



HITACHI
Inspire the Next

Environment Report 2001

Toward a Recycle-Oriented Society for Sustainable Development

Hitachi Group

■ Company Profile (As of March 31, 2001)

Corporate name:	Hitachi, Ltd.
Incorporated:	February 1, 1920 (Founded 1910)
Principal office:	6, Kanda-Surugadai 4-chome, Chiyoda-ku, Tokyo 101-8010, Japan
Representative:	Etsuhiko Shoyama, President and Director
Paid-in capital:	¥281,754 million

■ Financial Summary for the Year Ended March 31, 2001

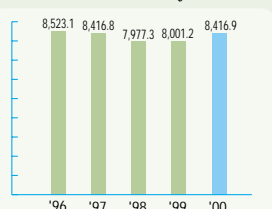
	Unconsolidated	Consolidated
Net sales	¥4,015,800 million	¥8,417,000 million
Net profit	¥40,100 million	¥104,400 million
Employees	55,609	340,939

Consolidated figures include 1,069 subsidiaries.

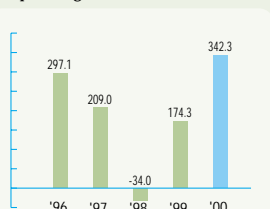
Number of affiliated company whose investment had been carried the equity method is applicable : 83

■ Changes in Consolidated Results

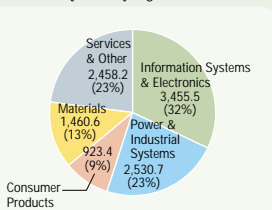
Net Sales (billions of yen)



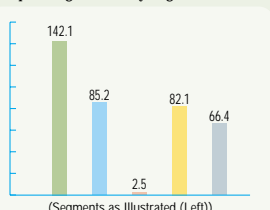
Operating Income (Loss) (billions of yen)



Net Sales by Industry Segment, FY00 (billions of yen)



Operating Income by Segment, FY00 (billions of yen)



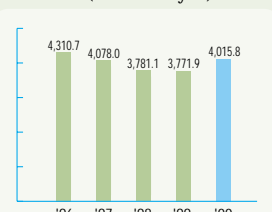
Total (Industry Segment Sales)	¥10,828.7 billion
Intersegment Transactions	¥2,411.7 billion
Consolidated Net Sales	¥8,417.0 billion

Total Segment Operating Income	¥378.4 billion
Management Sector Expenses, Other	¥ 36.1 billion
Consolidated Operating Income	¥342.3 billion

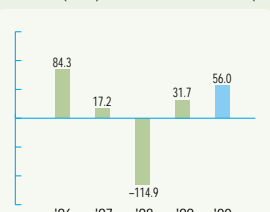
Note: Net Sales by Industry Segment include intersegment transactions.

■ Changes in Unconsolidated Results

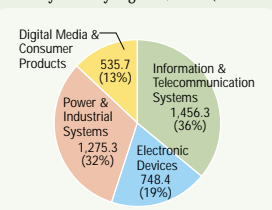
Net Sales (billions of yen)



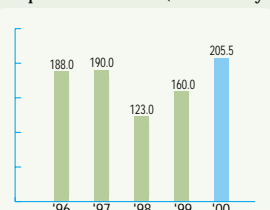
Income (Loss) before Income Taxes (billions of yen)



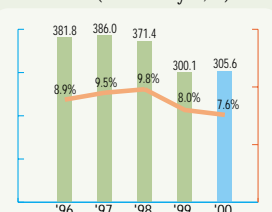
Sales by Industry Segment, FY00 (billions of yen)



Capital Investment (billions of yen)



R&D Expenditures/R&D as a Percentage of Net Sales (billions of yen, %)



■ Editorial policy of this report

This report centers around the results and activities of environmental activities of fiscal 2000 (April 1, 2000 through March 31, 2001). The separate booklet, "Reports and Data on Environmental Performance, Fiscal 2000," expands a report scope and indicators, and entirely revised version of the one of the previous year. We have also added feedback we received from NGOs on our Environmental Report 2000 in the "Exchange with Society". And, the report proper is the result of a partial revision of "Environmental Report 2000" (pages 1, 4, and 28). The next environmental report is scheduled to come out in May, 2002.

Reports and Data on Environmental Performance, Fiscal 2000

Report period—Fiscal 2000 (April 1, 2000 through March 31, 2001)

Scope of reports—310 firms of the Hitachi Group (Hitachi, Ltd. and its 309 related companies subsidiaries and affiliates).

We conducted a survey of environmental impacts of consolidated group firms and covered in the report the major group firms that accounted for 85% of the environmental impact of the Hitachi Group. (The "Data on Environmental Performance" of fiscal 1999 covered 21 firms, which accounted for 50% of the environmental impact of the group.)

Reference indicators—We used "Environmental Performance Indicators for Businesses, Fiscal Year 2000 Version" (Ministry of Environment) for reference.

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Hitachi Home Page: <http://www.hitachi.co.jp>

Hitachi's Approach to Environmental Issues-Web Site Address:

<http://www.hitachi.co.jp/Div/kankyo/khoukoku/kfoukoku.htm>

Message from the President

As we start the 21st Century, we find ourselves increasingly moving towards becoming a loop-based society that recycles and reuses resources and can undergo sustainable development in a way that ensures both environmental preservation and economic growth. In corporate management as well, the environment has become a key consideration in business strategy.

In accordance with our corporate motto, "**Inspire the Next**," the business activities of the Hitachi Group aim at making a society capable of sustainable development based on a policy of recycling and reusing resources from the broad perspectives of the environment, safety, and economic efficiency, with the aim of making us the most trustworthy business partner in the world, indeed, the "best solution partner."

In fiscal 2000, the Hitachi Group strengthened consolidated management and carried out an environmental burden study for subsidiaries and affiliates, expanding the scope of report to about 300 such companies in the group. In March 2001, we also revised our Green Procurement Guidelines to reinforce the Hitachi Group's green procurement. The data provided has been utilized to link design support and material procurement systems and offer products and services with a minimal environmental burden.

GREEN 21, our program to quantitatively assess environmental activities and improve environmental corporate management, has reached the last year of its first stage, and is now being expanded. Together with this, we will continue to carry out environmental action plans in our management, products and services and production activities.

This Environmental Report includes a supplement containing data collected on environmental performance in fiscal 2000, based on the results of our activities. We have also added feedback we received from NGOs on our Environmental Report 2000. In the same way, we hope to reflect NGOs and other opinions in Environment Report 2002, to be issued next year, and will further strive to enhance reporting on Hitachi's environmental work.

It is our sincere wish that this report will lead to a deeper understanding of the Hitachi Group's policies and activities concerning environmental preservation. We respectfully ask for your continued support and guidance as we face the challenges ahead.



Etsuhiko Shoyama
President and Director

Etsuhiko Shoyama

Environmental Management System

Fundamental Principles of Environmental Activities

Hitachi, Ltd. has embraced environmental activities since 1970. In 1972, Hitachi began making Companywide environment-related capital expenditures, and the progress has continued. Further, since 1973, environmental audits from the management's perspective have been included in performance evaluations.

The Environmental Protection Action Guidelines were formulated in 1993 and have served as the basis for the Company's environmental activities.

On April 1, 1999, the Hitachi Group adopted a consolidated business structure that includes the business groups of Hitachi, Ltd. and 35 major affiliated companies.

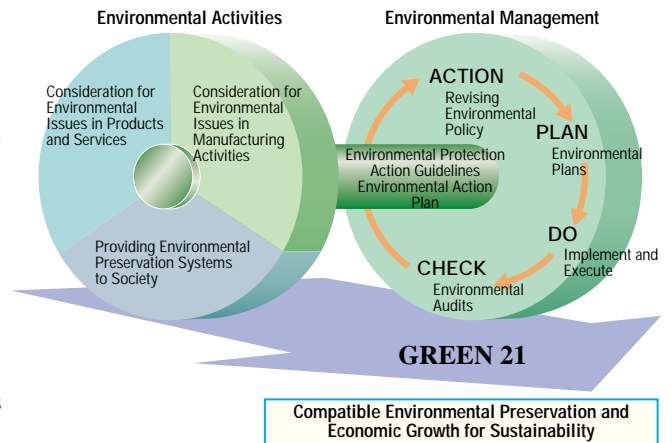
In line with these management reforms, Hitachi also sought to strengthen its organizational structure to improve the Company's stance as regards environmental management Groupwide. One aspect of this was the establishment of the Senior Executive Committee for

Environmental Policy, a top management-level body led by Hitachi's president. The committee assesses and sets the course for the Hitachi Group's policies regarding the environment.

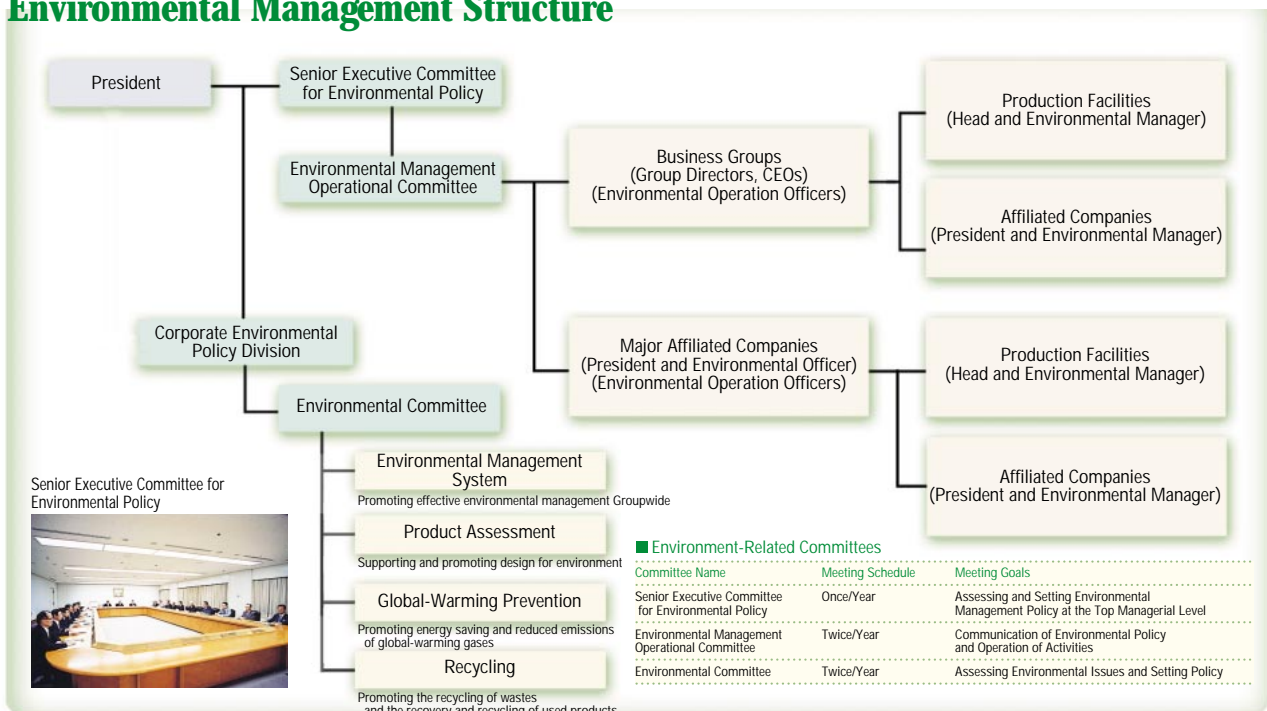
Furthermore, as a body specifically promoting environmental activities within Hitachi, Ltd., an officer in charge of environmental management operations was appointed anew to unify the environmental departments of each business group. Affiliated companies also appointed officers in charge of environmental promotion (environmental executive officers) and established similar structures.

The Environmental Management Operational Committee was established to consider Groupwide environmental issues and develop environmental awareness within the Group.

We are assembling the collective strength of the Hitachi Group with the three goals of providing products and services that reflect consideration for the environment, manufacturing activities with due consideration for society of which Hitachi is a part, and supplying society with an environmental preservation system to achieve compatible environmental preservation and economic growth for sustainability.



Environmental Management Structure



Standards for Corporate Activities/Environmental Protection Action Guidelines

Hitachi, Ltd. formulated the Environmental Protection Action Guidelines in March 1993. The Hitachi Group conducts its environmental preservation activities based on the guidelines.

Standards for Corporate Activities • Basic Philosophy

The basic philosophy of Hitachi, Ltd. is to further promote the principles upon which the Company was founded—harmony, sincerity and a pioneering spirit—to take pride in Hitachi and to contribute to the society of which Hitachi is a part through superior technologies and products.

In accord with this, the Company is fully aware that enterprises are also members of society, and, in addition to a deep devotion to just and transparent corporate activities, the Company strives as a responsible corporate citizen to bring about a society of real wealth through harmony with the environment and the aggressive pursuit of activities that contribute to society.

Environmental Protection Action Guidelines

The Environmental Protection Action Guidelines, as part of Hitachi's Standards for Corporate Activities, express standards for activities in response to environmental issues as related to the Company's business activities.

1. In recognition that problems affecting the global environment are serious matters for all mankind, harmony with the environment will be a top management priority throughout the Company.
2. By establishing a structure for the promotion of environmental protection, enacting regulations relating to the environment, setting environmental impact reduction targets and similar measures, officers and site directors in charge of environmental promotion will promote environmental preservation activities. Moreover, environmental audits will be used to confirm the efficacy of activities and in efforts for continued improvement.
3. By accurately understanding how best to resolve environmental problems facing the world, the Company will work to make contributions to society through the development of highly reliable technologies and products that meet those needs.
4. The Company gives due consideration to reducing the effect on the environment a product will have throughout its entire life cycle, from R&D and design stages through production, logistics, use and disposal.
5. The Company will investigate and examine the effect of its business operations on the environment and seek to introduce new technologies and materials with superior functionality regarding environmental safety, energy conservation and resource conservation.
6. In addition to observing international, national and local regulations with regard to the environment, the Company will develop its own standards where necessary to maintain environmental conservation.
7. With regard to overseas activities and the export of products, the Company will give consideration to the effects on the local environment and implement measures in response to the wishes of the local society.
8. In addition to working to enhance the environmental awareness of its employees, the Company will focus such activities on society at large, contributing to the society, of which Hitachi is a part, with environmental protection activities from a broad perspective.
9. Should an environmental problem arise as a result of the Company's business activities, the Company will take appropriate steps to minimize the impact on the environment.

Environmental Action Plan

The table below shows the Hitachi group's Environmental Action Plan of fiscal 2001. For the achievement status, see the Supplement "Reports and Data on Environmental Performance Fiscal 2000."

Category		Action and targets	Target values	Target date	
Environmental Management	Promotion of Environmental Management	Aiming to consolidated operations of the Hitachi Group, which is aware of the need for environmental preservation activities, all operation groups and associated companies shall comprehensively manage business establishments and associated companies under their control and endeavor to further improve the environmental managementsystems. The environmental management shall be promoted as a business strategy.			
	GREEN 21 Activities	Improving Green points.	Increase of 21% (domestic) (based on FY1998 levels)	FY2001	
			Increase of 21% (overseas) (based on FY2000 levels)	FY2003	
	Environmental Management Performance	Implementation of the environmental management system (principally non-manufacturing sites)	Acquire ISO 14001 certification.	FY2002	
		Promote green procurement	Spreading throughout the Hitachi Group		
Environmental Accounting	Establish the environmental accounting even in affiliated companies to promote the environmental management actively.				
Consideration for Environmental Issues in Products and Services	Design for Environment	Expanding design for environment (Environmental information labeling system)	Over 60%	FY2003	
		Increase the proportion of recyclable materials* ¹⁾	Improve by over 40% (based on FY1992 levels)	FY2000	
		Reduce disassembly time* ¹⁾	Over 60% (based on FY1992 levels)	FY2000	
		Reduce polystyrene foam packaging* ¹⁾	Over 60% (based on FY1990 levels)	FY2000	
		Total abolishment of lead solders used in printed circuit board connections	Totally abolished (in-house manufacturing process)	FY2001	
			Totally abolished (Hitachi group's products)	FY2003	
		Total abolishment of products using HCFC* ²⁾ and their production	Totally abolished	Domestic: End 2003 Overseas: End 2006	
	Promotion of green procurement	Ask 6000 major customers to cooperate.	FY2001		
Promotion of the Modal Shift	Promote the reduction of load to the environment (emission of CO ₂ , NO _x , SO _x , etc.) when the products are shipped.				
Consideration for Environmental Issues in Production Activities	Prevention of Warming	Reduction in the basic unit of CO ₂ emitted vs. production output for saving plant energy.Reduction of global warming gas other than CO ₂ . (Compliance to the Industrial Action Plan on HFC, SF ₆ , and PFC)* ³⁾	Reduced 25% (based on FY1990 levels)	FY2010	
			SF ₆ : The rate of emission, 3% or less of the purchased quantity. PFC: Reduced emission by more than 10%.	FY2005 FY2010	
	Waste Reduction	Reducing the amount of ultimate disposal	Hitachi, Ltd.unconsolidated* ⁴⁾ Below 15% (based on FY1991 levels) Below 10% (based on FY1991 levels)	FY2005 FY2010	
			Affiliated companies Below 85% (based on FY1998 levels) Below 75% (based on FY1998 levels)	FY2005 FY2010	
		Promoting the Zero-emission facilities	At least 20 places of business	FY2005	
	Chemical Substance Management	Through chemical substance management and planned reduction of emissions			
Management of PCB	Total abolishment of balasts with PCB-included condensors for lightings	Balasts currently in use will be totally abolished.	FY2001		
	Strict storage and management (quantity, leakage, etc.) of electric appliances using PCB (transformer, capacitor, etc.)				
Supplying Environmental Preservation Systems to Society		Using the Hitachi Group's environmental preservation technologies to reach comprehensive solutions			
Research & Development		Actively promoting research and development that contributes to environmental preservation as regards products and services			
Exchange with Society-Environmental Communication	Personnel Training /Awareness and Information Disclosure/Social Contribution	In addition to seeking a broad understanding of the Hitachi Group's environmental activities among such stakeholders as customers, shareholders, partners, government bodies, employees of the Hitachi Group's and the public at large by public relation and advertising activities, the Hitachi Group seeks communication with stakeholders.			

*1)The action plan ended in fiscal 2000.

*2)HCFC: Hydrochlorofluorocarbon

*3)HFC: hydrofluorocarbons; SF₆: sulfur hexafluoride; PFCs: perfluorocarbons

*4)Data includes data from some affiliated companies managed on an integrated basis in business operations of the parent company.

Environmental Management

GREEN 21 Activities

Action Plan

- Improve Green Points for Fiscal 2001 by 21% over Fiscal 1998

In fiscal 1998, the Hitachi Group established GREEN 21, a new system to evaluate the Group's environmental performance. The self-evaluation system scores all activities against a fixed set of standards and promotes continuous improvement and a greater level of environmental activities. The system is also useful for improving the environmental management of business groups and

major affiliated companies as well as promotes a greater degree of harmony with the environment.

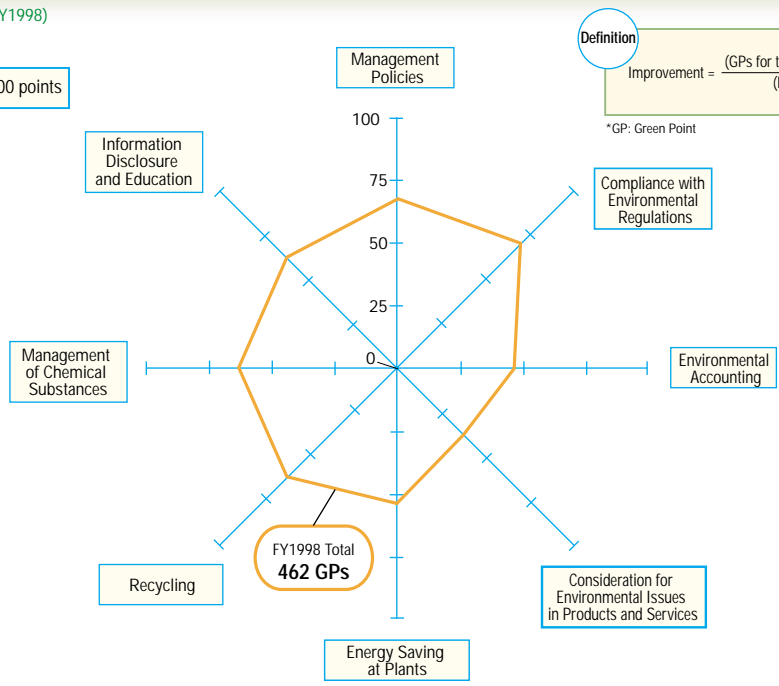
The system evaluates 43 environmental performance indicators in eight key categories: management policies, compliance with environmental regulations, environmental accounting, the consideration for environmental issues in products and services, as well as information disclosure and education are management performance indicators. Energy saving at plants, recycling and the management of chemical substances are operational performance indicators. The total number of points—called Green Points (GPs)—for each category is 100,

and the entire evaluation has a maximum score of 800 GPs. The scores are represented on a radar chart, allowing each business group or affiliated company to easily use the results in decision making regarding environmental management. The evaluation is made annually, allowing a quantitative assessment of the state of continuing progress in implementation.

Each unit evaluates its own performance indicators with regard to each category once a year and compares the score with levels from the base year, fiscal 1998, to measure improvement. In our pursuit of continuing improvement, our goal for fiscal 2001 is to beat the total score of the base year by 21%.

■ Hitachi Group Average GPs (FY1998)

Total for each category=100 points



Definition

$$\text{Improvement} = \frac{(\text{GPs for the new fiscal year} - \text{base year GPs})}{(\text{Full score} - \text{base year GPs})}$$

*GP: Green Point

■ Criteria for Evaluation

No.	Category	Environmental Performance Indicators	FY1998 Points
1	Management Policies	Degree of development of environmental policy, implementation structure, consistency, comprehensiveness	68
2	Compliance with Environmental Regulations	List of regulations, preparation and management for voluntary action plans, sufficiency of licensed and certified personnel	69
3	Environmental Accounting	Expenditures for equipment, maintenance cost, number of managing indicators	46
4	Consideration for Environmental Issues in Products and Services	Implementation of product assessments, plans for and execution of green procurement	35
5	Energy Saving at Plants	Energy conservation improvement ratio, amount of energy conserved, ratio of automatic systems	53
6	Recycling	Recycling of waste at facilities and appropriate disposal of waste at facilities, recovery and recycling of products	64
7	Management of Chemical Substances	System for preliminary review of the use of new chemical substances, status of Pollution Release and Transfer Register (PRTR), plans for reduction and prohibition of substances	65
8	Information Disclosure and Education	External communication of information, internal and external awards received, local activities, education and training	62
Total			462

Environmental Management Performance

Action Plan

- **Acquiring ISO 14001 certification chiefly for nonmanufacturing sites and enhancing environmental audits**
- **Promoting green procurement**
- **Strengthening environmental education and training**

Acquiring ISO 14001 Certification and Environmental Audits

Seeking continuing improvement in environmental management and the reduction of environmental risk, the Hitachi Group has introduced an environmental management system based on the ISO 14001 international standards, and a number of facilities, principally manufacturing centers, have been certified as ISO 14001 compliant. (See pages 1 and 2 of accompanying documents regarding ISO 14001 certified sites.) In the future, we will seek to continue to improve through the promotion of an enhanced environmental management system and pursue ISO 14001 certification for nonmanufacturing business centers, such as software and service firms. Furthermore, to meet ISO 14001 standards, Hitachi, Ltd. introduced its own Environment Round Audit System in 1995. The system employs a system of round internal audits whereby audits are performed by certified employees assigned to units other than the unit being audited to assure the objectivity and fairness of the audit.

Groupwide seminars are held to improve the quality of audits, and qualified staff are then registered as internal auditors. As of March 2000, approximately 1,600 Hitachi Group employees certified as auditors conducted audits at business sites throughout the Group.

■ Overview of Hitachi's Environmental Audits

Environmental Audit	Frequency	Auditors	Content
Environment Policy Office Environmental Audit (Performance Audit)	Once every 3 to 4 years	Environmental auditors from the Environment Policy Office	Prevention of environmental problems Management's perspective of all environmental activities
ISO 14001 Environmental Audits	Environmental Round System Audits	Once a year	Environmental auditors from a facility other than the one to be audited
	Internal Environmental Audit	At least once a year	Environmental auditors from the facility to be audited
			Overall efficacy of environmental management systems Compliance with laws and regulations Establishment of autonomous objectives and targets relating to the environment
			Efficacy of environmental management systems at the departmental level

Furthermore, environmental audits have been conducted as part of compliance audits since being recognized as an issue for management in 1973.

Compliance with Laws and Regulations

To ensure the preservation of the environment, each Hitachi Group site has established internal standards more stringent than most laws and external regulations. Each site works to prevent environmental harm through regular measurements and the maintenance and supervision of environmental preservation facilities and equipment. Moreover, specific training programs are in place to ensure that each site has the required number of employees with environment-related legal qualifications.

■ Special Qualifications/Legally Certified Staff

As of February 2000, Hitachi's business activities required a total of 4,833 employees with special certifications or qualifications. The Company exceeded these requirements, having 29,279 employees with special certifications or qualifications as of the same date.

Green Procurement

The Hitachi Group promotes green procurement policies for administrative materials to be used by management and nonproduction departments (office supplies, business cards, toilet paper and other supplies). Specifically, the Hitachi Office Supply Catalog, prepared in June

1998, calls for the proactive purchase of products with minimal environmental impact. (See page 3 of accompanying documents for more information regarding green procurement.)

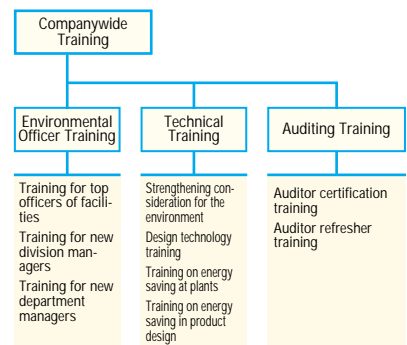
* See page 10 for more information on component materials covered under green procurement standards.

Environmental Education and Training

The understanding of every employee is important in our response to environmental issues. Based on its employee education system, the Hitachi Group holds Groupwide classes to further develop its employees' understanding.

Moreover, to meet specific needs of its management strategy, each business group and affiliated company pursues education and training for employees with certain job classifications, new employees and the entire Hitachi family.

■ Companywide Training



Environmental Accounting

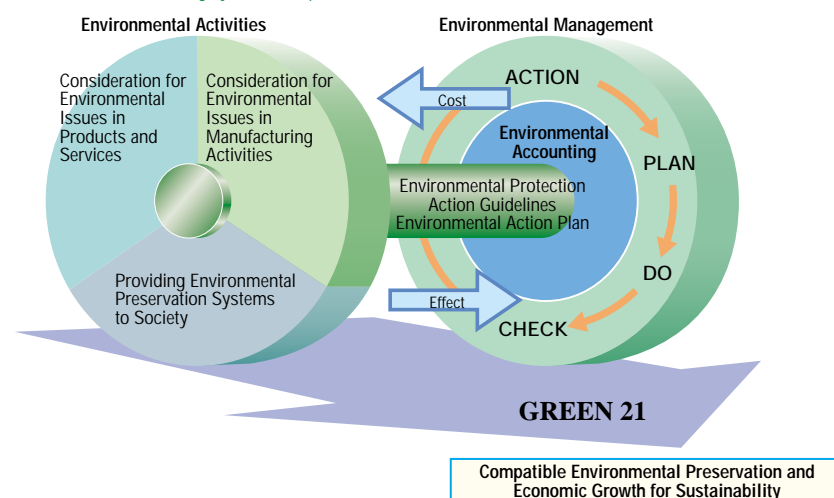
Introduction of an Environmental Accounting System

Hitachi, Ltd. introduced an environmental accounting system to promote efficiency and continuous improvement in environmental investment and environmental activities.

Data was compiled for Hitachi, Ltd. on an unconsolidated basis for the first fiscal year of operations under the new system.*¹ In addition to plant and equipment investment related to environmental activities announced since fiscal 1997, costs encompassed ordinary expenditure items, such as R&D expenditures and the cost of operating and managing environmental conservation plants.*² Effectiveness was established based on an economic result, addressed in terms of monetary value, and a quantitative effect, addressed in terms of the degree of environmental load abatement. The economic effect was based on reliable grounds. The quantitative effect*³ was calculated not only on the basis of the degree of environmental load abatement during the manufacture of a product but also during the use of the product. Eco-efficiency was also assessed, in terms of the decrease in cost per environmental load item.

*¹ Environmental load data includes data from some affiliated companies managed on an integrated basis in business operations of the parent company.

■ Environmental Accounting System Concept



*² These figures are based on the "Draft Guidelines for Measuring and Announcing Environment Cost," Environment Agency of Japan (issued March 1999).

*³ Hitachi used its own system to estimate the abatement effect under conditions of standard use.

Goals of the Introduction of the Environmental Accounting System

The environmental accounting system was introduced as information for environmental management to promote efficiency and continuing improvement in environmental investment and environmental activities.

Furthermore, through the disclosure of information regarding the distribution of management resources to environmental activities and regarding environmental technologies and products, Hitachi, Ltd. seeks a greater understanding of its commitment to being a company in harmony with the environment.

Environmental Accounting Approach and Concept

Hitachi, Ltd. decided in July 1999 to introduce the environmental accounting system. A project team of employees drawn from the financial and environmental divisions studied environmental accounting items and methods. Also during this time, Hitachi took part in a Study Group on Practical Matters about

Introducing Environmental Accounting established by the Environment Agency in June 1999. Hitachi views the system as a means of improving eco-efficiency and achieving rational environmental management.

Results from the First Fiscal Year

The chart below presents an overview of the results for fiscal 1999. (See page 3 of the accompanying documents for a more detailed report.) Of special note is that Hitachi's R&D expenditures (¥11.14 billion) accounted for 42% of the total expenditures and investment related to environmental activities.

As a result, energy consumed during the use of products by end users decreased an estimated 165 million kWh—the equivalent of energy consumed in one year by 48,000 average households.

Future Approach to Environmental Accounting

In the future, the data used will be drawn for an increasing number of Hitachi Group companies. Moreover, the data will be made more comprehensive, and more details of the data will be disclosed.

Hitachi intends to use the implementation of the environmental accounting system to promote rational economic management and to contribute to the society of which it is a part by balancing corporate growth with the protection of the environment.

Cost	
Expenditures:	¥26.7 billion
Investments:	¥6.76 billion
Effect	
Economical Effect:	¥4.16 billion
Quantitative Effect (Amount Reduced/Equivalent Number of Households):	
• Reduction in energy used during production	94 million kWh/27,000 households
• Reduction in final amount of wastes disposed during production	792t/3,000 households
• Reduction in energy consumed during use of products	165 million kWh/48,000 households

Consideration for Environmental Issues in Products and Services

—3R* Policies for a Recycle-Oriented Society—

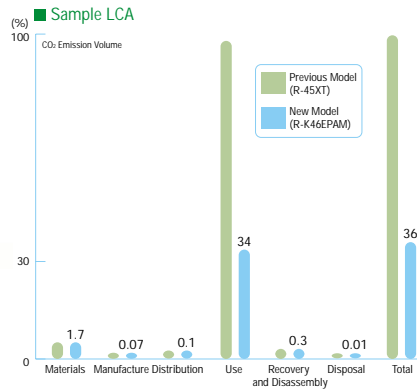
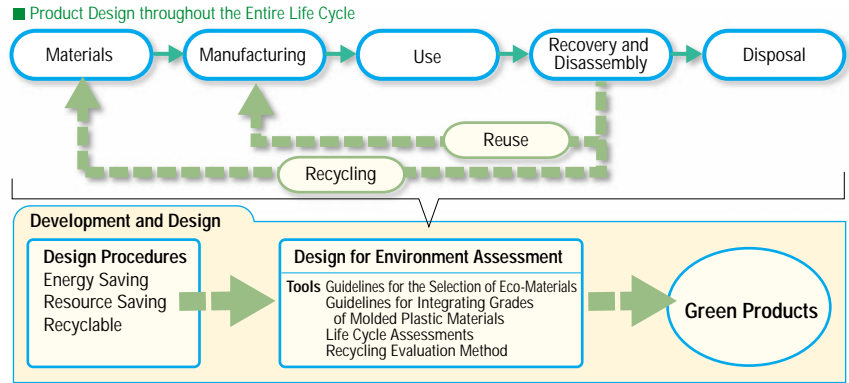
*3R: Reduce, Reuse, Recycle

Design for Environment

Action Plan

- Expand the proportion of products developed with consideration for environmental issues to 60% by FY2003
- Increase the proportion of recyclable materials* by over 40% by FY2000 (based on FY1992 levels)
- * Proportion of recyclable materials = Weight of recyclable materials ÷ Total product weight
- Reduce disassembly time to 60% of FY1992 levels
- Reduce polystyrene foam packaging to 60% of FY1990 levels

Product development that seeks to minimize environmental load in all stages of the product's life cycle—including the selection of a product's component materials, its manufacture, use, recovery, disassembly and disposal (a life cycle assessment (LCA))—is necessary for the establishment of a recycle-oriented society. With this in mind, we are working to create products that reflect the three Rs—reduce, reuse and recycle—promoting the reduction of emissions at the disposal stage, the reuse and recycling of products and their components and, in particular, energy savings and the reduction of by-products at the manufacturing and use stages.



Each business site is working to ensure that goals stated in the Action Plan are met. (See page 4 of accompanying documents for more information.)

Design for Environment Assessments and the Environmental Labeling System

The Company embraced the concept of assessments in terms of a product's design for environment in conjunction with the promulgation of the Law for the Promotion of Recyclable Resources in

The Recyclability Concept

Defined as the possibility that, using technology currently available, a product or its components can be recycled.

Principal Recyclable Materials

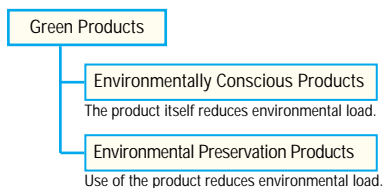
1. Iron, steel plates, one-piece stainless steel components
2. Aluminum, copper, one-piece non-iron/steel components
3. A- and B-rank plastics (as per the Guidelines for the Selection of Eco-Materials)
4. Cardboard, polystyrene foam
5. Motors
6. CRTs

Materials Difficult to Recycle

1. Products difficult to disassemble with standard tools
2. C- and D-rank materials (as per the Guidelines for the Selection of Eco-Materials)
3. Electrical wires, printed wiring boards
4. Molded plastic inserts, painted items or items glued to other items
5. Vinyl-clad steel

October 1991. In March 1999, Hitachi drew up design for environment (DfE) assessment criteria. Information regarding each category of a product in development is recorded, and a radar chart based on the results of the product's environmental load assessment is prepared,

Green Products Defined



Design for Environment Assessment Criteria

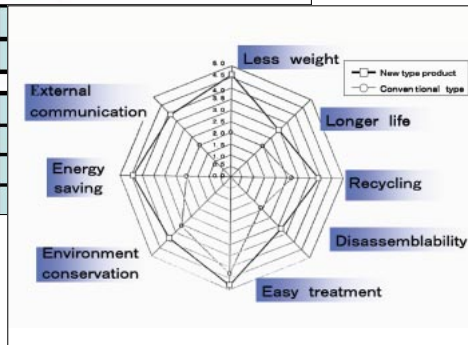
Assessment Category	Life Cycle	Assessment Points
Reducing	Materials, manufacture, distribution	Resource conserving, compact, conformity, lightweight, standardization, high yield
Longevity	Use	Upgradability, ease of repair and maintenance, durability, reliability
Recycling	Reuse, distribution	Reusability, conformity of materials, reusability of promotion of resource component materials, reuse, labeling of materials
Disassemblability	Disassembly	Disassemblability, materials, ease of separation, labeling of materials
Ease of Processing	Manufacture, distribution, disassembly	Crumbling, fragmentation, disassembly and separation, ease of processing
Environmental Safety	Materials, manufacture, distribution, use, disassembly, disposal	Potential levels of toxicity, injury, explosion/implosion, other hazards
Energy Saving	Use, manufacture	Energy saving, energy consumption, efficiency
Availability of Information	Use, disassembly	Availability of processing information, information regarding disposal

■ Design for Environment Assessment Entry and Assessment Output

Items	Performance	Evaluation		1	2	3	4
		Old	New				
Smaller products							
① Smaller ? Less area ?	m ³ m ²	2	2	2	up	same	<10%
② Less weight ?	kg	2	3	3	up	same	<10%

Higher reliability							
① Parts' reliability	Successful %	2	2				
② Materials' reliability	Successful %	2	2				
Reduction of packaging compared with old product							
① Smaller, lighter carton ?	m ³	2	3				
	kg	2	2				
② Less styrene foam?	m ³	2	2				
	kg	2	2				

Entry

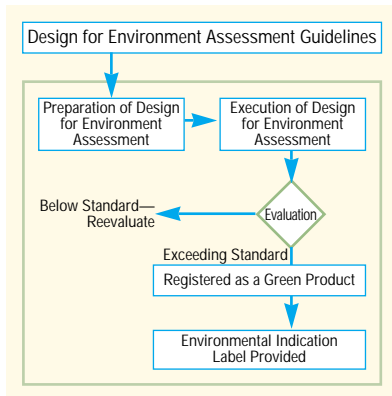


Output

■ Environmental Data Sheet

環境データシート		機種名:キヤノートパソコン FL06A202PC	
1 型式	PC118P5 PC2218D5	PC118P5 PC2218D5	PC118 PC2218
2 外形寸法 (mm)	幅×奥×高さ	276×226×50	幅×奥×高さ
3 重量 (kg)	本体重量	約1.65	約1.1
4 消費電力 (W)	最大	約15.2	約15.2
5 製造材料	樹脂	ABS	ABS
6 梱包材	梱包材	紙	紙
7 部品名	部品名	部品名	部品名
8 部品名	部品名	部品名	部品名
9 部品名	部品名	部品名	部品名
10 部品名	部品名	部品名	部品名
11 部品名	部品名	部品名	部品名
12 部品名	部品名	部品名	部品名
13 部品名	部品名	部品名	部品名
14 部品名	部品名	部品名	部品名

■ Registration Criteria



allowing assessments that can be understood at a glance. Products scoring above a certain standard on the DfE assessment are registered as green products, and in December 1999 a system of disclosure guidelines was put into effect regarding environmental information, whereby information is presented through indicator marks and data sheets.

Selection and Integration of Plastic Materials

Recycling efforts are under way for such metals as iron, copper and aluminum. To improve the proportion of recyclable materials, it is necessary to change to

materials that have less environmental impact than molded plastic materials. With regard to the selection of molded plastic materials, 13 selection categories—including energy consumed during manufacturing, recyclability and longevity—were prepared in “Guidelines for the Selection of Eco-Materials” in 1993, and the guidelines are applied from the design stage. In 1997, Hitachi revised the guidelines to reflect changes in materials for use in products.

In addition, criteria for integrating molded plastic materials based on their properties—such as flame retardancy, melt flow rate and flexure/resilience—were set out in 1999 in “Guidelines for Integrating Grades of Molded Plastic Materials.” Grade ratings for principal resins covered in the guidelines—acrylonitrile butadiene styrene (ABS) resin, polystyrene (PS) resin, and polypropylene (PP) resin—have been reduced by 62%.

■ Grades of Molded Plastic

Resin	ABS	PS	PP	Total
Prior to Integration	23	24	29	76
After Integration	9	9	10	28

*ABS = acrylonitrile butadiene styrene resin; PS = polystyrene resin; PP = polypropylene resin

Chemical Substance Management

The Pollutant Release and Transfer Register (PRTR) Law was enacted in July 1999. In response, Hitachi revised its autonomous management of chemical substances with regard to their use in consumer goods (See page 18.). Chlorofluorocarbons (CFCs) used as coolant in refrigerators and as foaming agents in thermal insulation will be completely eradicated, and, since the end of 1995, there has been a change from the use of CFC (HCFC-141b) as a foaming agent in thermal insulation to the use of the hydrocarbon cyclopentane. Regarding lead and lead compounds, also the target of reduction activities, since 1989 we have manufactured larger computers with lead-free solder using tin and silver substitutes. Moreover, since 1999 we have manufactured notebook computers, 8mm cameras, washing machines, air conditioners and other products with lead-free solder, using tin, silver and copper instead. In addition, our PCs use eco-boards—halogen-free flame retardant printed wiring boards.

Recyclability Evaluations

The Disassemblability Evaluation Method (DEM) was developed in 1993 as a quantitative measurement of the ease with which a product could be disassembled and recycled after use, and stipulations regarding consumer electronics goods and office automation equipment have been implemented and enhanced. In April 2001, the Law for the Recycling of Specified Kinds of Consumer Electric Goods (the Consumer Electronics Recycling Law) will take effect, requiring manufacturers to handle recycling efforts for products they manufacture. We have established and begun using a Recycling Evaluation Method (REM) based on the procedures required to recycle a given product and economic feasibility.

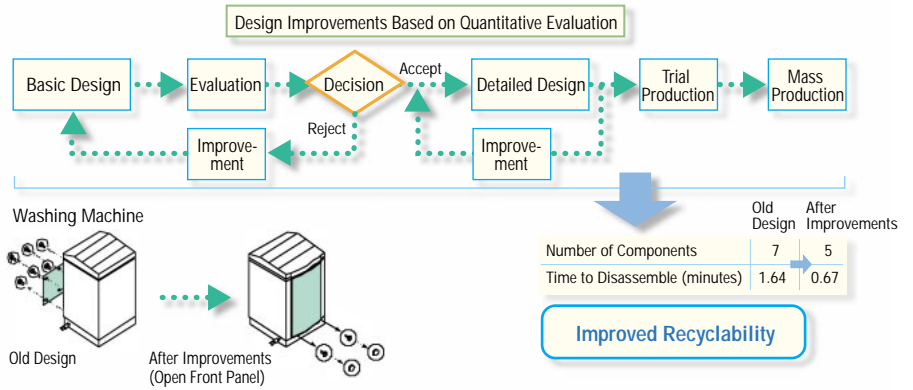
Green Procurement

Concerning procurement, Hitachi's green procurement policies give priority to suppliers of products, components, materials and other goods produced in consideration of the environment. In July 1998, we distributed copies of our *Green Procurement Guideline* to 3,100 suppliers.

Each business site also conducts environmental load surveys of its suppliers, waste disposal contractors and other business contacts, providing information on environmental activities and conducting educational activities annually.

Hitachi supports the environmental activities of its suppliers and other business contacts, striving for sustainable product development.

DEM/REM Example—Washing Machine



Green Procurement Guideline


- Establishing an Environmental Management Structure
 - Carrying Out Product Assessments
1. Selection of Materials
 2. Resource Conservation
 3. Reuse of Resources
 4. Ease of Disassembly
 5. Materials Labeling for Plastic Components
 6. Chemical Substance Management
 7. Energy Saving
 8. Packaging Considerations
 9. Disclosure of Information


Green Procurement Evaluation—Example

	Supplier Name	Energy Consumption (Monthly)			Product Class	Waste Disposal (Monthly) (kg)				ISO Certification Plans
		Electricity (MWh)	Gas (km ³)	Oil (kl)		Industrial Hazardous Wastes	Other Wastes	General Hazardous Wastes	Specially Controlled Wastes	
1	Company A	2.0	0.1	0.04	1	13	420	0	0	×
2	Company B	17.7	0.0	2.6	1	0	0	0	800	×
3	Company C	23.0	0.0	1.6	1	0	0	0	400	×
4	Company D	17.5	0.0	0.0	1	14	150	0	0	×
5	Company E	11.4	0.0	0.0	0	120	1,270	0	9	
	⋮									

	Evaluation Scores									Total	
1	Company A	1	1	1	5	1	2	0	0	5	16
2	Company B	1	1	1	5	0	0	0	3	5	16
3	Company C	1	0	1	5	0	0	0	2	5	14
4	Company D	1	0	0	5	1	1	0	0	5	13
5	Company E	1	1	0	0	3	3	0	1	0	9
	⋮										

Representative Products

<p>Refrigerators Model: R-K46EPAM</p> 	<p>Energy Savings</p> <p>Ease of Recycling/Disassembly</p> <p>Packaging Materials</p> <p>Other</p>	<ul style="list-style-type: none"> • Pulse amplitude modulation (PAM) and other energy-saving technologies have cut annual electricity consumption 65%, from 1,130kWh to 390kWh (compared with the 1992 model R-45XT). • Reduction of total components through the integration of the refrigerating cycle unit, structural improvements to the multi-temperature room participant, reduced number of mounting screws • One-piece door liner molding eliminates the PVC gasket holder. • Low-density, high-functionality design uses less insulating polyurethane foam. • Disclosure of materials in plastic components <ul style="list-style-type: none"> • Polystyrene foam cut 60% (compared with 1990 models) through the reduction of upper cushioning materials, smaller upper and lower cushioning materials' size. <ul style="list-style-type: none"> • Complete eradication of CFCs (principally freon) as refrigerants and foaming agents for insulating materials; use of hydrocarbon cyclopentane as a foaming agent 	<p>■ One-Piece Door Liner Molding</p> <p>Earlier Models: Door Gasket, Door Liner, Urethane, Gasket Holder (PVC), Outer Door Panel</p> <p>Improved Design: One-Piece Door Liner</p> <p>■ Reduced Use of Polystyrene Foam Packaging</p> <p>Earlier Models: Reinforcing Flap, Fewer, Smaller Cushioning Bars</p> <p>Improved Design: Size Reductions</p>
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<p>Washing Machine Model: NW-8PAM</p> 	<p>Energy Savings</p> <p>Water Savings</p> <p>Ease of Recycling/Disassembly</p> <p>Packaging</p>	<ul style="list-style-type: none"> • PAM and ion cleaning cut standard-program electricity consumption 77%, from 230Wh to 53Wh per program (compared with the 1995 model NW-8S). • Standard-program water use cut 36%, from 194l to 125l (compared with the 1995 model NW-8S). • Single-stage automatic water-level setting effectively cuts water use. • Use of bathwater allows further reductions in water use. <ul style="list-style-type: none"> • One-direction, single-action disassembly (through the front panel or top cover) • Thermoplastic elastomer hose to draw bathwater reduces PVC use. • Electronic control board uses lead-free solder. • Disclosure of materials in plastic components <ul style="list-style-type: none"> • Use of polystyrene foam cut 50% compared with 1990 models by partitioning, use of smaller base cushioning and use of molded pulp. 	<p>■ Front Panel or Top Cover Single-Action Disassembly</p> <p>Controllers, Back Panel, Top Cover, Stainless Steel Tub, Front Panel, Back</p>
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Room Air Conditioner
Model: RAS-2810LX



Energy Savings

- Wide-range PAM and a motor using a high-intensity magnet yield a 5.03 standard* rating, beating the 4.9 rating mandated by law for air conditioners effective 2004.
- Annual electricity consumption has been cut 52%, from 1,988kWh to 949kWh (compared with the 1989 model RAS-289AX).
- Standby power requirement cut 80%, from 4W to 0.8W (compared with the 1998 model RAS-2810KX).

Ease of Recycling/Disassembly

- Simplification of the indoor heat exchanger fitting, fewer mounting screws reduces total number of components.
- ABS blower direction plate replaced with polystyrene, unification of plastic components
- Disclosure of materials in plastic components

Packaging Materials

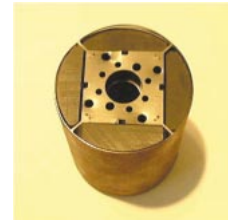
- Use of polystyrene foam cut 60% compared with 1990 models by the elimination of polystyrene foam from indoor unit, smaller cushions for outdoor unit and the use of molded pulp products.

Other

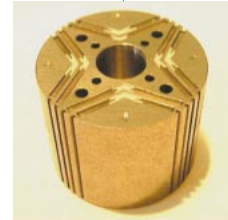
- Uses new hydrofluorocarbon (R410A) with no impact on the ozone layer.

■ DC Motor Using High-Intensity Magnet

Ferrite Motor



Rare Earth Motor



* Standard: Average air conditioner/heater energy efficiency

Color Television
Model: W32-GF3



Energy Savings

- Annual electricity consumption was cut 29% compared with 1997 model W32-G1, from 316kWh to 225kWh.
- Standby power requirement cut 91% compared with 1997 model W32-G1, from 4.3W to 0.4W.

Ease of Recycling/Disassembly

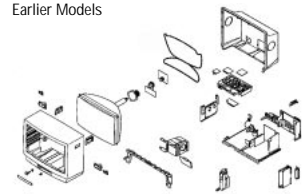
- Single-unit, buildup-type circuit boards reduce weight and the number of components.
- The front frame and back cover are made from halogen-free materials, which have an extremely low likelihood of generating environment-polluting substances.
- Internal wiring does not use lead as a stabilizer for insulating material.
- Structural components use no PVC.
- Disclosure of materials in plastic components
- Uses JIS-standard screws, standard industrial tools

Packaging Materials

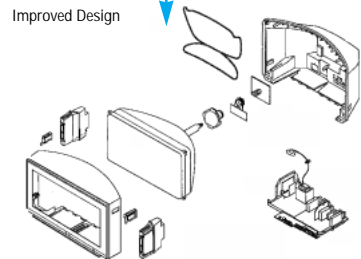
- Use of polystyrene foam cut 60% compared with 1990 models by partitioning, use of smaller upper cushioning

■ Component Reduction

Earlier Models



Improved Design



Videocamera
Model: E6H Series



Energy Savings

- Video, camera and LCD circuitry uses a single LSI, cutting electricity use 11% compared with the 1998 model VM-H945LA.

Ease of Recycling/Disassembly

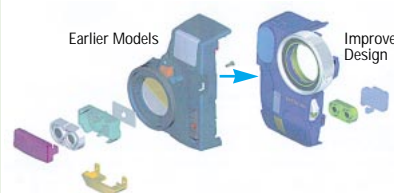
- Plastic-molded components of polystyrene and polycarbonate replaced with ABS, improving recycling 70%.
- Integration of the front cover and microphone cover cuts the number of parts, from 81 to 66.

Packaging Materials

- Use of polystyrene foam cut 72% compared with 1992 models by using thinner packaging materials and changing support for the product.


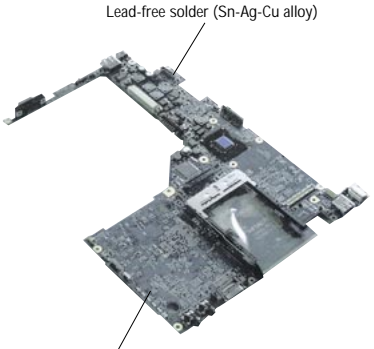
■ One-Piece Design for Front Cover and Microphone Cover


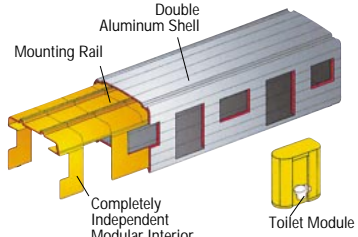
Earlier Models


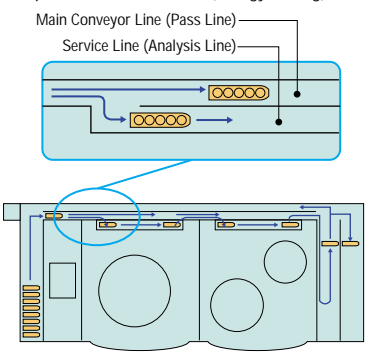


Improved Design



<p>Notebook Computer Model: FLORA 220FX</p> 	<p>Energy Savings</p> <p>Resource Savings</p> <p>Ease of Recycling</p> <p>Packaging Materials</p>	<ul style="list-style-type: none"> Electricity consumption efficiency* 1/7 the standard by energy consumption by law (Category S, electricity consumption efficiency 0.0065) *The electricity consumption efficiency value has been calculated by dividing the power consumption, measured according to the definition in the Law concerning the Rational Use of Energy, by the value representing the composite theoretical performance defined in the Energy Conservation Law. Power supply voltage in suspended mode declined from 5V to 3V; energy consumption at the time of suspended mode was 1W, which is the best value in the same category. Use of a 12.1-inch LCD reduces size and weight. Printed circuit board using hydrogen-free flame retardants External casing using magnesium alloy Polystyrene foam completely eliminated by use of cardboard cushioning. 	<p>■ Printed Circuit Board Using Lead-Free Solder</p>  <p>Lead-free solder (Sn-Ag-Cu alloy)</p> <p>Printed circuit board using halogen-free flame retardants</p>
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<p>Railroad Coach Model: A-Train</p>  <p>Next-Generation Aluminum Car-body System</p>	<p>Energy Savings</p> <p>Ease of Recycling</p> <p>Ease of Disassembly</p>	<ul style="list-style-type: none"> Double aluminum shell results in coaches 30% lighter than stainless steel coach bodies, reducing electricity use 6%. Improved production, disassembly and recycling through the development of functionally independent modular interior components Friction stir welding (FSW) produces an elegant product with little deformation, cutting energy used in the manufacture of advanced rolling stock 20%. 	<p>■ Modular Interior System</p>  <p>Double Aluminum Shell</p> <p>Mounting Rail</p> <p>Completely Independent Modular Interior</p> <p>Toilet Module</p>
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<p>Automatic Blood Chemistry Analyzer Model: 7600</p> 	<p>Product Overview</p> <p>Energy Savings</p> <p>Ease of Recycling</p> <p>Ease of Disassembly</p>	<ul style="list-style-type: none"> Automatic blood analyzer Specimen pass function reduces analysis and waiting time. Automatic on/off control and other functions cut electricity use 38% compared with earlier models. Easy to add/remove multispecimen and multicategory modules for flexible expansion and disposal Unpainted plastic molded components Selection of materials renders surface finishing unnecessary. Ease of recycling improved over earlier models by 52%. Disassembly time reduced 46% over earlier models through component integration, compatibility, and shared use. External casing fastened with rivets. 	<p>■ Specimen Pass Function (Energy Saving)</p>  <p>Main Conveyor Line (Pass Line)</p> <p>Service Line (Analysis Line)</p>
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Recycling Used Products

Response to the Electric Home Appliances Recycling Law

In response to the Electric Home Appliances Recycling Law, scheduled to go into effect in April 2001, Hitachi established Kantou Eco Recycle Co., Ltd., a new subsidiary to handle recycling operations for used electric home appliances in four categories: television sets, refrigerators, washing machines and air conditioners.

The new company's plant will be located in a production center for refrigerators and air conditioners in Tochigi Prefecture, where the four products will be disassembled, shredded and sorted, but the remaining materials will be gathered. CFCs used for thermal insulation for refrigerators will also be collected. The plant will have an annual operating capacity of 300,000

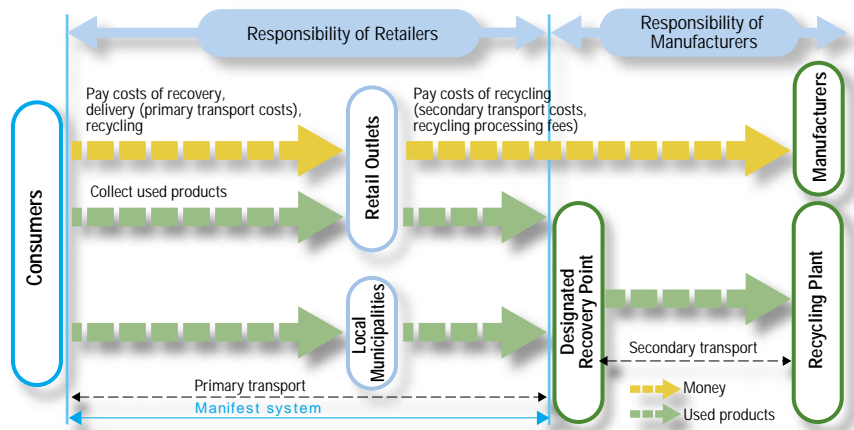
units and will be completed in September 2000. We hope to use the knowledge and experience we gain from operations at this plant in future DFE activities.

In addition to Kantou Eco Recycle, Hokkaido Eco Recycle Systems Co., Ltd.

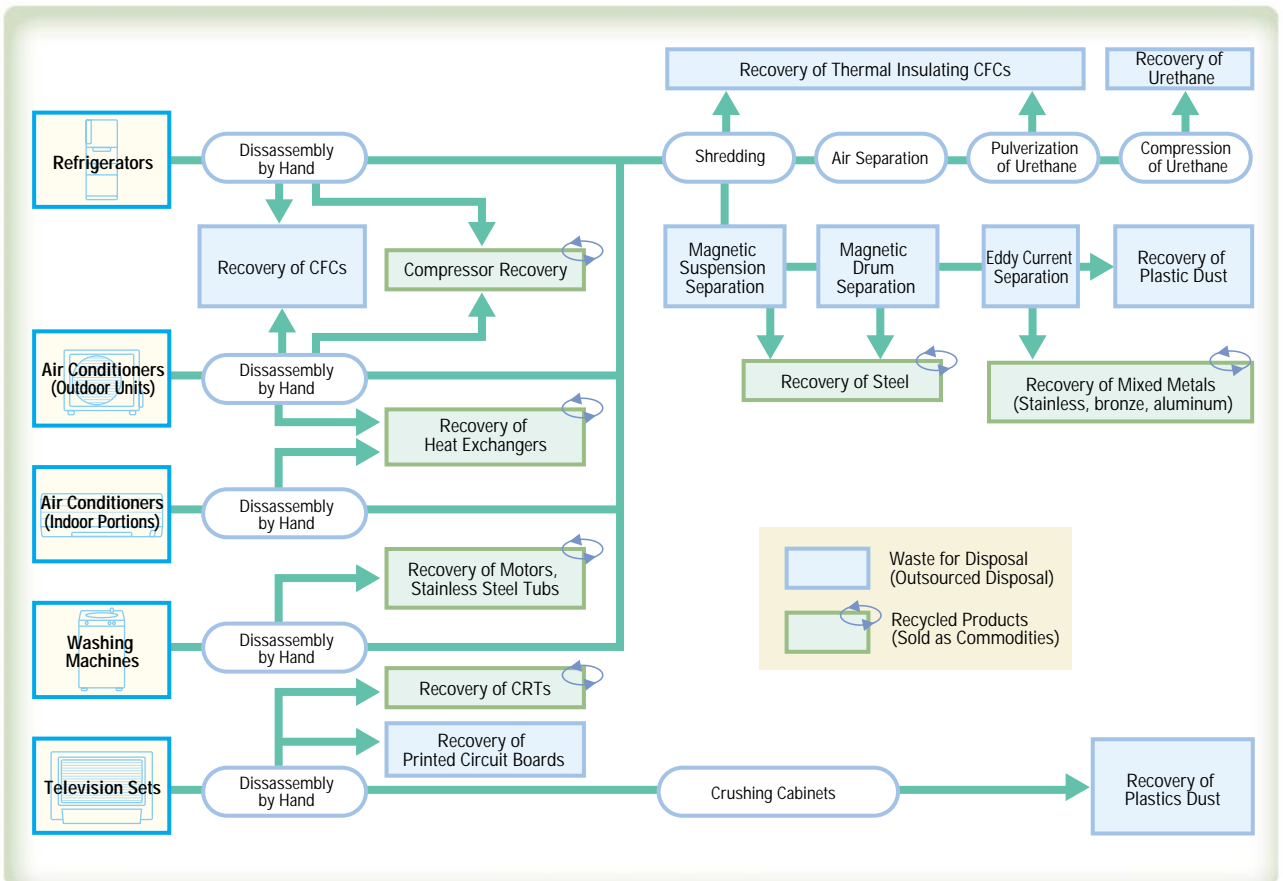
and Tokyo Eco Recycle Co., Ltd. were established in October and December 1999, respectively.

Hitachi is cooperating with others in the industry to advance recycling efforts in other areas of Japan.

■ Overview of the Electric Home Appliances Recycling Law



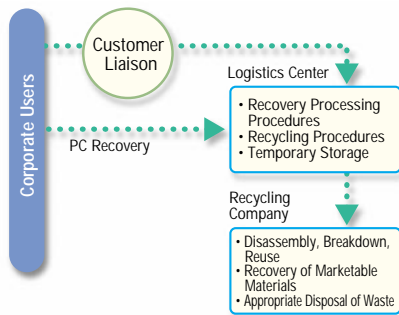
■ Flowchart for Kantou Eco Recycle Co., Ltd.



Recovery Services for Old PCs

As a service, the Hitachi Group collects used PCs from corporate users. After disassembling the collected computers and separating the components and materials,

Recovery System from Corporate Users



the Hitachi Group, in cooperation with recycling companies, collects the reusable parts and valuable resources, and the remainder is disposed of appropriately. A portion of the collected plastic is reused in computers.

Plans for the recovery of used PCs from general consumers will be implemented shortly.

For more information on PC recovery, visit Hitachi's home page at:

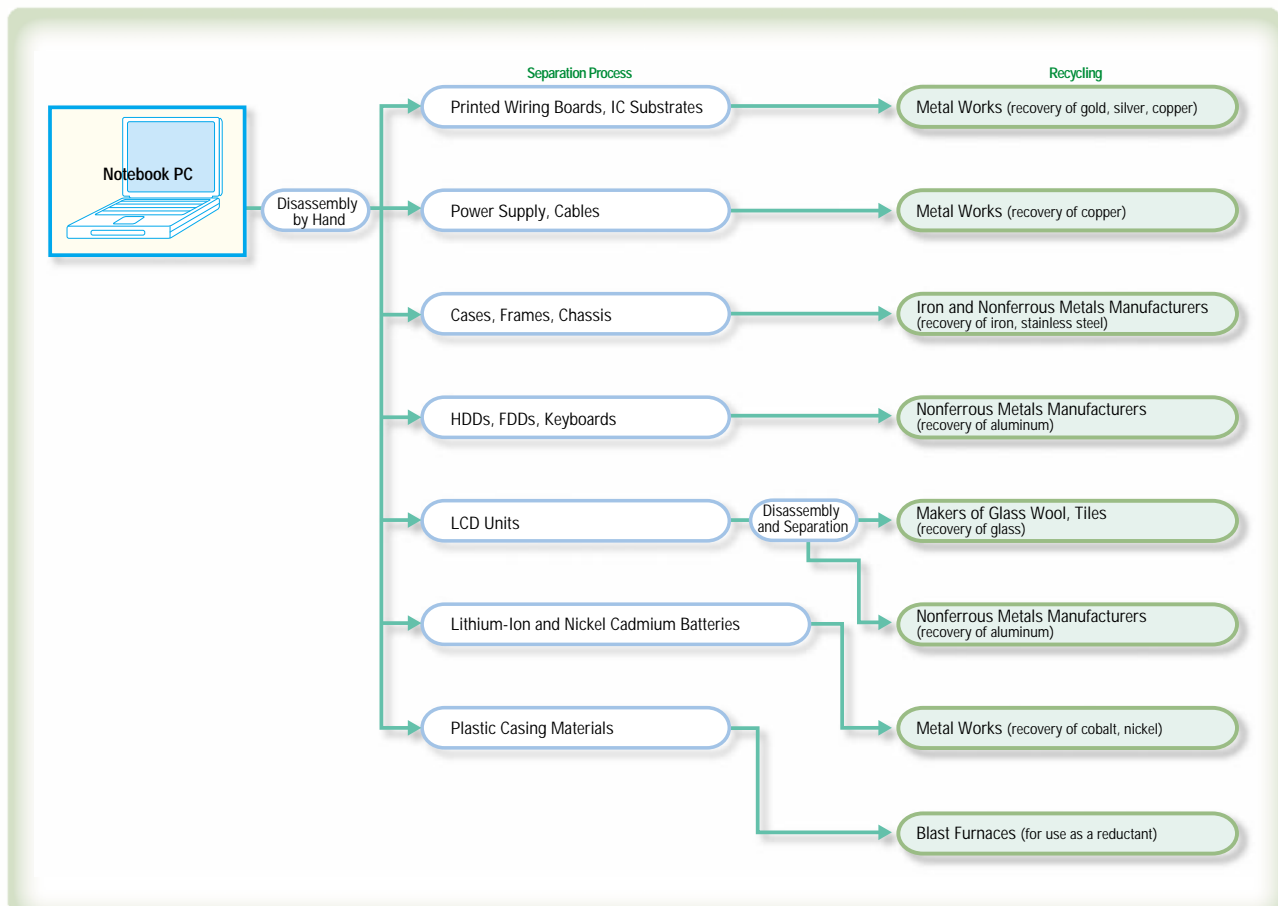
<http://www.hitachi.co.jp/Prod/comp/OSD/pc/index-j.htm>

Autonomous Activity Plans

Regarding PC Recycling and the 3Rs

In January 2000, the Japan Electronic Industry Development Association announced an autonomous activity plan aiming to reduce waste products and reuse and recycle resources regarding PCs. The plan focuses on the three themes of Manufacturing (DfE in accord with the 3R considerations), Collecting (promoting a greater degree of collection of used PCs) and Using (raising the recycle rates of collected PCs). Hitachi is actively promoting this activity plan.

Recycling Flow for Notebook PCs



Consideration for Environmental Issues in Production Activities

Prevention of Global Warming

Action Plan

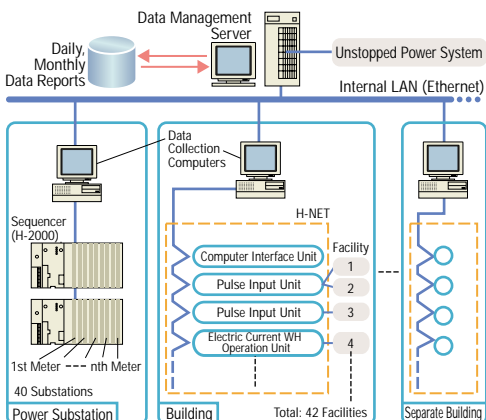
- Reducing production-related CO₂ emissions 25% by FY2010 (based on FY1990 levels)
- Satisfying industry autonomous activity plan requirements regarding global-warming gases (hydrofluorocarbons (HFCs), sulfur hexafluoride (SF₆), per-fluorocarbons (PFCs)) other than CO₂

Saving Energy

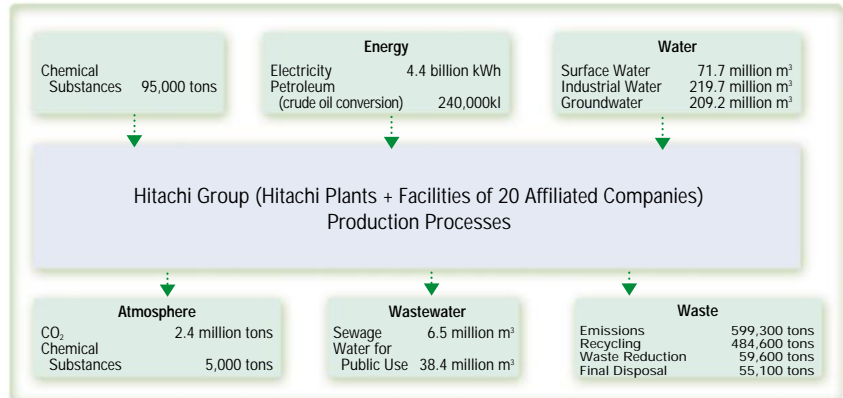
In December 1997, the Third Conference of the Parties (COP3) of the United Nations Framework Convention of Climate Change (UNFCCC) adopted measures to reduce levels of global-warming gases, one of which includes efforts to control CO₂ emissions by conserving energy as a necessary step in preventing global warming.

The Hitachi Group has actively sought to advance energy conservation through the introduction of systems to measure energy use, energy savings assessments conducted prior to the establishment and introduction of new facilities and equipment, and the use of energy-saving equipment. In March 1999, we prepared *Energy Conservation Guidelines* and a collection

Energy Measurement System (H-NET Electric Power Monitoring System)



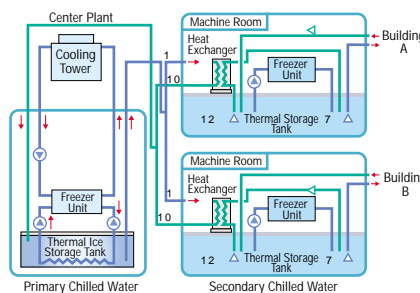
Resource Input and Emissions (FY1999)



Main Energy Conservation Activities

Item	Measures
Air-Conditioning System	Installation of energy-efficient equipment, reduction in air-conditioning airflow, regulation of number of units to raise efficiency
Heat-Treatment Furnace	Improved insulation to reduce heat loss, low-load operations through regulation of rotational frequency of blowers
Cogeneration System	Improvement in total efficiency through use of gas turbine cogeneration system
Boiler	Switch to smaller boilers, regulation of number of units to improve efficiency, exhaust heat recovery
Compressor	Efficiency through regulation of number of units, rightsizing of exerted pressure
Motor	Switch to high-efficiency motor
Other	Smaller vacuum pumps, Installation of energy-efficient lighting, installation of thermal ice storage system

General Diagram of Thermal Ice Storage Center Plant (Enterprise Server Division)



of practical examples, through which we seek to continue improvement in energy savings at each Hitachi business site.

Case Study: Industrial Equipment Group, Narashino Division

Electricity provides 75% (24.7 million kWh/year) of this division's energy supply, 62% of which was consumed by

motors, prompting an assessment of the energy used by equipment that drives motors. Based on this assessment, high-efficiency motors were installed, resulting in FY1998 energy consumption levels 16% (4.3 million kWh) lower than FY1996 levels and a 10% (900kW) reduction in contract power supply.



High-efficiency Motor (Narashino Division)

Other Global-Warming Gas Policies

Hitachi uses several global-warming gases in addition to CO₂, including HFCs in coolants and thermal insulation for air-conditioning units and refrigerators, PFCs as an etching gas for semiconductors, and SF₆ as an insulator for electric equipment. Following the guidelines of the industry's autonomous activity plan, Hitachi promotes the recovery and reuse of these substances and is working to develop materials and technologies to replace them.

Waste Reduction

Action Plan

- Reducing the amount of waste for final disposal at Hitachi, Ltd. to 15% or lower by FY2005 and 10% or lower by FY2010 (based on FY1991 levels)
- Reducing the amount of waste for final disposal at associated firms to 85% or lower by FY2005 and 75% or lower by FY2010 (based on FY1998 levels)
- Promoting zero-emissions facilities

Through the production process, secondary operations and other business activities, Hitachi produces a variety of waste and substandard products. The

Major Recycling/Reuse Methods

Material	Method of Recycling/Reuse
Paper	Recycled paper, RDFs
Wood	Charcoal, RDFs
Plastics	Recycled for internal processing, RDFs, blast furnace reductant
Sludge	Base material for cement
Oil	Distilled and reused, used as fuel additives
Acid, Alkali	Distilled and reused, used as neutralizing agents
Slag	Base material for iron, steel, cement
Raw garbage	Compost

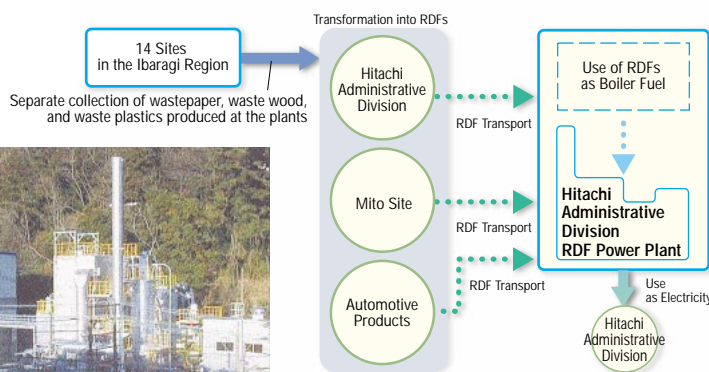
Examples of Efforts at Group Sites

Hitachi's Use of Refuse-Derived Fuels (RDFs) and Thermal Recycling

Hitachi has developed and installed at three of its plants RDF production devices that use wastepaper, waste wood, and waste plastic from other nearby companies for fuel. In April 1999, Hitachi



RDF Power Plant

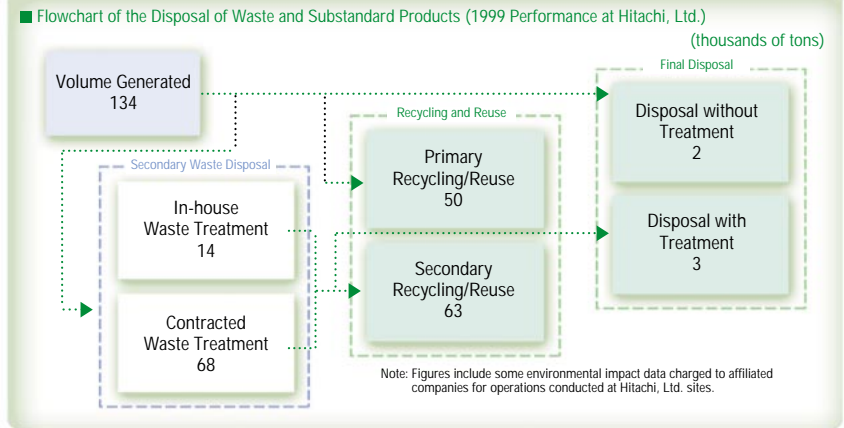
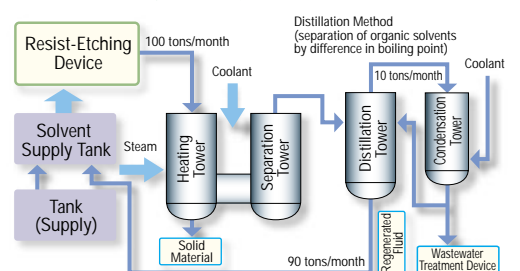


Resist Solvent Regeneration System (Mobara Site)

Hitachi has developed a distillation and regeneration device for resist solvents

used in the production of liquid crystal thin-film transistor (TFT) panels, allowing Hitachi to reuse 90% of its waste solvents.

Resist Solvent Regeneration System



Company is progressing not only in controlling the output of waste and substandard products but is also working to install recycling equipment, collaborate with other industries and outsource waste management to recycling companies so that usable resources are utilized to the fullest extent possible. Furthermore, Hitachi has established guidelines for appropriate waste disposal and conducts periodic inspections of its recycling contractors to ensure that they meet standards set by the guidelines.

Hitachi aims for zero emissions at each of its Group sites.

At Hitachi, zero emissions is defined as an emissions volume of less than 1% of the final disposal rate of the current fiscal year*1, or less than 5 tons/year*2.

*1 Final Disposal Rate = Final Disposal Amount/ Amount Generated

*2 Final Disposal without Treatment + Disposal with Treatment

Please see page 3 of the accompanying documents for further information on Hitachi's waste reduction operations.

Dioxin Countermeasures

Hitachi has systematically worked to prevent the generation of dioxins arising from incineration by discontinuing the use of its incinerators, including smaller incinerators that are not subject to regulation. In December 1997, the Company established a plan to discontinue its use of incinerators, and as of December 1999, it had successfully done so at 10 of 11 facilities. Hitachi plans to abolish the use of all incinerators by December 2000 and work to reduce and recycle waste that it would have incinerated in the past.

Chemical Substance Management

Action Plan

- **Thorough management of chemical substances and planned cuts in emissions volumes**

While chemical substances offer many improvements to our quality of life, it has become clear of late that some chemical substances, such as so-called environmental hormones, have come to have a negative impact on the environment.

In Japan, the Pollution Release and Transfer Register (PRTR) system will become law in 2002. For corporations, thorough routine management and risk management with regard to chemical substances has come to be more critical in furthering business.

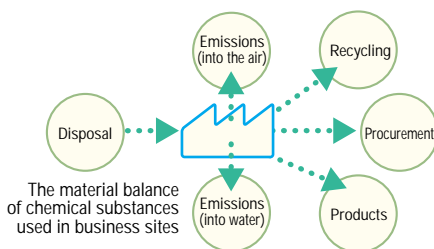
Prior to the PRTR Law, the Hitachi Group promoted the reduced use of designated chemical substances used in its

products and production processes and the replacement of these substances with other substances having less impact on the environment, through its Autonomous Guidelines for Chemical Substance Management, promulgated in 1996. Moreover, we have conducted PRTR surveys* since 1998.

* PRTR survey: Survey of 179 chemical substances specified by the electric and electronic industries

The Hitachi Group's Comprehensive Chemical Management System

With the PRTR Law as an example, regulations concerning chemical substances are being further developed and strengthened. In response, the Hitachi Group's Comprehensive Chemical Management System was



initiated in 1999 to raise the level of autonomous management, part of the Company's efforts to reduce its use of chemicals with an impact on the environment. The system includes management guidelines encompassing the procurement, use, disposal and commercialization of chemical substances at business sites. The first step is to understand exactly what types of chemical substances are being handled at each business site, then to evaluate the substances' potential impact on the environment and determine how substances should be managed. "Eliminate," "Reduce" and "Manage" have been set as autonomous management classifications, and, based on these classifications, substitution and elimination plans are prepared for banned substances, while specific plans for cuts in use and emissions are set for substances designated for reduction. Substances in the "Manage" category are handled in accord with appropriate handling guidelines and PRTR requirements.



■ Risk Assessment Guidelines			■ Risk Management Classification		
Environmental Impact	Evaluation Criteria	Score	Total Evaluation Score	Management Rating	Management Overview
Major	Substances for which Production Is Restricted by Law	20	20 or More Points	Eliminate	Complete Elimination
Moderate	Substances with High Environmental Toxicity Gases Significantly Impacting Global Warming (SF ₆ and others) Substances the Use of which Is Restricted by Law	10	10-19 Points	Reduce	Promote Reduction Plans
Minor	Substances with Environmental Toxicity Poisonous Substances Hazardous Substances	1-5	Less than 10 Points	Manage	Inventory Control

■ Hitachi's Autonomous Substance Management (1,100 Substances)

- Hitachi's Autonomous Substance Management (1,100 Substances)
- Banned Substances (100)** (benzine, dioxin, others)
- Substances for Reduction (250)** (methylene chloride, lead, others)
- Managed Substances (750)** (styrene monomer, ethanolamine, others)

Hitachi's Autonomous Substance Management policy is based on various laws and voluntary action plans.

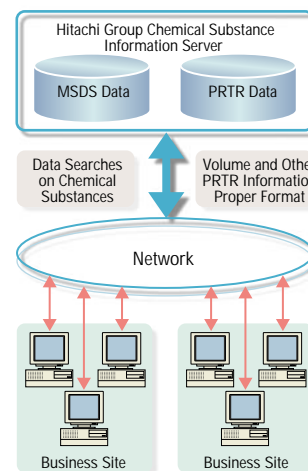
The Hitachi Group Comprehensive Management Support System for Chemical Substances

Hitachi developed and introduced the Hitachi Group Comprehensive Management Support System for Chemical Substances for the efficient operation of a comprehensive management system efficiently covering the entire Group. The system links the Group's business sites in a network, and any site can use the system to search for information about chemical substances anywhere in the Hitachi Group's possession. Complete PRTR information for the

Group is also compiled on the network, allowing real-time access to PRTR data.

The system's database contains information on the processing, special characteristics and other aspects of chemical substances as compiled by the Hitachi Group's wide range of companies, including manufacturers of chemical products and electronic components and devices, as well as logistics services companies. Group companies can use this information to more effectively carry out such environmental preservation operations as incorporating consideration for the environment in product designs and reducing emissions.

■ The Hitachi Group Comprehensive Management Support System for Chemical Substances



We will begin the filing and disclosure of PRTRs from 2002, in accord with the PRTR Law. Hitachi supplies stakeholders with information regarding various risks concerning chemical substances, actively pursuing risk communication to build a relationship of trust while enhancing understanding.

Keeping the Air and Water Clean

Every year, the legal regulations governing the amounts of pollutants in discharges from the workplace into water systems or the atmosphere grow stricter. Anticipating this, the Hitachi Group has instituted its own set of standards regarding discharges that are more exacting than any official ones. Since the 1996 revision of Japan's Clean Air Law and the 1999 promulgation of the Law Concerning Examination and Regulation of Manufacture and Handling of Chemical Substances, it has become more important than ever for companies to act on their own to reduce the volume of discharges from their workplaces. Currently, Hitachi is working hard to curb the

volume of volatile toxic substances its workplaces discharge into the atmosphere or bodies of water as well as to recover heavy metals from wastewater before they reach the general sewage system.

Water Quality Preservation

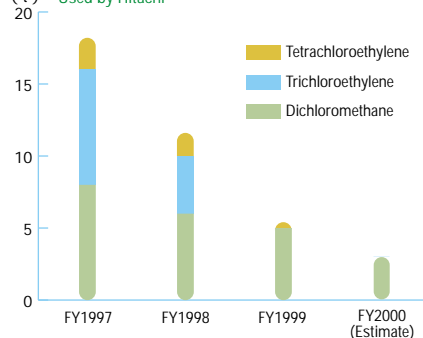
To curb the discharge of such toxic substances as heavy metals from the workplace into open bodies of water, Hitachi is pressing ahead with the installation of wastewater treatment facilities that purify and recycle wastewater after toxic substances have been separated from it and recovered through the use of filter membranes and other devices. At the Hitachi Semiconductor Group's semiconductor production facility in Naka, Ibaragi, wastewater is being effectively recycled at the rate of approximately 330m³ a day.

Preserving the Earth's Atmosphere

Hitachi has succeeded in eliminating the use of such substances that destroy the ozone layer as CFCs and 1,1,1-trichloroethane by devising technologies that facilitate the move to water-based detergents or render unnecessary the cleaning of substrates. (For details of Hitachi's

policies toward hydrochlorofluorocarbons (HCFCs), which are due to be phased out of production use by 2020, please refer to page 9.) Japan's Clean Air Law stipulates that companies are responsible for managing and monitoring their discharge of designated harmful substances into the atmosphere. Of these substances, trichloroethylene and tetrachloroethylene are particularly noxious, and Hitachi, designating them as prohibited substances, eliminated them from use Companywide in May 1995. Hitachi is also making significant progress in reducing its consumption of methylene chloride by making improvements to production processes and shifting to substitute compounds.

■ Trends in the Volume of Certain Atmospheric Pollutants Used by Hitachi



Using a membrane filter, this wastewater treatment device at Hitachi's Naka semiconductor production facility plays a crucial role in the recycling of wastewater.

Providing Environmental Preservation Systems to Society

The Hitachi Group's Comprehensive Environmental Business

Since 1996, environment-related members of the Hitachi Group have worked together to promote comprehensive environmental business. The technologies and businesses of the Hitachi Group

cover the fields of environmental preservation comprehensively. It is our goal to provide the best solutions for all environmental issues through cooperation and systemization. Accordingly, our

efforts are turning to environmental service businesses and regional revitalization in a harmonious relationship with the environment.

The Best Mix for Total Solutions

As the guiding principle of its comprehensive environmental business, the Hitachi Group seeks to provide total solutions with the best mix. This is to say that Hitachi's products are not just a specific treatment for an environmental ill; rather, Hitachi's philosophy is comprehensive, covering organizations' operational structure, logistics and the recovery of products and resources—all aspects of business.

From a broad perspective, with the goal of mobilizing the Group's overall strengths and systemized functions at their greatest levels to resolve environmental issues, Hitachi bases its environmental policy around five fundamental, comprehensive considerations:

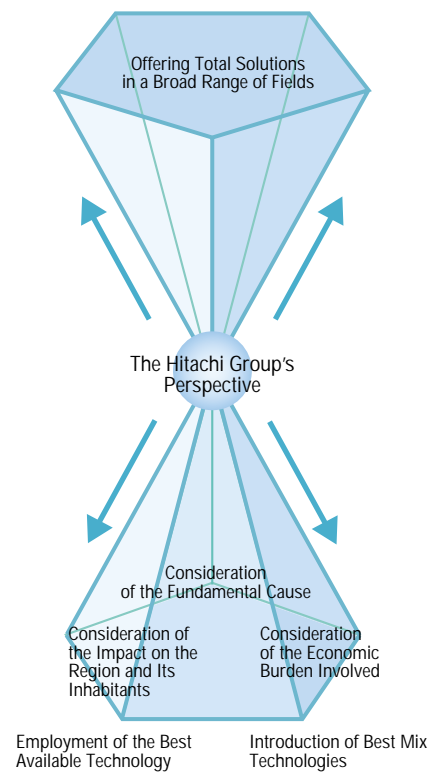
1. The Fundamental Cause
2. The Impact on the Region and Its Inhabitants
3. The Economic Burden Involved

4. Best Available Technology
5. The Best Mix

The illustration to the right shows Hitachi's perspective, supported by the five fundamental considerations and yielding total solutions with the best mix over a broad range of issues. Based on these five considerations and while focusing on environmental preservation in citizen's lives, industry, welfare, education and other fields, Hitachi is proposing solutions to meet broad needs, such as those for the revitalization of local communities.

To realize total solutions with the best mix, the Hitachi Group has diverse product lines focusing on solutions regarding waste, water, air, energy, information and services. Our goal is to provide the most appropriate solutions for all concerns. Below are some of the Hitachi Group's representative products and business operations.

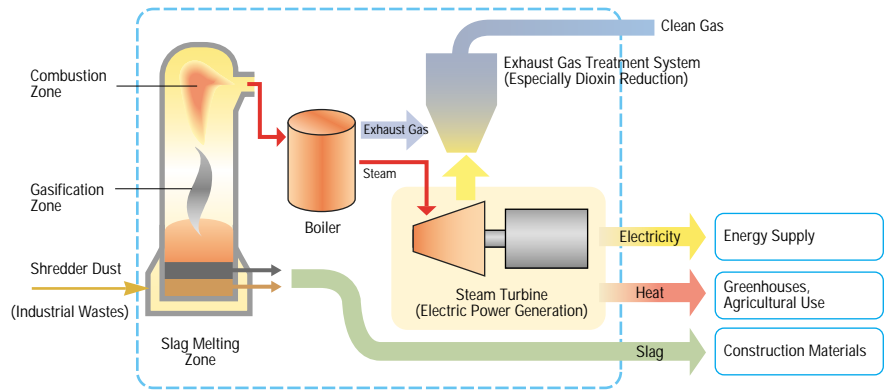
■ The Best Mix for Total Solutions—Overview



■ Major Hitachi Group Products and Businesses for Environmental Preservation

	Waste	Energy	Air	Water	Environmental Services
Major Products and Businesses	Recycling <ul style="list-style-type: none"> • Industrial Waste Products • Recovering Oil from Waste Plastics • Refuse-Derived Fuels (RDFs) • Composting • Carbonization Optimal Processing <ul style="list-style-type: none"> • Thermolysis • Incineration Furnaces • Ash Melt Furnaces Waste Information Management <ul style="list-style-type: none"> • Manifests Eco-Products/Eco-Materials <ul style="list-style-type: none"> • Eco-Production Process 	High-Efficiency Use <ul style="list-style-type: none"> • Waste-Derived Power Generation • Fuel Cells • Cogeneration • Regional Heating and Cooling Waste-Derived Energy Use <ul style="list-style-type: none"> • RDF Power Generation • Power Generation Using Oil from Waste Plastics Renewable Energy <ul style="list-style-type: none"> • Solar Power Generation • Wind Power Generation • Untapped Energy Sources Lean Burn Engine Vehicles <ul style="list-style-type: none"> • Electric Vehicles 	Exhaust Gas Treatment <ul style="list-style-type: none"> • Flue Gas Desulfurization • Flue Gas Denitrification • Dust Collectors • Deodorizers Dioxin Countermeasures <ul style="list-style-type: none"> • CFC & Perfluorocarbon (PFC) Decomposition CO₂ Stabilization <ul style="list-style-type: none"> • Supporting Systems • Analysis and Measurement Systems • Monitoring Systems • Simulation Systems 	Wastewater Treatment <ul style="list-style-type: none"> • Sewage and Industrial Wastewater Treatment • Reuse of Drainage and Rainwater • Advanced Water Treatment Sludge Treatment <ul style="list-style-type: none"> • Incineration, Drying, Composting Soil and Groundwater Purification <ul style="list-style-type: none"> • Hydrosphere Purification Supporting Systems <ul style="list-style-type: none"> • Water Quality Monitoring • Purification Simulation Systems • Information Systems 	Environmental Consulting <ul style="list-style-type: none"> • Environmental Management Support • ISO 14000 Management Support • Chemical Substance General Management Support Environmental Service Businesses <ul style="list-style-type: none"> • Measurement and Analysis • Analysis • Monitoring • Logistics • Treatment and Recycling Facilities Operation, Maintenance, Management <ul style="list-style-type: none"> • Facility Leasing

Overview of the Utashinai Project for Harmonious Coexistence



Comprehensive Environmental Business—Examples

Below are some examples of the Hitachi Group's commitment to the best mix for total solutions.

Electric Power Generation Business Using Industrial Waste in Utashinai, Hokkaido

With cooperation from the public sector,

the Hitachi Group has developed the Thermolysis Ash Melting System to convert industrial wastes into electricity and heat. The project will serve as new infrastructure, and is expected to attract new firms to the area and revitalize the region.

The generated heat will be used by new businesses. In July 1999, the city of Utashinai, Hitachi Metals, Ltd. and Hitachi, Ltd. established a new company to oversee the venture. The new firm will begin operations in October 2002.

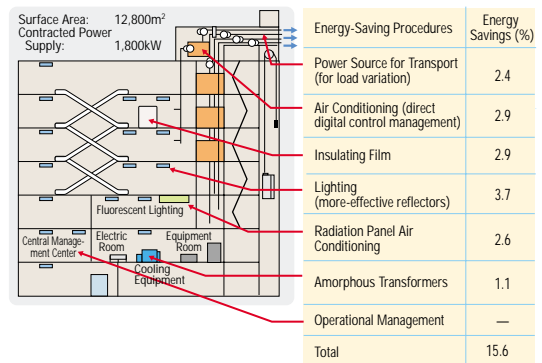
Energy Services Companies

While energy services companies (ESCOs) are a new form of business in Japan, they parallel similar business plans that arose in the United States in the 1970s, centering on guaranteeing energy savings over the long term through improvements in facilities and equipment. In 1998, as part of plans to promote this form of business in Japan, the Ministry of International Trade and Industry (MITI) decided to support model ESCOs

established by the private sector.

Hitachi's Mechanical Engineering Research Laboratory applied for and received MITI support for its construction for improved energy savings, which is expected to produce annual energy savings of 15.6% and reduce CO₂ emissions by 94 tons. Hitachi is advancing its ESCO operations based on the technologies developed in this model business.

Model Business—High Energy Efficiency (Mechanical Engineering Research Laboratory)



Comprehensive Water Environmental Business

In recent years, manufacturing and daily activities in urban areas have caused a water pollution problems in Japan's rivers and lakes. The creation of a biotope along rivers as well as the improvement of the water quality of lakes and drainage to maintain flow levels in rivers are required

to preserve the total water environment. Hitachi is supporting various water environmental management decision making by enhancing its plant control expertise and through various simulation technologies, wide area telecommunications network systems and watershed management systems, utilizing Geographical Information Systems (GIS).



An image of Comprehensive Water Environment Business

Representative Environmental Preservation Products/Systems

Waste Treatment and Reuse of Resources

Rotary Kiln-Type Thermolysis and Ash Melting System

The Hitachi Group has begun commercial production of next-generation waste treatment systems that overcome many of the drawbacks of conventional waste incineration methods. The Hitachi rotary kiln-type waste thermolysis system maximizes waste energy and reduces the volume of ash by melting it and making it

reusable. Moreover, residual heat is used with great efficiency in the generation of electricity. High-temperature combustion greatly reduces dioxins, and exhaust gas treatment equipment minimizes the dioxin content of exhaust gas to under 0.01ng-TEQ/m³N. By combining thermal recycling and materials recycling, the waste thermolysis and ash melting system makes a significant contribution to the preservation of the global environment.



Pilot waste treatment plant using the kiln-type waste thermolysis system in Hitachinaka City, capable of processing 20 tons of waste material a day

Electric Home Appliances Recycling Business

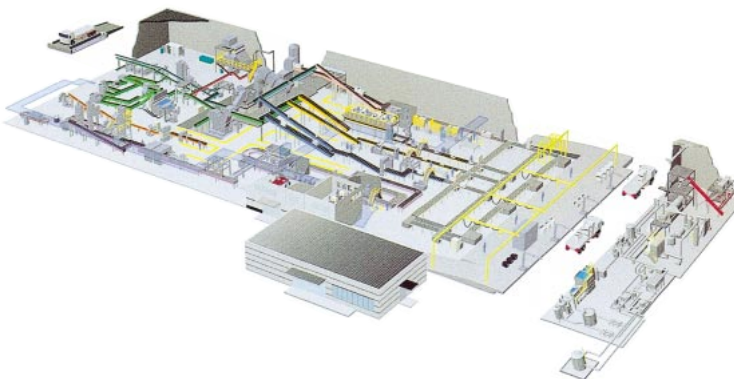
Hitachi has developed a recycling system in accord with Japan's Electric Home Appliances Recycling Law. The system reduces environmental load by recycling materials after crushing and separating waste components. Foamed urethane used as insulation in refrigerators is compressed, then the CFCs in it are recovered. At the same time, the system recovers metals, reusable plastic and polyvinyl chloride (PVC) from the crushed materials by using various separation techniques.

As the next step, Hitachi founded Hokkaido Eco Recycle Systems Co.,

Ltd. in October 1999 and Tokyo Eco Recycle Co., Ltd. in December 1999, applying the system it developed to

the consumer electronics recycling business in Japan.

Electric Home Appliances Recycling Plant
Picture: Association for Electric Home Appliances



Energy

Photovoltaic Power Generation Systems

Using the sun as an energy source provides a clean source of electricity with essentially no environmental load from emissions.

Facilities can be located where necessary to meet the demands of the situation. Facilities can be operated with no supervision, equipment has a long life-time and maintenance is quite simple.



Solar Power Generation System
(Kure Technical College)

Wind Power Systems

With a product lineup capable of generating from 230kW to 1,800kW, Hitachi can provide the wind power system that best matches the operating environment

and application. The system's high-efficiency, low-noise operation supplies high-quality electricity, and exacting maintenance service provides stable power generation.



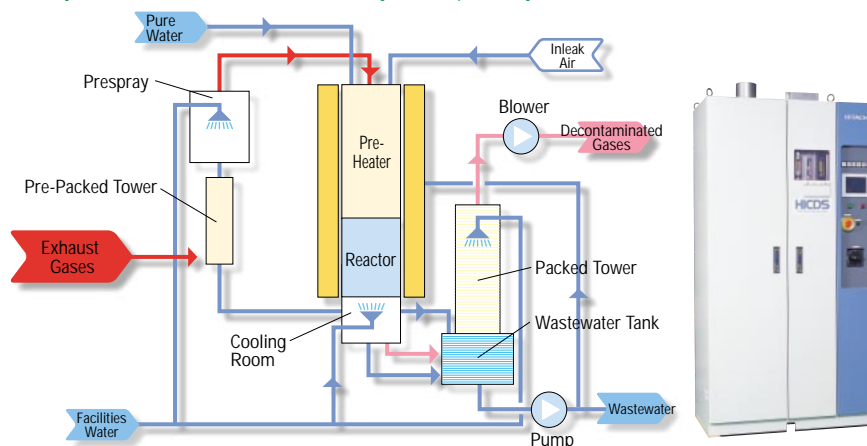
500kW Wind Power Generation System
(Okinawa Electric Power Company)

Air Environmental Preservation

PFC Catalytic Decomposition System

PFCs are used throughout the semiconductor and liquid crystal display (LCD) industries for a variety of process applications. PFCs were listed as global warming gases at the 3rd Conference of the Parties (COP3) to the United Nations Framework Convention on Climate Change (UNFCCC) held in Kyoto in 1997, and it has become increasingly important to abate or neutralize them. The issue has been an ongoing problem for the semiconductor industry, as PFCs are very stable and difficult to break down. Hitachi has solved this problem by developing a proprietary catalytic decomposition technology through which PFCs, CHF₃, C₂F₆, C₃F₈,

■ System Flow and External View of the PFC Catalytic Decomposition System



C₂F₆, SF₆, NF₃ and even CF₄—generally the most difficult PFC to decompose—can be broken down by more than 99% at 750°C (including CO), while maintaining the lowest cost of ownership available today.

Exhaust gases from the etching process, which include PFCs, are washed in the prespray tower to remove such solids as SiO₂. The gases are heated to 750°C in the chamber and are decomposed by the catalyst in the reactor. The hot

decomposed gases are then cooled in a cooling room. Since HF gas is formed by the catalytic reaction, a packed tower is included to remove the acid from the decomposed gases. The final exhaust by-products are CO₂ and fluorinated water.

The system has a high resistance to corrosion and offers superior maintenance, providing an excellent environmental protection measure.

Water Environmental Preservation

Ribbon-Fiber Biofilter System

The ribbon-fiber biofilter system very effectively decomposes and abates organic pollution (biochemical oxygen demand, chemical oxygen demand and algae) by concentrating microorganisms that normally live dispersed in polluted water in a system of ribbon fibers. The system offers potential energy savings, as it uses the microorganisms' natural abili-

ties to purify the water. Operation and maintenance characteristics are also superior, as minimal sludge generation reduces clogging and jamming.



(Above) Ribbon-Fiber Units
(Right) A View of the System in Use

Environmental Services

Comprehensive Chemical Substance Management System—Chemilution

Chemilution is a package system offering unified management functions for such chemical substance issues as PRTRs and green procurement. Based on extensive data accumulated by Hitachi Group companies concerning a diverse range of

chemical substances as well as their extensive process knowledge and experience with regard to materials selection, the system can also be used as a database. In addition, efficient data compilation and analysis functions allow emissions reduction plans to be implemented smoothly.



The Chemilution Start-up Screen and Data Entry Screen

Research and Development

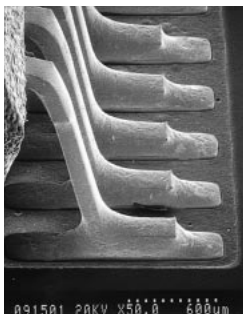
Research and Development for Environmental Preservation

Each of the Hitachi Group's R&D centers actively promotes research into products and services that contribute to environmental preservation by focusing on research themes related to environmental preservation systems.

Recent R&D work includes developments in materials, new energy sources and the measurement of chemical substances.

Three New Lead-Free Solders Developed In-house

Hitachi is working to eliminate lead from many of its products. Since 1989, some supercomputer components have used lead-free solder based on alloys of tin and silver. Hitachi has developed three materials that can replace lead in a wide range of product applications, from industrial and commercial applications to general home applications. As a result, practically all products can now be made without the use of lead. The companies of the Hitachi Group are actively putting these new materials into use.



Magnified Photo of Lead-Free Solder in Use

Manganese-Lithium Rechargeable Batteries

Rechargeable lithium batteries are a critical tool in the resolution of a number of energy and environmental problems, showing potential for use in electric cars and in electric power load-leveling applications. We are specializing in manganese-lithium batteries, the resources

Lead-Free Solder Materials

	High-Temperature Solder	Medium-Temperature Solder	Low-Temperature Solder
Main Components	Tin-silver alloy	Tin-silver alloy with small amounts of bismuth and other elements	Tin-bismuth
Special Characteristics	Used in product fields demanding superior strength and reliability and in heat-resistant flow processes*1 components on printed circuit boards	Good usability, better wettability than the high-temperature solder, for use in reflow processes*2	Good usability, used as a low-temperature material in three-dimensional layered mounting components on printed circuit boards
Main Applications	Vacuum cleaners Washing machines	PCs 8mm video cameras	Mainframes Washing machine display substrates

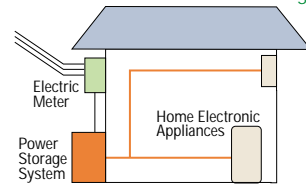
*1 Flow processes—for insertion mounting *2 Reflow processes—for surface mounting

for which are abundant and inexpensive. Through a project sponsored by the New Energy and Industrial Technology Development Organization (NEDO), we are promoting the development of a power storage system for home electric appliances that focuses on the use of manganese-lithium batteries and makes use of off-peak nighttime electricity. One application of the results of this research is manganese-lithium batteries for use in electric cars.

Prototype Reusable Manganese-Lithium Battery



Overview of Home Power Storage System Equipment



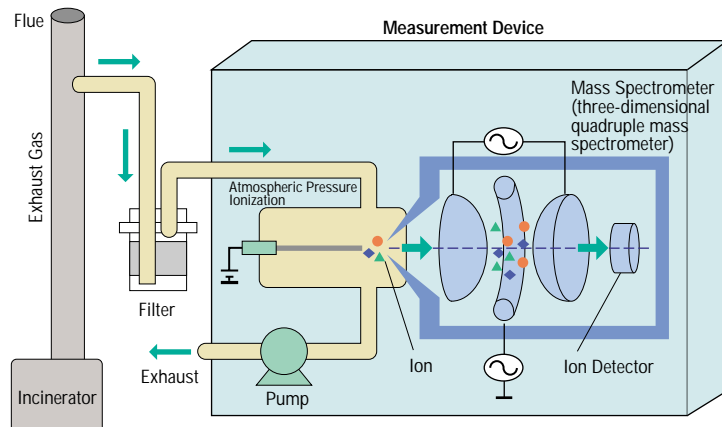
Chlorophenol Monitoring System for On-line Measurement of Dioxin Antecedents in Flue Gas

We have developed a technology for on-line measurements of concentrations of chlorophenol, an antecedent of dioxin found in flue gas from incinerators used to dispose of waste products.

Results of measurements are reported to incineration control, and, by suppressing the generation of chlorophenol, it is possible to reduce dioxin emissions.

In the past, dioxin analysis typically took several weeks, but a special feature of this new technology is that chlorophenol concentration can be measured on-line in approximately one minute.

Overview of the Dioxin Antecedent (Chlorophenol) Concentration Measurement Device



Exchanges with Society—Environmental Communication

Disclosure of Information on the Environment

People from all walks of life, corporations, politicians and bureaucrats must build a partnership, cooperate and work together in unison toward the goal of realizing a fully sustainable society.

Above all else, what matters is a collective awareness of environmental risks, the burden that we place on the environment, an exchange of information about various environmental strategies and a broadening of mutual understanding. Based on this philosophy, while striving to make as many people aware of its

environmental operations as possible, Hitachi is pushing ahead with these operations only after conducting a serious and sustained dialogue with all those involved.

Bringing Information to the World Publication of the *Hitachi Environmental Report* and Web Site Features

Hitachi has been publishing pamphlets on the environment since 1993 and in 1998 published and distributed its first full-fledged environmental report. In April 1999, we established a series of

pages on our Web site devoted to our approach to environmental issues and have placed on those pages not only our environmental reports but also the latest news on environmental topics.

Hitachi's Approach to Environmental Issues— Web Site Address:

<http://www.hitachi.co.jp/Div/kankyo/khoukoku/kfoukoku.htm>



Environment-related Printed Documents

Month/Year	Issue	Printed Volume
Oct. 1993	FOR PLANET EARTH	5,000
Oct. 1994	BEYOND RECYCLE NEWS	3,000
Mar. 1995	FOR PLANET EARTH (English version)	3,000
Mar. 1996	FOR PLANET EARTH (Additional data '94 & '95)	10,000
Oct. 1996	FOR PLANET EARTH (English version)	3,000
Dec. 1997	FOR PLANET EARTH (Additional data '96)	10,000
Sept. 1998	1998 Environment Report, Japanese version	10,000
July 1999	1999 Environment Report, Japanese version	10,000

Home Page Addresses for Hitachi Group Environment Activities

Company Name	Home Page Address
Hitachi Chemical Co., Ltd.	http://www.hitachi-chem.co.jp/honsha/environment/rc.html
Hitachi Koki Co., Ltd.	http://www.hitachi-koki.co.jp/env/eindex.html
Hitachi Denshi, Ltd.	http://www.hitachi-denshi.co.jp/Pages/CoPrf/kankyoku.html
Hitachi Cable, Ltd.	http://www.hitachi-cable.co.jp/eco/index.htm
Hitachi Maxell, Ltd.	http://www.maxell.co.jp/company/kankyo.pdf

Hitachi at Exhibitions

In 1999, Hitachi made presentations at the exhibitions listed below and deepened the public's understanding of its approach to environmental issues.

Principal Exhibitions in which Hitachi Recently Participated

Month and Year	Event Title
June 1999	Environment Exhibition '99 (Hitachi City)
October 1999	New Earth '99
November 1999	Wastec '99
November 1999	Recycle Festa Yokohama
December 1999	Eco Products 1999
February 2000	ENEX '99



Eco Products 1999

Participation in Lecture Meetings

Hitachi is working hard to enhance communication with the general public by introducing them to the technology and know-how it uses in its approach to environmental issues via magazine articles written by its employees and lecture meetings.

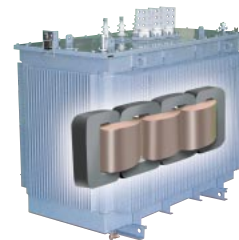


Discussion Meeting Hosted for Local Small and Medium-Sized Corporations by the Nagano Prefecture Techno Highland Development Organization

Awards

Hitachi has received a number of awards from organizations outside of the Company in recognition of its products' environmental soundness and the environmental operations of its offices and factories. (See page 7 of accompanying documents.)

Super Amorphous Transformer Awarded the Chairman's Prize* by the Energy Conservation Center, Japan



By using an amorphous alloy for the iron core of the transformer, the winding structure is improved, and total losses are reduced by half. It has been widely praised for its high energy conversion efficiency.

* Presented by the Energy Conservation Center, Japan, for energy-conserving machines suited to life in the 21st century, one of the major energy conservation accolades awarded by Japan's Ministry of International Trade and Industry (MITI).

In Touch with Nature

At every Hitachi business site, employees enthusiastically participate in environmental activities in their area, from greenification projects and other beautification campaigns. Local residents and people from other corporations nearby are encouraged to visit the Company's workplaces and are thereby introduced to Hitachi's unique approach to environmental preservation and able to exchange views on environmental issues with Hitachi employees.

When we were approached by people complaining of excessive noise being generated by Hitachi's factories and when local authorities have had occasion to bring to Hitachi's attention issues concerning

wastewater discharge, the Company has taken rapid and decisive steps to deal with the problems.

To support contributions made by its employees to environmental activities and the society of which Hitachi is a part, in May 2000 Hitachi established a Green Award for Social Contribution, for which any of its workplaces can be nominated.

Conservation in Action—Enterprise Server Division

In July 1993, the Enterprise Server Division inaugurated a new project, The Woods of Wild Birds Program, designed to attract more wild birds to the park surrounding the division's premises.



Putting Up Birdhouses with Elementary School Students



A Newspaper Feature Introducing The Woods of Wild Birds Program

Members of the division planted fruit-bearing trees and put up birdhouses, feeding stations and birdbaths to encourage more birds to visit.

Members of the program attended the morning assemblies at a local elementary school.

Foundations and Institutes

With the intention of deepening society's awareness and understanding of environmental issues, as far back as 1972, Hitachi established the Environmental Research Center, an incorporated foundation. The center contributes to the resolution of environmental problems in numerous ways: by supporting the study-abroad programs of environmental specialists with

either administrative or research backgrounds; by conducting surveys and research into a host of environmental matters; by publishing an in-house magazine, *Environmental Research* and by awarding its Environmental Prize for environmental activities.

Hitachi also supports the World Wide Fund for Nature Japan (WWF Japan) and other environmental NGOs.



Hitachi's In-house Publication *Environmental Research*

Responding to Your Questions and Opinions

In fiscal 1999, by telephone, post and e-mail from our home page and through other means, Hitachi responded to some

200 requests for more information about its environmental policies. Below are just

a few examples of the sort of inquiries that we receive.

Inquirer	Subject of Inquiry	Hitachi's Response
Junior High School Student	Questionnaire of area businesses for a homework project on efforts to prevent pollution	We completed the student's questionnaire and sent out a copy of the <i>Hitachi Environmental Report</i> .
University Student	Surveying the impact IT equipment has on the environment and efforts being made to lessen its impact	We explained what we do in this area, particularly with regard to our returns system for recovering used IT equipment and other products.
Middle-aged Man	A lover of Hitachi products, this man asked to be sent a copy of the <i>Hitachi Environmental Report</i> as he said that he was going to take into consideration the attitude of electrical manufacturers toward the environment when making purchases of electrical goods in the future.	We sent out a copy of the <i>Hitachi Environmental Report</i> .
Electrical Machinery Manufacturer	Conducting a survey into how companies were making their products more environment-friendly	We explained our guidelines regarding design for environment.
Financial Institution Employee	Surveying the approaches of companies to environmental issues as part of an investigation into Ecofunds	We explained our approach, as presented in the <i>Hitachi Environmental Report</i> .

Environmental Activities around the World

The Hitachi Group has business interests all over the world, not only in Japan but also in Southeast Asia, Europe and the Americas. Everywhere that it operates, the Company is actively committed to the concept of environmental soundness and is pressing ahead with the introduction of environmental management systems and the acquisition of ISO 14001 certification. As a good corporate citizen, Hitachi takes care to participate in a variety of activities that will hopefully lead to the making of a better and more fulfilling society for everyone and is putting together a series of projects that are designed to bring Hitachi closer to the citizens of the societies where the Company operates. Hitachi also enthusiastically supports the volunteer activities of its employees wherever they work.

Hitachi Semiconductor (Malaysia) Sdn. Bhd.

Hitachi has banned the use of chlorine solvents and halon gas in fire extinguishers, reduced the volume of soldering waste generated 30%, moved to 100% recycled packaging for all its products and introduced several energy conserving measures at this Malaysian semiconductor production facility. In August 1998, the facility acquired ISO 14001 certification. In recognition of these and other achievements, in February 2000, Hitachi was awarded the Malaysian Prime Minister's Hibiscus Award, the premier environmental award for business and industry in Malaysia.



Receiving the Malaysian Prime Minister's Hibiscus Award

Hitachi Air Conditioning Products (M) Sdn. Bhd.

This Malaysian air-conditioning manufacturing plant acquired ISO 14001 certification in April 1997 and has been constantly broadening the scope of its recycling operations and the reach of its environmental policies.

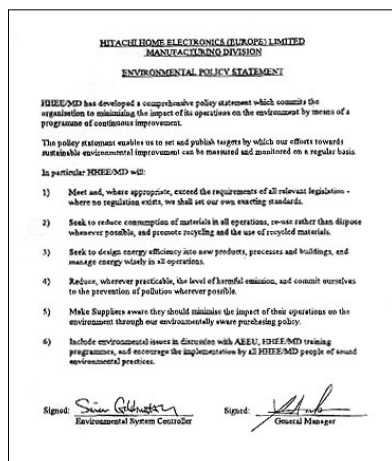
The Malaysian administration recognized the depth of Hitachi's commitment to the environment when in October 1998 the factory was awarded the Selangor State Prize for Environmental Excellence (Large-Scale Business Category).



Presentation of the Selangor State Prize for Environmental Excellence (Large-Scale Business Category)

Hitachi Home Electronics (Europe) Ltd., Manufacturing Division

This is a Hitachi television manufacturing facility in the United Kingdom that has drawn up a comprehensive statement of its environmental policies and made noteworthy efforts to purchase products that are environmentally sound, manage chemical substances as carefully as possible and reduce waste products.



The Environmental Policy Statement of Hitachi Home Electronics (Europe)

Environmental Awareness Activities in the Fiscal 1999 Hitachi Young Leaders Initiative*

With the cooperation of the World Wide Fund and local authorities, Hitachi hosted a camp on the outskirts of Kuala Lumpur for young people involved in the Young Leaders Initiative, where they were able to learn more about environmental preservation, explore local forests and take part in tree-planting initiatives, thereby deepening their awareness of the importance of conserving our natural environment. They also performed dramatic sketches on environmental themes and were able to share their thoughts and exchange opinions on green issues.

*An international students forum inaugurated by Hitachi in 1996 to discover the leaders of the next generation from across Asia and help them network and promote a greater understanding of various problems confronting the region.



Learning about the Environment

Hitachi Computer Products (America), Inc.

Employees at the Hitachi Computer Products manufacturing facility in Norman, Oklahoma were enthusiastic participants in the city's volunteer-based garbage collection day, held on April 8, 2000. In five hours, Hitachi employees managed to collect an amazing 84,600 pounds of garbage.



Hitachi Employees Helping to Clean Up Norman, Oklahoma

The History of Hitachi's Approach to Environmental Issues

	Month and Year	Measures Taken by the Hitachi Group	Year	World Events
1960s-1970s			1967	Japan's Basic Law for Environmental Pollution Control promulgated
	September 1970	Pollution Prevention Committee set up	1968	Japan's Air Pollution Control Law promulgated
	September 1971	Environmental Management Promotion Center set up	1970	Japan's Clean Water Act and other water pollution-related laws promulgated
	February 1972	Hitachi begins Groupwide investment in environment facilities Environmental Research Center established		
	May 1973	Hitachi incorporates environmental audits into its operational audits		
1980s	February 1983	Environmental Management Promotion Center renamed the Environment Protection and Fire Prevention Production Center	1988	Montreal Protocol signed
	May 1989	CFC Policy Committee set up		
1990s	June 1991	Environment Policy Office established	1991	Keidanren Global Environment Charter formulated
	December 1991	Hitachi wins Stratospheric Ozone Layer Protection Award from the U.S. Environmental Protection Agency (EPA)		Japan's Law for the Promotion of Recyclable Resources promulgated
	March 1992	Environmental Committee established Ozone Layer Protection Committee, Products Recycling Committee, Global Warming Prevention Committee, Industrial Waste Committee set up	1992	Japan's Waste Management Law revised Earth Summit in Rio de Janeiro British Standards Institute BS7750 environmental management systems certificate established
	July 1992	Environmental Action Plan formulated		
	October 1992	Cogeneration systems introduced at Hitachi facilities		
	March 1993	Hitachi formulates Environmental Protection Action Guidelines (Global Environment Charter)	1993	Japan's Basic Environment Law promulgated
	May 1993	Awarded Global Environment Prize by WWF Japan		Japan's Law Concerning the Rational Use of Energy revised
	December 1993	Use of CFCs as cleaning agents eliminated		
	May 1994	ISO Certification Committee set up	1994	United Nations Framework Convention on Climate Change comes into effect
	December 1994	Use of trichloroethane and other chlorine-based organic solvents eliminated		
	January 1995	Internal environmental audit system introduced	1995	Containers and Packaging Recycling Law promulgated
	October 1995	Refuse-Derived Fuel (RDF) facilities introduced		
	December 1995	Use of all CFCs deemed ozone depleting by the Montreal Protocol completely eliminated		
	January 1996	Environmental Action Plan revised with regard to product recycling and global warming prevention measures	1996	Keidanren Appeal on Environment proclaimed Japan's Clean Air Act revised ISO 14001 international environmental standards established
	June 1996	The Storage Systems Division becomes the first Hitachi unit to acquire BS7750 environmental management systems certification from the British Standards Institute		
	March 1997	Hitachi voluntarily introduces system of usage reduction and the elimination of particularly toxic chemicals	1997	Japan's Waste Management and Public Cleaning Law was revised Japan hosts the Third Conference of the Parties to the United Nations Framework Convention on Climate Change (COP3)
	September 1997	Hitachi wins the U.S. EPA's Best-of-the-Best Stratospheric Ozone Protection Award		
	December 1997	Industrial Waste Reduction Action Plan revised Hitachi has a prominent stand at Eco Japan '97 exhibition, held alongside the Third Conference of the Parties to the United Nations Framework Convention on Climate Change (COP3) in Kyoto, Japan		
	February 1998	Recycling System Committee set up	1998	Japan's Law Concerning the Rational Use of Energy revised
	July 1998			Japan's Law for the Recycling of Specified Kinds of Consumer Electric Goods (the Consumer Electric Home Appliances Recycling Law) promulgated
	March 1999	Hitachi awarded the Minister of International Trade and Industry's Prize at the Green Japan Center sponsored annual Resource Recycling Awards ceremony Design for environmental assessment guidelines formulated	1999	Japan's Law Concerning Promotion of Global Warming Countermeasures promulgated
	April 1999	Hitachi Group environmental management structure strengthened by the establishment of the Senior Executive Committee for Environmental Policy and the start of GREEN 21 activities		Japan's Law Concerning Examination and Regulation of Manufacture and Handling of Chemical Substances promulgated
	July 1999	Formulation of Comprehensive Chemical Substance Management Policies		
	October 1999	Hitachi introduces a system for the disclosure of environmental information		
	December 1999	Hitachi Group's Environmental Action Plan revised completely Hitachi exhibits at Eco Products 1999 Environmental Accounting Policies formulated		Japan's Law Concerning Special Measures to Control Dioxin promulgated
2000s	April 2000	Environmental accounting results disclosed	2000	Basic Recycling Law was established.
	May 2000	Green Award for Social Contribution established		Japan's Wastes Management and Public Cleaning Law was revised.
	November 2000	Hitachi wins the "Award for Excellence" at the Fourth Environmental Report Awards.		Japan's Recycling Law was established.
	December 2000	Guideline for waste reduction, reuse, recycling and appropriate disposal set up Hitachi Hitachi exhibits at Eco Products 2000.		Japan's Green Purchasing Law was established. Food-Recycling law established.
	March 2001	The Green Procurement Guideline (Ver. 2).*		Construction Material Recycling Act established.

Organization or Committee System Groupwide Policy Major External Awards



The design above is used to indicate the Hitachi Group's environmental management activities and its system for the disclosure of information on the environment.

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Hitachi, Ltd. is a member of the Green Purchasing Network.



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Reports and Data on Environmental Performance Fiscal 2000

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Editorial Policy

“ Reports and Data on Environmental Performance, Fiscal 2000, ” expands a report scope and indicators, that we referred to “ Environmental Performance Indicators for Businesses, Fiscal 2000 ”

Report period: Fiscal 2000(April 1,2000 through March 31,2001)

Scope of reports: 310 firms of the Hitachi Group (Hitachi, Ltd. and its 309 related companies subsidiaries and affiliates). We conducted a survey of environmental impacts of consolidated group firms and covered in the report the major group firms that accounted for 85% of the environmental impact of the Hitachi Group. (The "Data on Environmental Performance" of fiscal 1999 covered 21 firms, which accounted for 50% of the environmental impact of the group.)

Reference indicators: We used "Environmental Performance Indicators for Businesses, Fiscal Year 2000 Version" (Ministry of Environment) for reference.

This indicates the relationship between the table of contents of "Reports and Data on Environmental Performance, Fiscal 2000 "and "Environmental Performance Indicators for Businesses, Fiscal Year 2000 Version " (Ministry of Environment)

Contents of This Report		Environmental Performance Indicators for Businesses	
Environmental Management System	GREEN 21 Activities	Chronological Changes and Improvement the Green Point Average Green Points of Each Site	Unique environmental activities of the group
	Environmental Management Performance	ISO 14001 Certification Status Legal License Green Purchasing Status	Situations of EMS establishment Number of persons of those who received education. - Indicators of green purchasing according to the characteristics of products and services purchased Quantity or proportion of environment-conscious products / services purchased such as Eco Mark products which are certified by eco-labels
	Environmental Accounting	Performance Progress in Environmental Accounts Cost Effect Efficiency of Environmental Impact Reduction Sales of Environmental Preservation and Environmentally Conscious Products	Monitoring of environmental conservation costs - Monitoring of the effects associated with environmental conservation measures
Consideration for Environmental Issues in Products and Services	Green Products	Registration Status of Green Products	Indicators of environmental burdens according to the characteristics of the products and services -Environmental burdens at the use phase -Energy efficiency of each product group -Environmental burdens at the time of disposal -Percentage of reusable / recyclable portions of each product group -Dismantling time for each product group -Amount of containers and packaging used -Content of hazardous materials
		Status of Disassembly Time Reduction, Recyclability Enhancement, and Packaging Polystyrene Reduction	
		Consumption of Containers and Packaging	
		Amount of Polystyrene Foam Used in Packaging for Home Electric Appliances	
		Amount of Lead Used in Solder	
	Promoting Green Procurement	Indicators of green purchasing according to the characteristics of products, services purchased	
Promotion of the Modal Shift	Total Volume of Transportation CO ₂ Emissions Resulting from Transportation Ratio of Means of Product Transportation The Percentage of Low-Emission Vehicles to the Number of the Company-Owned Vehicles	Total volume of transportation CO ₂ emissions resulting from transportation Production quantity / percentage of low-emission vehicles and fuel efficient vehicles Numbers introduced or ratios of low-pollution vehicles and fuel-efficient ones	
	Representative Green Products	Indicators of environmental burdens according to the characteristics of the products and services	
Consideration for Environmental Issues in Production Activities	Overview of Resource Input and Emissions	Overview of Resource Input and Emissions	Total input of materials Total energy consumption Amount of water used Amount of sustainable use of water within a business internally Total amount of drainage
		Water Consumption	
	Prevention of Global Warming	Emission and Breakdown of Greenhouse Gases	Greenhouse gas emissions
		Composition of Energy Use	Renewable energy consumption
		Trends in CO ₂ Production-Related Emissions	Total CO ₂ emission
	Waste Reduction	Flowchart of the Disposal of Waste and Substandard Products	Total amount of waste generated
		Trends in Final Disposal Waste Reduction	Amount of final disposal of waste
		Proportion of the Way of Recycling	Amount of recyclable resources reused Amount of recyclable resource recycled Amount of recyclable resources that are thermally recycled
Chemical Substance Management	PRTR Survey Results	Substances subject to the PRTR Law	
	Amount of Ozone Depleting Substances Released	Amount of ozone depleting substances released	
Exchanges with Society	Disclosure of Information, Communication	Third-Party Comments on the Environment Report 2000 •Questionnaire Survey Results	Disclosure of environmental reporting, eco-labels, etc. Progress in implementation of environmental communication with stakeholders
		Issuance of Environmental Report	
		Participation in Exhibitions	
	Social Contribution	Progress in Social Contribution Activities	Progress in social contribution activities related to environmental conservation
	Adherence to Regulations	Status of Adherence to Regulations	Number of violations, accidents, fines
Awards	Products Awards	Evaluation of the Hitachi Group's environmental activities	
	Operations Awards		

Environmental Management System

Green 21 Activities

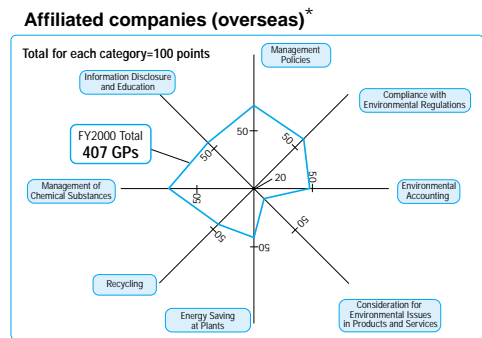
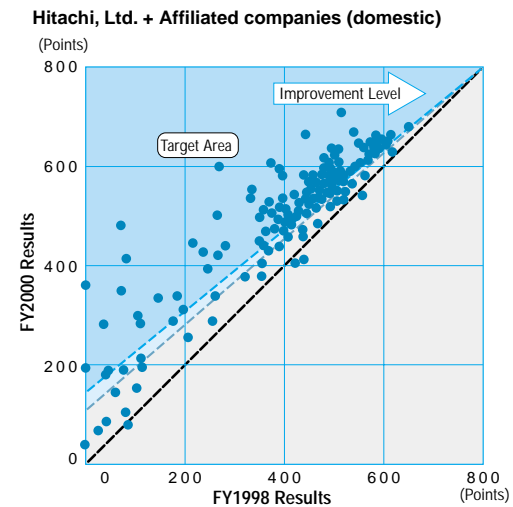
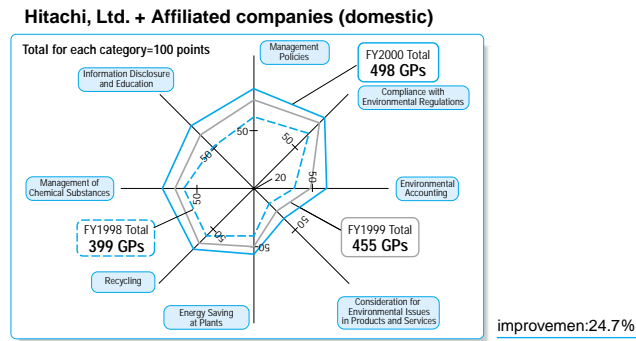
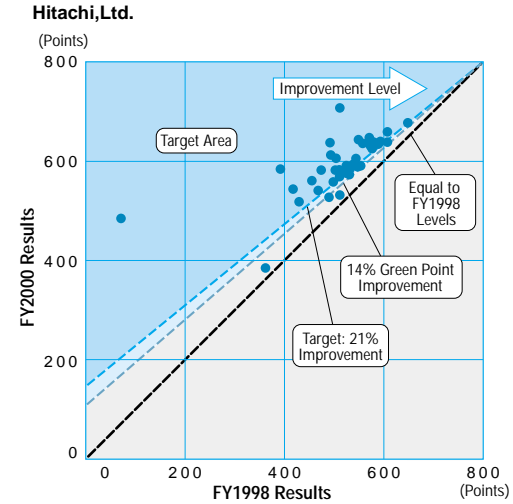
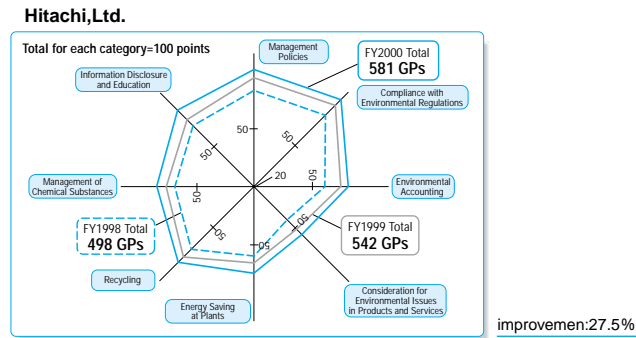
The Increase in the Green Point Average of Hitachi, Ltd.

The improvement in the green point average of fiscal 2000 (from fiscal 1998) was 27.5% for Hitachi, Ltd. alone and 24.7% for Hitachi, Ltd. and its affiliates (domestic). The consideration for environmental issues in products and services, energy saving at plants and environmental accounting that showed particularly high rises in the average scores were due to the setup of guidelines and their enforcement. The project was able to be advanced with regard to the 21% rise target for fiscal 2001 (as compared to fiscal 1998). They were front-loaded. During the next fiscal year, we will consider the targets for the second stage. For the affiliated companies (overseas), we have launched "Green21 Activities" campaign to raise the green point average 21% or more in the fiscal 2003, compared with the figure for the fiscal 2000.

* Green point average: The total green points of the site involved divided by the number of sites involved

Chronological Changes and Improvement the Green Point Average

Green Points of Each Site (fiscal 1998/2000 comparison)



* The data is for 28 selected affiliated companies(overseas)

Average Scores by Category

No.	Category	Hitachi, Ltd.			Hitachi, Ltd. + Affiliated companies (domestic)			Affiliated companies (overseas)*
		FY 1998	FY 1999	FY 2000	FY 1998	FY 1999	FY 2000	FY 2000
1	Management Policies	70	77	81	57	67	72	63
2	Compliance with Environmental Regulations	73	80	84	61	68	72	57
3	Environmental Accounting	58	65	69	42	49	57	49
4	Consideration for Environmental Issues in Products and Services	44	51	56	31	37	43	27
5	Energy Saving at Plants	57	60	65	45	50	54	45
6	Recycling	67	73	77	55	61	65	47
7	Management of Chemical Substances	63	66	72	57	63	68	65
8	Information Disclosure and Education	66	70	77	51	60	67	54
Total for the Average of the Green Points		498	542	581	399	455	498	407

Environmental Management Performance

ISO 14001 Certification Status (Hitachi Group as of March 2001)

	Hitachi, Ltd.		Affiliated companies (domestic)		Affiliated companies (overseas)	Total
	Manufacturing	Non-manufacturing	Manufacturing	Non-manufacturing	Manufacturing	
Certified Sites	34 (all sites)	3	126	8	27	198

List of ISO 14001-Certified Sites

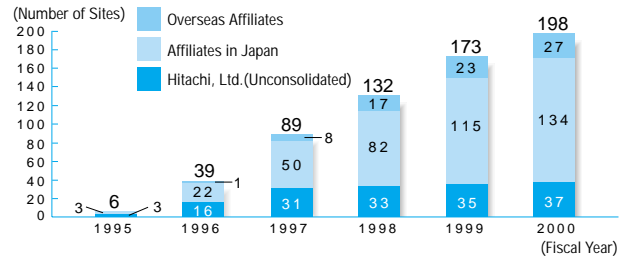
(Main certified Sites of the Hitachi Group as of March, 2001)

The report of this fiscal year is limited to the companies to be reported.

*Represents the sites of Hitachi, Ltd.

Domestic		
No.	Hokkaido and Tohoku Regions	Date Certified
1	Hitachi Media Electronics Co., Ltd. Mizusawa Works	1997. 1
2	Hitachi Telecom Technologies, Ltd.	1997. 9
3	Hitachi Hokkai Semiconductor, Ltd. Chitose Works	1998. 1
4	Hitachi Yonezawa Electronics Co., Ltd.	1998. 1
5	Hitachi Hokkai Semiconductor, Ltd. Hakodate Works	1998. 2
6	Hitachi AIC Inc. Miharu Works	1998. 3
7	Akita Electronics Co., Ltd.	1998. 3
8	Hitachi Hokkai Semiconductor, Ltd. Tsugaru Works	1998. 8
9	Tohoku Electric Manufacturing Co., Ltd.	1998.11
10	NAMIE JAPAN BRAKE CO., LTD.	1999. 8
11	Hitachi HI Component., Ltd.	1999.12
12	Haguro Electronics Co., Ltd.	2000. 2
No.	Kanto and Koshinetsu Regions	Date Certified
13	Information & Telecommunication Platform Systems Data Storage Systems Division*	1995. 7
14	Hitachi Chemical Co., Ltd. Goi Works	1995.11
15	Semiconductor & Integrated Circuits Kodaira Site*	1996. 3
16	Semiconductor & Integrated Circuits Takasaki Site*	1996. 3
17	Hitachi Chemical Co., Ltd. Shimodate Works	1996. 3
18	Hitachi Chemical Coated Sand Co., Ltd.	1996. 3
19	Hitachi Chemical Co., Ltd. Yamazaki Works (Kashima)	1996. 6
20	Hitachi Chemical Industrial Materials Co., Ltd. Road Materials Section	1996. 7
21	Consumer Products Home Appliances Division*	1996. 7
22	Semiconductor & Integrated Circuits Kofu Site*	1996. 7
23	Hitachi Taga Technology, Ltd.	1996. 7
24	Hitachi Chemical Co., Ltd. Yamazaki Works	1996. 7
25	Hitachi Koki Co., Ltd. Sawa Works, Kasama Works	1996. 9
26	Instruments*	1996. 9
27	Information & Telecommunication Platform Systems Systems Division*	1996.10
28	Solution Systems Information & Control Systems Division*	1996.10
29	Hitachi Chemical Automotive Products Co., Ltd.	1996.12
30	Hitachi Chemical Co., Ltd. Yuki Works	1996.12
31	Nikka Plastic Co., Ltd.	1996.12
32	Hitachi Chemical Filtec Inc.	1996.12
33	Hitachi Chemical Co., Ltd. Goshomiya Works	1996.12
34	Production Engineering Research Laboratory*	1997. 1
35	Hitachi Media Electronics Co., Ltd. Yokohama Office	1997. 1
36	Digital Media Digital Media Systems Division*	1997. 1
37	Digital Media Digital Media Systems R&D Division*	1997. 1
38	Consumer Products Refrigeration & Air Conditioning Division*	1997. 1
39	Hitachi Cable, Ltd. Toyoura Works	1997. 2
40	Digital Media Digital Media Products Division*	1997. 2
41	Hitachi Medical Corporation Kashiwa Site	1997. 3
42	Automotive Products*	1997. 3
43	Hitachi Cable, Ltd. Densen Works	1997. 3
44	Industrial Machinery Systems Division*	1997. 3
45	Displays*	1997. 3
46	Hitachi Cable, Ltd. Hitaka Works	1997. 3
47	Hitachi Tohbu Semiconductor, Ltd. Komoro Works	1997. 4
48	Hitachi Research Laboratory*	1997. 4
49	Building Systems Mito Building Systems Division*	1997. 4
50	Semiconductor & Integrated Circuits Naka Site*	1997. 6

Certification Trends (cumulative)



51	Hitachi Kokusai Electric Inc. Koganei Works	1997. 6
52	Hitachi Powdered Metals Co., Ltd. Katori Works	1997. 6
53	Information & Telecommunication Platform Systems Enterprise Server Division*	1997. 6
54	Industrial Components & Equipment Nakajo Administrative Division*	1997. 7
55	Shin-Kobe Electric Machinery Co., Ltd. Saitama Factory	1997. 7
56	Device Development Center*	1997. 8
57	Mechanical Engineering Research Center*	1997. 8
58	Industrial Components & Equipment Narashino Division*	1997. 9
59	Hitachi Lighting Equipment, Ltd.	1997. 9
60	Power & Industrial Systems Power & Industrial Systems R&D Laboratory*	1997. 9
61	Hitachi Construction Machinery Co., Ltd. Tsuchiura Works	1997.11
62	Hitachi Tokyo Electronics Co., Ltd. Head Office and Works	1997.11
63	Power & Industrial Systems Power Transmission & Distribution Division Kokubu Site*	1997.12
64	Hitachi Electronics Engineering Co., Ltd. Shonan Works	1997.12
65	Hitachi Maxell, Ltd. Tsukuba Site	1997.12
66	Hitachi Computer Peripherals, Co., Ltd.	1997.12
67	Hitachi Electronics Engineering Co., Ltd. Saitama Works	1998. 1
68	Japan Servo Co., Ltd. KIRYU site	1998. 2
69	Hitachi Kokusai Electric Inc. Hamura Works	1998. 2
70	Design Center*	1998. 3
71	Central Research Laboratory*	1998. 3
72	Hitachi Hokkai Semiconductor, Ltd. Sagami Works	1998. 3
73	Hitachi AIC Inc. Haga Works	1998. 4
74	Power & Industrial Systems Hitachi Administrative Division*	1998. 4
75	Hitachi Tokyo Electronics Co., Ltd. Equipment & Engineering Division	1998. 7
76	Power & Com Tech, Ltd. Head Office, Shinagawa Office, Toyoura Office	1998. 8
77	Hitachi Plant Engineering & Construction Co., Ltd. Matsudo Research Laboratory	1998. 9
78	Hitachi Haramachi Electronics Co., Ltd.	1998. 9
79	Silontec Corporation	1998. 9
80	Hitachi Engineering Co., Ltd.	1998.10
81	Hitachi Engineering & Services Co., Ltd.	1998.10
82	Nakayo Telecommunications, Inc. Operation Headquarters	1998.10
83	HITACHI SHONAN DENSHI CO., LTD. HEAD OFFICE and WORKS	1998.10
84	Hitachi Hometec, Ltd.	1998.11
85	Power & Industrial Systems Thermal & Hydroelectric Systems Division, Materials Product Division*	1998.11
86	Hitachi Techno Engineering Co., Ltd. Ryugasaki Works	1999. 1
87	Denshi Tech, Ltd.	1999. 2
88	Hitachi Powered Metals Co., Ltd. Matsudo Works	1999. 2
89	Hitachi Transport System, Ltd. Metropolitan Area Headquarters I Kanagawa Division	1999. 3
90	Hitachi Metals, Ltd. Kumagaya Works	1999. 3
91	Hitachi Cable, Ltd. Tsuchiura Works	1999. 3
92	Hitachi Taga Electronics Co., Ltd.	1999. 4
93	Tokico Ltd. Yamanashi Plant	1999. 4
94	Hitachi Metals, Ltd. Moka Works	1999. 4
95	Tonichi Kyosan Cable, Ltd. Fujishiro Works	1999. 7
96	Hitachi Information Technology Co., Ltd.	1999. 7
97	Hitachi Techno Engineering Co., Ltd. Ebina Works	1999. 8
98	Hitachi Tochigi Electronics Co., Ltd. Koganei Works	1999. 8
99	Hitachi Plant Engineering & Construction Co., Ltd. Environmental Systems Group	1999. 9
100	Solution Systems Software Division*	1999. 9
101	Nippon Denka, Ltd. Shimodate Plant	1999.10
102	Hitachi AIC Inc. Kanagawa Works (Sagamihara)	1999.11
103	Hitachi AIC Inc. Tochigi Works	1999.11

104	Hitachi AIC Inc. Kanagawa Works (Odawara)	1999.11
105	Hitachi Via Mechanics, Ltd. Head Office and Works	1999.12
106	ShinMaywa Industries, Ltd. Special Purpose Truck Division Sano Plant	1999.12
107	Nihon Brake Industrial Co., Ltd. Hachioji Works	1999.12
108	Nihon Brake Industrial Co., Ltd. Chiba Works	1999.12
109	Hitachi Kasei Polymer Co., Ltd. Noda Works	2000. 1
110	Tonichi Kyosan Cable, Ltd. Ishioka Works	2000. 1
111	TOKICO LTD. SAGAMI PLANT	2000. 1
112	Hitachi Life Corporation	2000. 1
113	HITACHI JOEI TECH CO., LTD. Yokohama Site	2000. 1
114	Hitachi Lighting, Ltd.	2000. 3
115	Advanced Research Laboratory*	2000. 3
116	Iwaki Metal Manufacturing Co., Ltd.	2000. 4
117	Hitachi Chemical Industrial Materials, Co., Ltd. Katsuta Works	2000. 7
118	Systems Development Laboratory*	2000. 8
119	Hitachi Plant Engineering & Construction Co., Ltd. Power Group	2000. 9
120	Hitachi Plant Engineering & Construction Co., Ltd. Air Conditioning & Industrial Facilities Group	2000.10
121	Hitachi Transport System, Ltd. Metropolitan Area Headquarters II Chiba Division	2000.12
122	Hitachi ULSI Systems Co., Ltd.	2000.12
123	Solution Systems Government & Public Corporation Information Systems Division*	2000.12
124	Hitachi Video and Information System, Inc.	2001. 1
125	Hitachi Tool Co., Ltd. Narita Plant	2001. 2
No.	Hokuriku and Chubu Regions	Date Certified
126	Hitachi Kokusai Electric Inc. Koganei Works	1996.10
127	Hitachi Media Electronics Co., Ltd. Hokuriku Works	1997. 2
128	Information & Telecommunication Platform Systems Internet Systems Platform Div.*	1997.10
129	Hitachi Air Conditioning Systems Co., Ltd. Shimizu Works	1997.10
130	Shin-Kobe Electric Machinery Co., Ltd. Nabari Factory	1997.10
131	Information & Telecommunication Platform Systems Mechatronics Systems Division*	1997.10
132	Hitachi Joeli Tech Co., Ltd. Gifu Works	1997.12
133	Hitachi IE Systems Co., Ltd.	1998. 9
134	Hitachi Kasei Unit Co., Ltd.	1999. 4
135	Hitachi Metals, Ltd. Kuwana Works	1999. 4
136	Jidosha Denki Kogyo Co., Ltd.	1999. 7
137	TOKICO LTD. SHIZUOKA PLANT	2000. 4
138	Kokusan Denki Co., Ltd. Head Office/Factory	2000. 8
139	Hitachi Systems & Services, Ltd. Chubu Area Operations	2001. 1
140	Hitachi Tool Co., Ltd. Uozu Plant	2001. 3
No.	Kansai Region	Date Certified
141	Shin-Kobe Electric Machinery Co., Ltd. Hikone Factory	1997. 8
142	Hitachi Maxell, Ltd. Ono Works	1998. 1
143	Hitachi Maxell, Ltd. Kyoto Works	1998. 2
144	Hitachi Maxell, Ltd. Osaka Works	1998. 2
145	ShinMaywa Industries, Ltd. Industrial Machinery System Div. Ono Plant	1998. 6
146	Hitachi Air Conditioning Systems Co., Ltd. Ibaraki Works	1998.11
147	Hanshin Electric Co., Ltd.	1999. 7
148	ShinMaywa Industries, Ltd. Special-Purpose Truck Div. Harima Plant	1999.12
149	ShinMaywa Industries, Ltd. Aircraft Div. Konan Plant	1999.12
150	Toyo Machinery & Metal Co., Ltd.	2000. 3
151	Hitachi Tool Co., Ltd. Yasu Plant	2000.12
152	Hitachi Transport System, Ltd. West Japan Area Headquarters	2001. 3
No.	Chugoku, Shikoku and Kyushu Regions	Date Certified
153	Babcock-Hitachi K.K. Kure Works & Laboratory, Akitsu Works	1997. 3
154	Power & Industrial Systems Kasado Administrative Division*	1997.12
155	Hitachi Yanai Semiconductor Co., Ltd.	1998. 4
156	Hitachi Metals, Ltd. Tottori Works	1998. 9
157	Hitachi Metals, Ltd. Yasugi Works	1998.10
158	Hitachi Metals, Ltd. Wakamatsu Works	1999. 1
159	Hitachi Metals, Ltd. Kyushu Works	1999. 3
160	Kyushu Hitachi Maxell, Ltd.	2000. 3
161	Hitachi Kasei Polymer Co., Ltd. Tokushima Works	2000. 4
162	HMY, Ltd. Yasugi Hagane Unyu	2000. 8
163	HMY, Ltd. YSS	2000. 8
164	Hitachi Tool Co., Ltd. Nakatsu Plant	2001. 3
165	Kyushu Techno Metal Co., Ltd.	2001. 3

Overseas

No.	Asia Area	Date Certified
166	Hitachi Air Conditioning Products (Malaysia) Sdn.Bhd.	1997. 4
167	Taiwan Hitachi Co., Ltd.	1997. 8
168	Hitachi Semiconductor (Malaysia) Sdn.Bhd.	1997. 8
169	Hitachi Computer Products (Asia) Corp.	1997.10
170	Hitachi Electronic Devices (Singapore) Pte.Ltd.	1997.12
171	Hitachi Chemical Co., (Taiwan) Ltd.	1998. 3
172	CSB BATTERY CO., LTD.	1998. 4
173	Hitachi Chemical Asia Pacific Pte.Ltd	1998. 5
174	Kaohsiung Hitachi Electronics Co., Ltd.	1998. 5
175	Luzon Electronics Technology, Inc.	1998. 9.
176	Hitachi Cosumer Products (Malaysia) Sdn.Bhd.	1998. 9
177	Hitachi Chemical (Johor) Sdn.Bhd.	1998.12
178	Hitachi Nipponsteel Semiconductor Singapore Pte.Ltd.	1999. 4
179	Hitachi Electronic Devices (M) Sdn.Bhd.	1999. 7
180	Hitachi Consumer Products (Thailand) ,Ltd.	1999.11
181	Hitachi Compressor (Thailand) ,Ltd.	1999.11
182	Hitachi Cable (Johor) Sdn.Bhd. Plo50	2000. 5
183	Hitachi Cable (Johor) Sdn.Bhd. Plo40	2000.11
184	Shanghai Hitachi Household Appliances Co., Ltd.	2000.11
185	HITACHI SEMICONDUCTOR (SUZHOU) CO., LTD.	2000.12
No.	America Area	Date Certified
186	Hitachi Automotive Products (USA) ,Inc.	1998. 3
187	Aap St.Marys Corporation	1998. 9
188	Hhea & Hitachi Consumer Products de Mexico,S.A. de C.V.	1999. 3
189	Hitachi Electronic Devices (USA) ,Inc.	1999. 8
No.	Europe Area	Date Certified
190	Hitachi Home Electronics (Europe) ,Ltd.	1997. 1
191	Hitachi Semiconductor (Europe) Gmbh.	1998. 5
192	Hitachi Air Conditioning Productos Europe S.A.	1999. 5

Legal License (as of March 2001)

License	Licenses needed	License holders
Pollution Control Manager(Air Pollution)(Type 1, 2, 3, and 4)	141	485
Pollution Control Manager(Water Pollution)(Type 1, 2, 3, and 4)	143	677
Pollution Control Manager(Manager)	8	39
Pollution Control Manager(Noise)	79	411
Pollution Control Manager(Vibration)	50	236
Energy Manager (Heat and Electricity)	135	391
Energy Management Officer (Heat and Electricity)	38	97
Electrical Engineer (Type 1, 2, and 3)	197	715
Boiler Engineer (Extra Grade, First Grade, Second Grade)	208	1,717
Boiler Maintenance Engineer	13	209
Senior Boiler Turbine Engineer	4	4
Refrigeration Security Controller (Type 1, 2, and 3)	56	537
Technical Controller of Waste Disposal Facilities	53	105
Controller of Specially Controlled Industrial Wastes	207	754
Hygiene Controller	523	2,450
Senior Technician for Dry Equipment Work	590	2,676
Senior Radiation Technician	45	361
Senior Technician for Organic Solvents	1,816	10,203
Senior Worker for Designated Chemicals and Other Substances	803	5,378
Controller of Toxic and Hazardous Substances	44	237
Engineer for the Environmental Hygiene Control of Buildings	18	43
Controller of Hazardous Materials	2,124	15,958
Security Controller for Manufacturing High-pressure Gases (Type A, B, and C)	435	1,903
Total	7,730	45,586

Green Purchasing Status

(data for Hitachi, Ltd., unconsolidated)

No.	Item		FY1997	FY1998	FY1999	FY2000	Scale of Purchase
1	Copier and printer paper	Wastepaper content Brightness	70% 80%	100% Less than 70%	100% Less than 70%	100% Less than 70%	Approximately 200 million sheets
2	Paper for publications	Wastepaper content Brightness	Approximately 70% Approximately 80%	Approximately 70% Approximately 80%	70% 80%	70% 80%	Approximately 400 million sheets
3	Business cards	Wastepaper content Brightness Case	70% Less than 70% Plastic	100% Less than 70% Recycled paper	100% Less than 70% Recycled paper	100% Less than 70% Recycled paper	Approximately 360,000 boxes (1 box=100 business cards)
4	Green procurement guidelines	Wastepaper content		100%		100%	10,000 sheets
5	Hitachi office supplies catalogs	Wastepaper content	50%		100%	100%	Approximately 10,000 brochures
6	Envelopes	Wastepaper content	70%	70%	70%	70%	Approximately 180,000 sheets
7	Writing materials • Pens and pencils • Files and related products • Other	Eco-products ratio*	Approximately 2% 0.0% 5.7% 1.5%	Approximately 18% 67.3% 26.4% 10.4%	20% 70% 30% 13%	40% 70% 45% 16%	Approximately 550 items Approximately 130 items Approximately 190 items Approximately 230 items
8	Recovered toner cartridges	Recycling rate Recovery rate	Approximately 30%	Approximately 35% 100%	45% 100%	45% 100%	Approximately 6,000 units
9	100% post-consumer waste toilet paper	Wastepaper content			100%	100%	Approximately 850,000 rolls

Eco-products ratio : Purchasing price of environmentally conscious products / All products .
(Unique indicators of Hitachi group)

Environmental Accounting

The environmental accounting results for fiscal 2000 were as follows: For Hitachi, Ltd. alone, the expenditure was 28.17 billion yen, investment 5.90 billion yen, economical effect 4.16 billion yen. For Hitachi, Ltd. with its affiliates, the expenditure was 82.08 billion yen, investment 21.25 billion yen, and economical effect 17.61 billion yen. In the breakdown of the expenditure, high percentages were accounted for by "business area costs" and "R&D costs." Among the main economical effects (Hitachi, Ltd. and its affiliates) were profit on sales of recycled waste, cuts in material expenses due to resource-saving, and reduction in waste treatment costs due to separation, recycling, which amounted to 7.78 billion yen, accounting for 44% of the total.

Performance Progress in Environmental Accounts

(billions of yen)

		FY1998	FY1999	FY2000	
		Hitachi, Ltd.	Hitachi, Ltd.	Hitachi, Ltd.	Hitachi, Ltd. + Affiliated companies
Costs	Expenditure	28.25	26.70	28.17	82.08
	Investments	5.65	6.76	5.90	21.25
Effect (Economical Effect)		3.69	4.16	4.16	17.61

Cost (FY 2000)

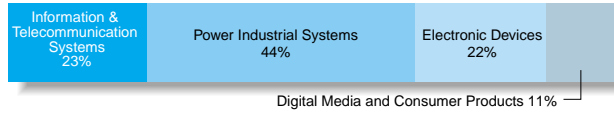
(billions of yen)

	Item	Cost		Overview
		Hitachi, Ltd.	Hitachi, Ltd. + Affiliated companies	
Expenses	1. business area costs	10.72	35.96	Maintenance of equipment with low environmental impact, depreciation
	2. up stream / downstream costs	1.40	3.58	Green procurement expenses, recovery of products and packaging, transition to recyclable goods, recycling expenses
	3. managements activity costs	2.86	8.35	Labor costs of environmental management, employment of environmental management system, maintenance expenses
	4. research and development costs*	11.65	30.03	R&D for the reduction of environmental impact of products and production processes, product design expenses
	5. social activity costs	1.24	3.23	Environmental improvement, including greening and beautification, PR and publicity expenses
	6. environmental damage costs	0.30	0.93	Environment-related measures, contributions and levies
	Total expenditures	28.17	82.08	
Total investment		5.90	21.25	Investment in energy-saving equipment and equipment that directly reduces environmental impact

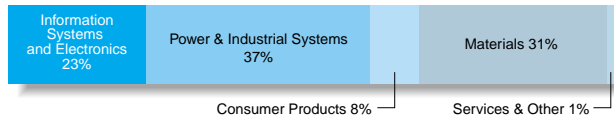
* "Research and Development cost" includes costs for product design.

Proportion of Expenses by Segment (FY 2000)

Hitachi, Ltd.

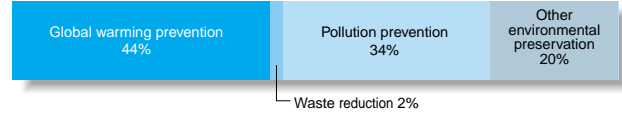


Hitachi, Ltd. + Affiliated companies

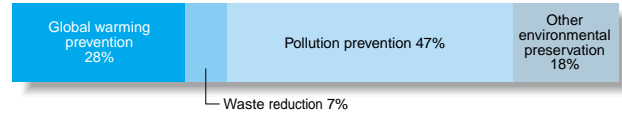


Proportion of Investments by Action Taken (FY 2000)

Hitachi, Ltd.

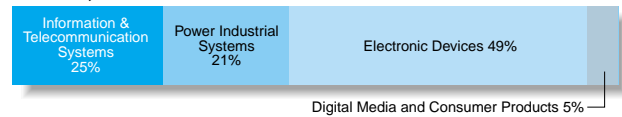


Hitachi, Ltd. + Affiliated companies

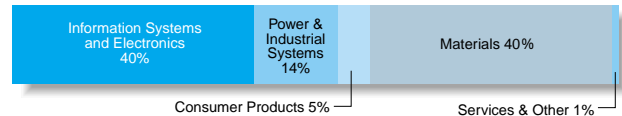


Proportion of Investments by Segment (FY 2000)

Hitachi, Ltd.



Hitachi, Ltd. + Affiliated companies



Effect (FY 2000)

Effect	Item	Effect		Overview
		Hitachi, Ltd.	Hitachi, Ltd. + Affiliated companies	
Economical Effect	Net income effect	0.94	5.58	Profit on sales of recycled waste
	Expense reduction effect	3.22	12.03	Reduction in material costs due to resource saving, reduction in waste treatment costs due to reduction in waste, reduction in power expenses due to energy savings.
	Total	4.16	17.61	

Effect	Item	Amount of Reduction/Household Conversion		Overview
		Hitachi, Ltd.	Hitachi, Ltd. + Affiliated companies	
Physical Effect	1.Reduction in energy used during production	84million kWh 24000 house holders	169million kWh 49000 house holders	Decrease in energy expenses due to installation of energy-saving equipment
	2. Reduction in final amount of waste disposal	1,212t 4000 house holders	6,051t 20000 house holders	Decrease in ultimate waste output due to separation, recycling
	3. Reduction in energy consumed during use of products	772million kWh 223000 house holders	844million kWh 243000 house holders	Decrease in energy requirements of Hitachi products

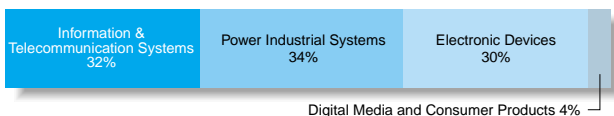
Note 1: Depreciation on capital investment and the resulting effect are calculated using a five-year flat rate formula.

Note 2: Regarding the classification of items and economical effect

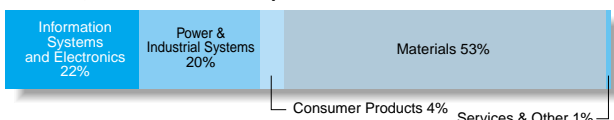
- Net income effect: Effects for which there is real income, including the sale of valuables and environmental technology patent income
- Expense reduction effect: Reduction in electricity fees and waste treatment expenses with environmental impact reduction activities

Proportion of Economical Effects by Segment (FY 2000)

Hitachi, Ltd.



Hitachi, Ltd. + Affiliated companies



Efficiency of Environmental Impact Reduction Eco-Efficiency (FY 2000)

Hitachi, Ltd. + Affiliated companies

Reduction in energy used during production	0.41million kWh/billions of yen
Reduction in final amount of waste disposal	11.7/billions of yen

Note: Efficiency of environmental impact reduction=Amount of reduction/Expenses

Sales of Environmental Preservation and Environmentally Conscious Products (FY 2000)

Hitachi, Ltd. + Affiliated companies

Environmental preservation products	1.4%
Environmentally conscious products	13%

Note: Environmental preservation products: Products manufactured for the purpose of environmental preservation-for example, waste treatment systems

Environmentally conscious products: Products-energy-saving products, for example-manufactured with design for environment. (Selected according to Hitachi guidelines)

Consideration for Environmentally Issues in Products and Services

Green Products

Green products numbered 28 as of March, 2001. They accounted for 3% in the sales ratio (the sales of Green products divided by total sales). The Consideration for environmentally points of representative products are listed on pages 10 and 11 as well. For these points of registered products and for the environmental data sheets, access <http://www.hitachi.co.jp/Div/kankyo/khoukoku/kfoukoku.htm>.)

Registration Status of Green Products (Main registered products as of March, 2001)

Segment	Product Name	Model Name	Date Registered	Product Information Available from
Information Systems and Electronics	TFT LCD Module	TX36D81 VC Series	2001. 3.30	Displays, Hitachi, Ltd.
	46cm(19 inch)and 51cm(21inch) Color Display Tube with Rectangular Cone Deflection Yoke	M51LSQ		
	Exchanger	NS8000A-AODU	2001. 3.30	Telecommunication Systems Division, Information & Telecommunication Platform Systems, Hitachi, Ltd
	Automatic Blood Chemistry Analyzer	Model 7080	2001. 3.22	Instruments, Hitachi, Ltd.
	Gigabit Router	GR2000-20H	2001. 3.30	Network Solutions Dept, Enterprise Servers Division, Information & Telecommunication Platform Systems, Hitachi, Ltd.
	Contactless Image Scanner	Blinkscan BS20	2001. 3.26	Sales Promotion Dept., Mechatronics Systems Div., Information & Telecommunication Platform Systems, Hitachi, Ltd.
	Sub-Notebook PC FLORA 220TX	PC7NP4- J	2000.11. 8	HCA Center, Hitachi, Ltd.
		PC7NP4- E		
	Sub-Notebook PC FLORA 220FX	PC1NP3G9G23B120	2000. 4.24	
		PC1NP3-G9A23B120		
PC1NP3-G9C23B120				
PC1NP3-G8C23B120				
PC1NP3-P9G23B120				
PC1NP3-P9A23B120				
PC1NP3-P9C23B120				
PC1NP3-P8C23B120				
PC1NNP3-G8C24B120	1999.12.13			
PC1NNP3-G8C24B110				
Power and Industrial Systems	Traction Inverter for Rolling Stock (snubberless inverter)	VF IHR1420G	2001. 3.30	Mito Transportation Systems Product Div., Power & Industrial Systems, Hitachi, Ltd.
	Order Urban (Machine room-less, order-made passenger elevator)	OU	2001. 3.21	Sales Engineering Div., Building Systems, Hitachi, Ltd.
	Local Control Unit	MCS-2100	2001. 3. 2	Mito Transportation Systems Product Div., Power & Industrial Systems, Hitachi, Ltd.
	Motor	High-Efficiency Motor SUPER POWER Series	2000.10.23	Motor Gr Drive System Dept, Business Planning Division, Industrial Component & Equipment, Hitachi, Ltd.
		Gear Motor CA Series	2000.10. 2	
	Super-Amorphous Transformer	SOU-DD5CA	2000. 3. 9	Business Planning Division, Power Distribution & Environmental Equipment Dept, Industrial Component & Equipment, Hitachi, Ltd.
		SOU-CCDR		
	Hydraulic Excavator	ZX200	2000.11.21	Engineering Dept, Medium-Size Product Div., Hitachi Construction Machinery Co., Ltd.
	"High-Peak Shift Type" Heat Storage Unit for Multi-Package Air Conditioners, Ice Heat Storage Type, for Buildings	RT-J500T	2000.10. 3	Air Conditioning Product Dept., Business Operation Div., Hitachi Air Conditioning Systems Co., Ltd.
		RT-J500W		
		RT-J310W		
		RT-J310T		
	"High-Peak Shift Type" Outdoor Unit for Multi-Package Air Conditioners, Ice Heat Storage Type, for Buildings	RAS-J450FCHT	2001. 3.30	
RAS-J355FCHT				
RAS-J280FCHT				
RAS-J224FCHT				
Split Type Packaged Air Conditioner for Shops and Office	RAS-P56HVR	2001. 3.30		
	RAS-P63HVR			
	RAS-P80HVR			
	RAS-P112HVR			
	RAS-P140HVR			
RAS-P160HVR				

Segment	Product Name	Model Name	Date Registered	Product Information Available from	
Consumer Products	Washing Machine	NW-8PAM2	2001. 3.30	Answer Center, Consumer Products, Hitachi, Ltd.	
		NW-7PAM2			
	Refrigerator	R-S34MPAM	2001. 1.10		
		R-K37MPAM			
		R-S38MPAM	2000.11.17		
		R-K40MPAM			
		R-K46MPAM			
	R-KX46MPAM				
	Self-ballasted Fluorescent Lamp	FE-1E	2001. 2.14		Hitachi GE Lighting, Ltd.
		FE-4P			
FE-5P					
Self-ballasted Fluorescent Lamp	EFG13EL(ED,EN)	2001. 2.13			
	EFD12EL(ED,EN)				
	EFA13EL(ED,EN)				
Alkali Battery	LR6(S)(2PP,4PP,8PP)	2001. 2.20	Product Planning Group, Consumer Sales Div., Hitachi, Maxell, Ltd.		
3.5" MO Disk	MA-M640.WIN.B1E, MA-M230.WIN.B1E	2001. 1.11			
3.5" Floppy Disk	MFHD18.C10E				
Audio Cassette Tape	UR-10L ~ UR-150.L				

Status of Disassembly Time Reduction, Recyclability Enhancement, and Packaging Polyesterene Reduction (representative products)

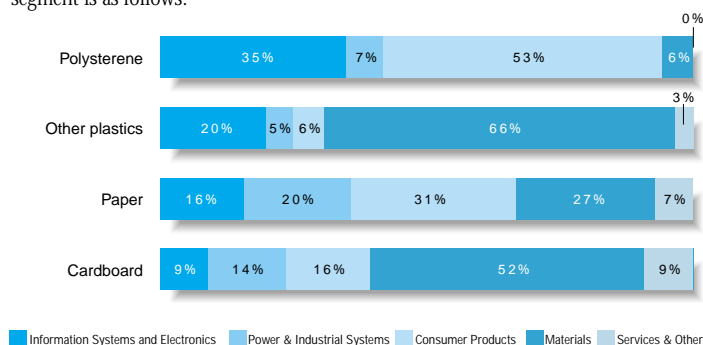
Here is a table showing the fulfillment status of the targets for disassembly time reduction, recyclability enhancement, and packaging polyesterene reduction for representative products according to the Environmental Action Plan. The targets have almost been fulfilled.

(Unit: %)

Division	Product Type	Reduction in Disassembly Time (Target: 60% Rise vs. Fiscal 1992)	Increase in Proportion of Recyclable Products (Target: 60% Rise vs. Fiscal 1992)	Reduction in Use of Polystyrene Foam (Target: 60% Fall vs. Fiscal 1990)
Information Systems & Electronics	Large Magnetic Disks	98	41	100
	General-Use Computers	58	55	100
	Automated Teller Machines (ATMs)	60	51	100
	Notebook PCs	75	61	100
	Exchange Systems	84	55	100
	Automatic Blood Chemistry Analyzer	60	40	60
Power & Industrial Systems	Computers for Factory Automation (FA)	68	55	60
	In-Store Air Conditioners	21	42	100
	Spot Air-Conditioners	31	48	100
	Inverters	66	35	100
Consumer Products	Refrigerators	61	54	61
	Room Air Conditioners	62	48	62
	Washing Machines	60	56	60
	Vacuum Cleaners	55	47	100
	Color Televisions	66	29	61
	Display Devices	60	36	68
	VCRs	65	50	67
Ratio of Achievement		93	97	100

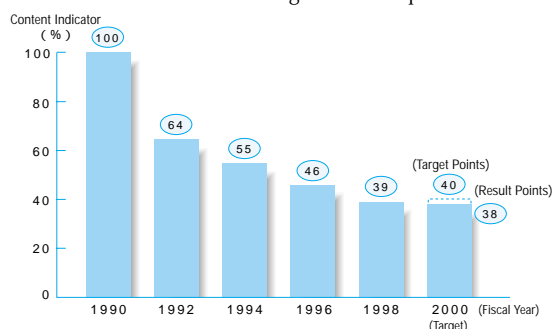
Consumption of Containers and Packaging

When the container packaging are divided into polysterene, other plastics, cardboard, other papers, and the yearly consumption rates of each are roughly as follows: 900 tons of polysterene 3,000 tons of other plastics, 2,000 tons of paper, 27,000 tons of cardboard and 2,000 tons of other papers. The proportion by segment is as follows:



Amount of Polystyrene Foam Used in Packaging for Home Electric Appliances

The amount of polystyrene foam used in packaging home electric appliances has fallen to 38% of fiscal 1990's level, due to the use of alternative packaging made from cardboard pulp as well as reductions in the size and volume of cushioning material required.



Amount of Lead Used in Solder

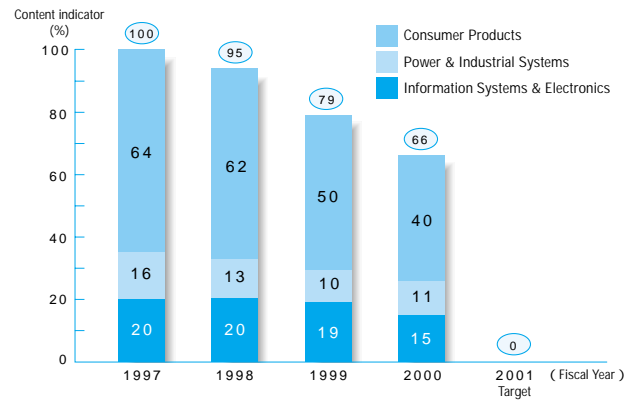
The lead content of solder for board connections was reduced by 34% from 1997 in the in-house manufacturing process. Here are the products currently using lead-free solder.

Status of Main Applications (products of the in-house manufacturing process)

No.	Product Name	Product Number	Component of used solder	
			Flow Process	Reflow Process
1	Washing machine	NW-8PAM2	Sn-Ag-Cu-Ge	Sn-Ag-Cu-Bi-In
2	Vacuume cleaner	CV-WD20		
3	Clothing dries	WD-60D		
4	Dish washer	KF950		
5	Kitchen garbage processor	BGD-200		
6	Refrigerator	R-KX46MPAM	Sn-Cu-Ni	
7	Air conditioner	RAS-2810MX		Sn-Ag-Cu-Bi
8	Subnote PC	FLORA270FX	Sn-Cu	Sn-Ag-Cu
9	8mm camera	VM-H845L		Sn-Ag-Cu-Bi
10	Electrical equipment	C-PCM ^{*1}		Sn-Ag
11	BGA/CSP solder balls	SH7709	Sn-Ag-Cu	
12	Memory modules	All models ^{*2}		Sn-Ag-Cu

*1 Compact Powertrain Control Module *2 Except for some of the custom products

Chronological Changes in Lead Content



Promoting Green Procurement

"Green Procurement" Guideline was issued in March, 2001. Last April, we began to collect information regarding the environmental conservation activities of vendors and business partners, information about chemical substances contained in procured items, and other environmental information via the Internet. The data input screen was prepared in a format on which the customer can easily work and which is suited for making a database of useful information. Collected information is turned into a database and shared by the personnel within the group, and is linked with the design support system and the materials procurement system. It is thus effectively used to develop eco-friendly products.



Green Procurement Guideline

Accessible on <http://www.hitachi.co.jp/Div/kankyo/khoukoku/index.e.htm>.



Log-in screen and beginning screen presented by The Green Procurement Management System

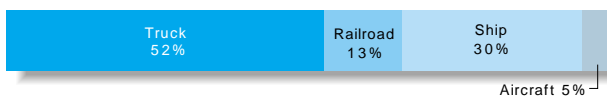
Promotion of the Modal Shift

Status of Transportation Load (as of March, 2001)

The transportation load (the load required to deliver the products from the place of business to the customer) was calculated for each means of transportation, and tabulated.

Hitachi, Ltd. + Affiliated companies (domestic)

Total Volume of Transportation : 3,212,853 kt*km / year
CO₂ Emissions Resulting from Transportation : 577 kt-CO₂ / year
Ratio (%) of Means of Product Transportation



Affiliated companies (overseas)^{*1}

Total Volume of Transportation : 78,173 kt*km / year
CO₂ Emissions Resulting from Transportation : 16 kt-CO₂ / year
Ratio (%) of Means of Product Transportation

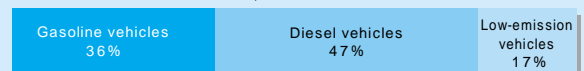


*1 The data is for 16 selected affiliated companies(overseas)

The Percentage of Low-Emission Vehicles ^{*2} to the Number of the Company-Owned Vehicles ^{*3}

Hitachi, Ltd. + Affiliated companies (domestic)

Total number of vehicles : 6,524



Affiliated companies (overseas)^{*1}

Total number of vehicles : 233


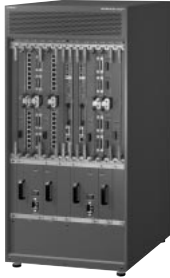


*2 Low-emission vehicles: Clean-energy vehicles of the Ministry of Environment (natural gas vehicles, methanol vehicles, hybrid vehicles, and electrical vehicles)

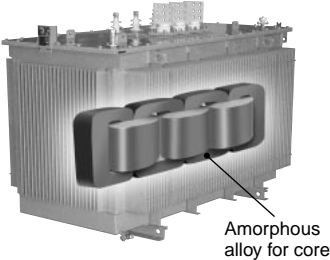

*3 The data is about the company-owned vehicles including a fork lift for the loading and unloading work

Representative Green Products

Information Systems and Electronics



<p>Contactless Image Scanner Model Name: Blinksan BS20</p> 	<p>Energy Savings</p> <p>Power consumption in operation was cut 85% using an electronic scanning system</p>
	<p>Ease of Recycling</p> <p>17% reduction of lead solder for PWB Adoption of non-halogen type flame retardant plastics for PWB/cabinet</p>
	<p>Resource Savings</p> <p>This product has been reduced 37% in its volume and 38% in its weight by eliminating the need of a power supply unit. Power to the product is supplied from the personal computer to which it is connected.</p>
<p>Gigabit Router Model Name: GR2000 20H</p> 	<p>Energy Savings</p> <p>30% reduction of power consumption per switch function</p>
	<p>Ease of Recycling</p> <p>Uses lead-free solder in its power supply board, thus reduce lead solder consumption by 60%. Reduce 37% of PVC consumption due to reducing the consumption of cable for internal wiring</p>
	<p>Resource Savings</p> <p>The unit weight is reduced 17% due to downsizing the volume to 2/3 of traditional models The packing weight is reduced 4% due to reducing the unit size</p>

Power and Industrial Systems



<p>Super Amorphous Transformer Model Name: SOU-DD5CA</p> 	<p>Energy Savings</p> <p>Adoption of amorphous alloy for core material About 25% reduction of no-load loss 46% reduction of no-load loss by improvement of winding structure About 60% reduction of total loss 60% reduction of electric energy</p>
	<p>Order Urban (Machine room-less, order-made passenger elevator) Model Name: OU</p> 

Figures above are compared with those of the conventional model unless otherwise specified.

Power and Industrial Systems

<p>Split type packaged air conditioner for shops and office Model name:RAS-P140HVR</p>  <p>Outdoor unit</p>	<p>Energy Savings</p> <p>Environmental Safety</p> <p>Longevity</p> <p>Packaging Materials</p>	<p>53% reduction of power consumption due to CBS/inverter control (as compared with the fixed speed)</p> <p>Adoption of R407C with zero ozone depletion as a refrigerant (Global Warming Potential : 1530) Electromagnetic-noise reduction using the 3-dimensional twisted long blade and AC chopper</p> <p>Able to use existing current breakers due to adopting electronics expansion valve and current optimization control</p> <p>Adoption of carton packages (styrene foam-less packages) About 45% reduction of wood for packing</p>
<p>Hydraulic excavator Model name:ZX200</p> 	<p>Energy Savings</p> <p>Ease of Recycling</p> <p>Environmental Safety</p>	<p>12% reduction of fuel consumption by using auto accelerator system (the first in the industry) with an emission control engine conformable to U. S. EPA Tier 2 and FC stage 2 emission regulations</p> <p>Indication of material name on plastic parts</p> <p>Adoption of lead-free radiator, oil cooler, inter-cooler, and wiring Biodegradable type of hydraulic oil available</p>

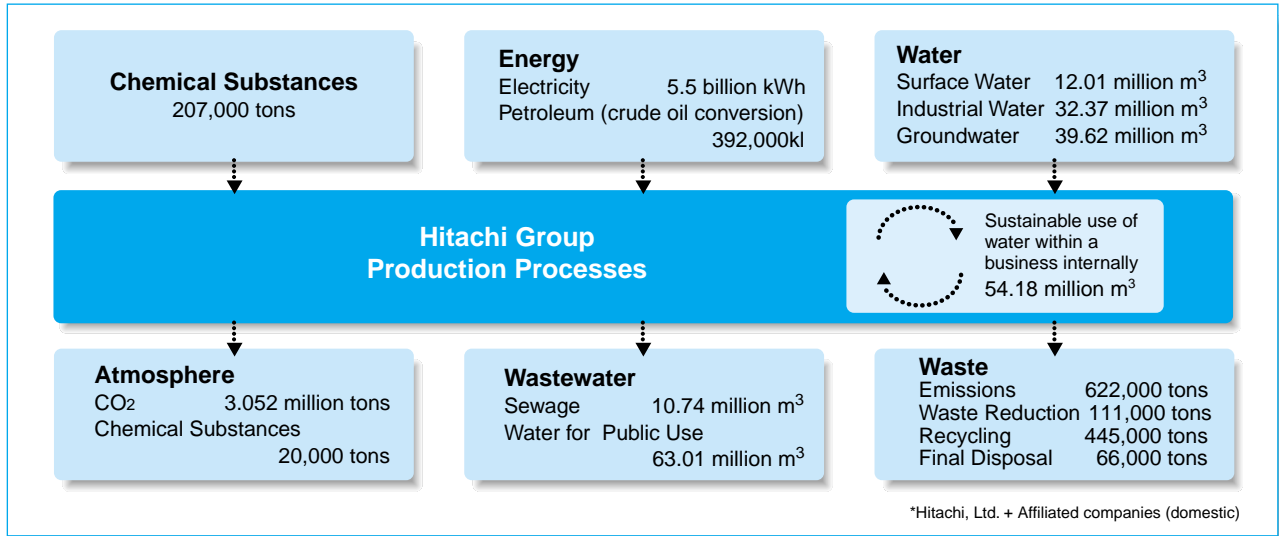
Consumer Products

<p>Seif-ballasted Fluorescent lamp Model name:EFA13EL, EN, ED</p>  <p>「Nice Ball V」</p>	<p>Energy Savings</p> <p>Resource Savings</p> <p>Packaging Materials</p>	<p>New Fluorescent tubes and new operating circuits have been developed to cut power consumption by 13%. (while maintaining an illumination level equal to that of traditional models.)</p> <p>3U delta-arranged Fluorescent tubes that bridge three slim Bulb and new operating circuits have been developed to cut the capacity by 43% and the weight by 40%.</p> <p>Reduces the consumption of packing material by 55% due to making the product compact.</p>
<p>Alkaline battery Model name:LR6 (Size AA) (Alkali Ace, Dynamic)</p>  <p>Blister cardboard</p> <p>Pack film</p> <p>Blister pack</p>	<p>Resource Savings</p> <p>Ease of Recycling</p> <p>Longevity</p>	<p>Use of recycled paper for blister cardboard</p> <p>Use of polyethylene terephthalate (PET) for blister pack film (without polyvinyl chloride) Use of polypropylene for pack film (realization of one-material package) Use of no (zero) mercury</p> <p>The enlargement of the internal volume (due to reducing the wall thickness of the positive can and thinning the gasket) and the reduction of the internal resistance of the batteries (due to the optimization of the materials) have increased the discharge performance*1 by about 20%.</p> <p>*1: Dynamic LR6-type at high rate 1,500mW, continuous discharge time (End-point voltage *2: 0.9V/ As compared with products manufactured in October, 1999) *2: The voltage at which a battery discharge ends.</p>

Consideration for Environmental Issues in Production Activities

Overview of Resource Input and Emissions

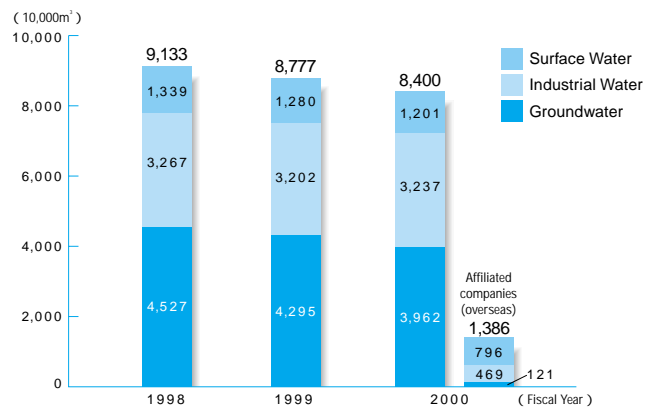
Overview of Resource Input and Emissions (FY2000)



Water Consumption

Cleaning-process drainage recovered and reprocessed and some of the drainage from waste water processing are reused for cooling and other purposes. This inhibits the rise in water consumption. The fiscal 2000 consumption was thus 84 million cubic meters yearly and 95.7% from the previous year for Hitachi, Ltd. and its affiliated companies (domestic) combined. And that of its affiliated companies (overseas) was 13.86 million cubic meters yearly.

Hitachi, Ltd. + Affiliated companies (domestic)

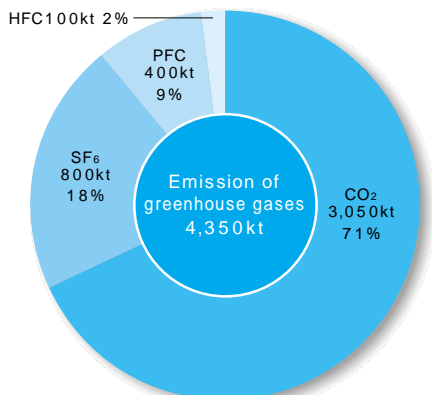


Prevention of Global Warming

Emission and Breakdown of Greenhouse Gases

The total emission of greenhouse gases of the Hitachi Group (domestic) for fiscal 2000 was 4.35 million tons per year, CO₂ emission accounting for 71%.

Hitachi, Ltd. + Affiliated companies (domestic)

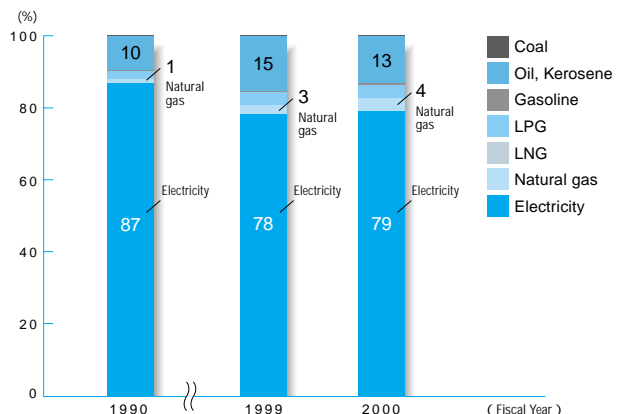


* GWP : Global Warming Potential (convert into CO₂)t

Composition of Energy Use

In energy use, Electricity and Natural gas account for about 80%.

Hitachi, Ltd. + Affiliated companies (domestic)

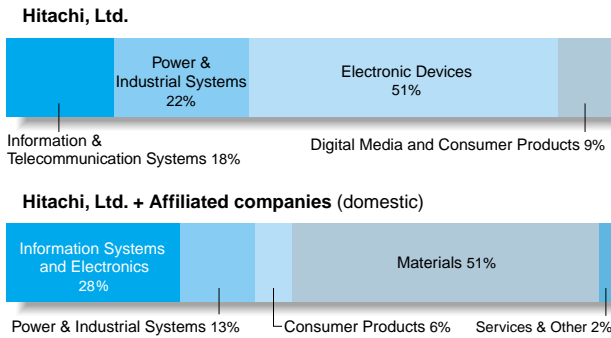


Prevention of Global Warming

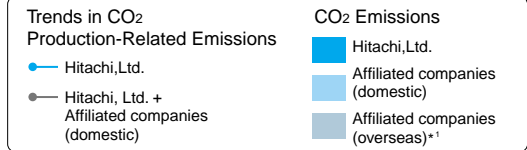
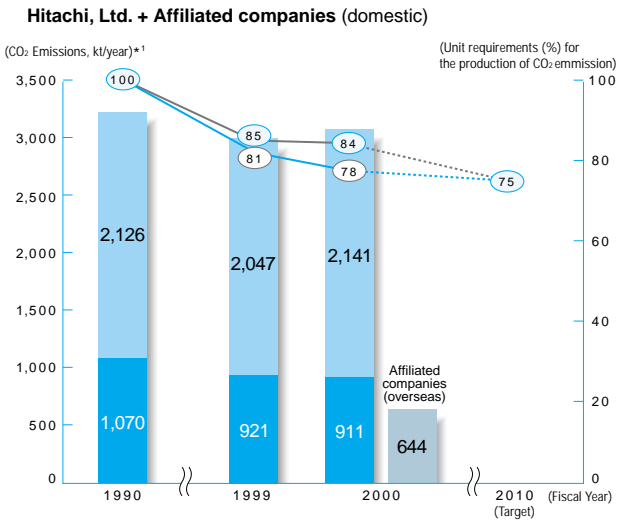
CO₂ Emissions

The unit requirements for the production of CO₂ emission as the sum of Hitachi, Ltd were 78%, and the sum of Hitachi, Ltd. and its affiliates (domestic) were 84% as compared to fiscal 1990, respectively. This was due to the use of inverters in equipment, the higher efficiency of air-conditioning systems, and other comprehensive energy-saving measures.

CO₂ Emission by Segment (FY2000)



Trends in CO₂ Production-Related Emissions



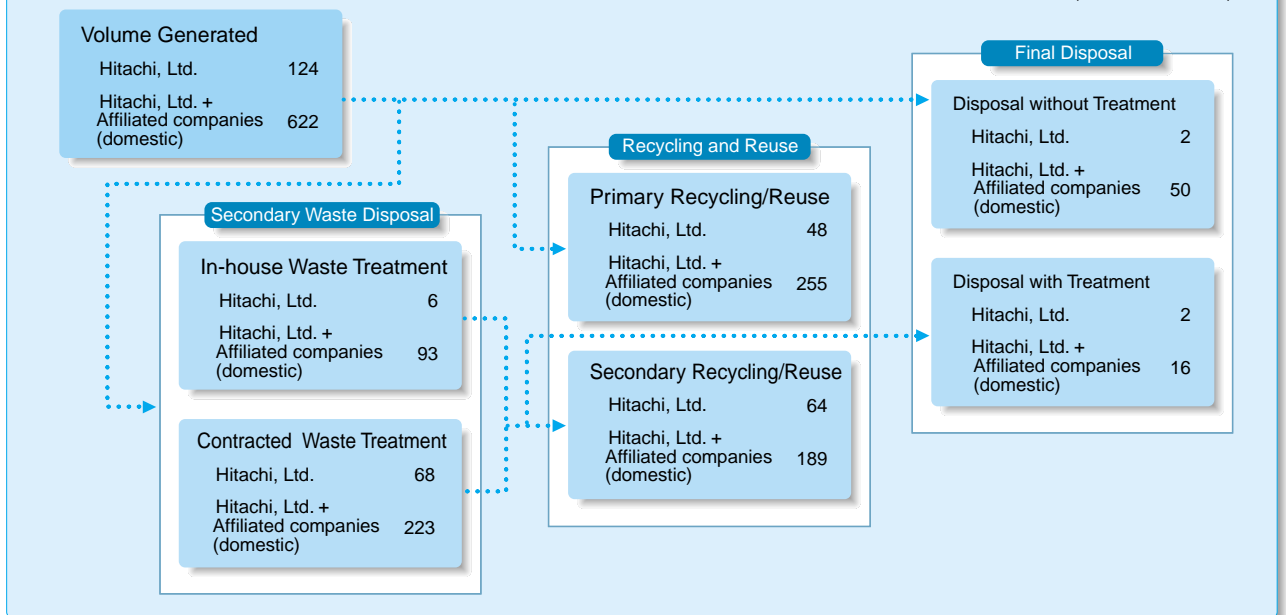
*1 For the conversion factor of CO₂ for power, we used the user's end CO₂ emission unit requirement publicized by the Federation of Power Operators. The figures for fiscal 2000 were the values calculated by interpolating the values of fiscal 1998 and 2010 with a straight line. We used identical values for both domestic and overseas operations.

*2 The data is for 29 selected affiliated companies (overseas).

Waste Reduction

Flowchart of the Disposal of Waste and Substandard Products (2000 Performance at the Hitachi Group)

(thousands of tons)

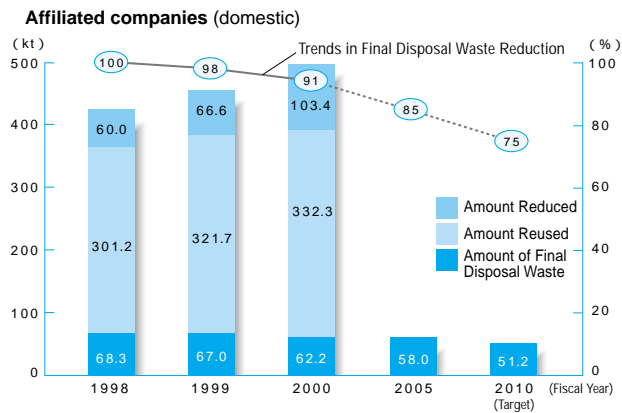
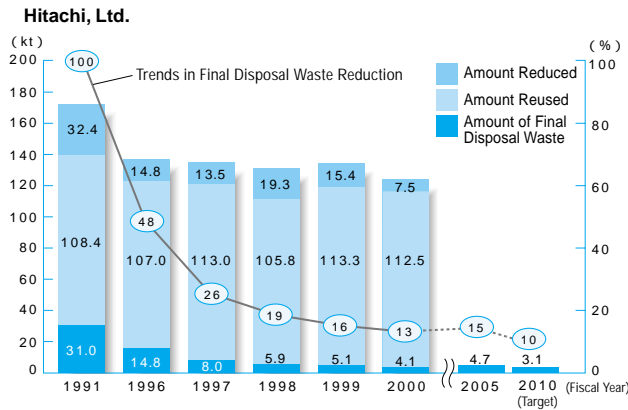


Waste for Final Disposal

By promoting the recycling of waste plastics, activated sludge, slag and other materials, Hitachi, Ltd. (unconsolidated) has reduced final disposal waste to 13% of the total for fiscal 1991, while final disposal waste for affiliated companies (domestic) is at 91% of the fiscal 1998 level. The final disposal of wastes at the overseas affiliates (fiscal 2000) was 81kt.

*The data is for 27 selected affiliated companies(overseas).

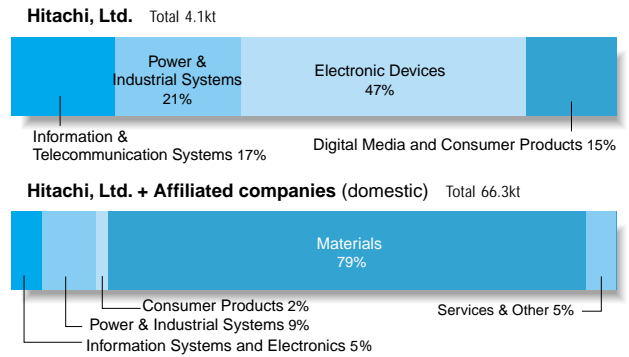
Trends in Final Disposal Waste Reduction



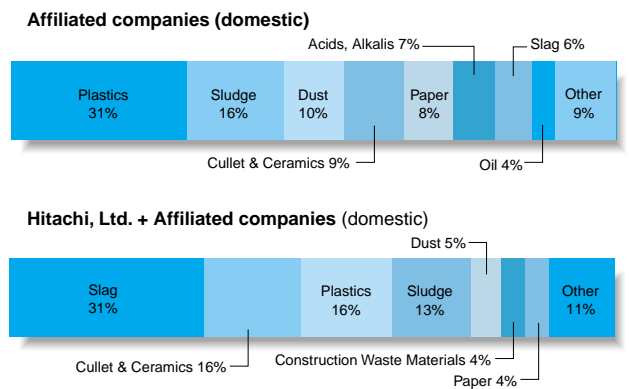
Hitachi, Ltd. + Affiliated companies (domestic) (Unit:kt)

	FY1998	FY1999	FY2000
Amount Reduced	79.3	82.0	110.9
Amount Reused	407.0	435.0	444.8
Amount of Final Disposal Waste	74.2	72.1	66.3

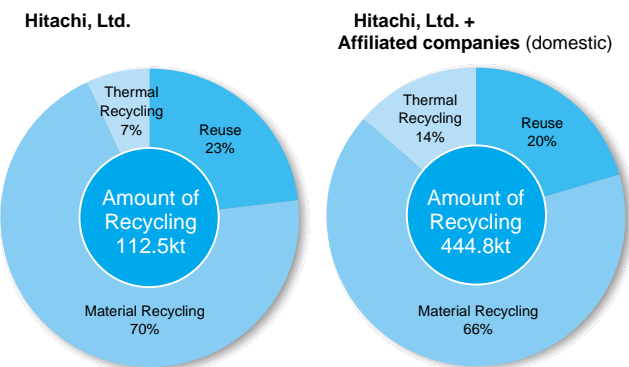
Final Disposal Waste by Segment (FY2000)



Final Disposal Waste by (FY2000)



Proportion of the Way of Recycling (FY2000)



Chemical Substance Management

PRTR Survey Results

Hitachi, Ltd.

Hitachi, Ltd. has records of usage for 51 of 179 chemical substances surveyed by four major electric and electronics organizations. Of these substances, those for which the annual volume handled exceeded 50 tons in fiscal 2000 are (a coverage of at least 95% of the total handling) detailed below.

Chemical Substance	Management Classification	Volume Handled		Volume Consumed (Including Volume Removed)		Volume Recycled	
		FY 1999	FY 2000	FY 1999	FY 2000	FY 1999	FY 2000
Ethanolamine	Manage	2,943.46	3,485.84	180.33	213.55	2,656.83	3,146.44
Lead Compounds	Reduce	1,299.01	766.60	1,272.10	752.30	25.72	9.81
Barium Compounds	Manage	804.50	560.76	759.51	474.96	29.92	2.93
Hydrofluorocarbons (HFCs)	Reduce	297.52	482.04	284.56	466.33	0.00	0.00
Hydrochlorofluorocarbons (HCFCs)	Reduce	535.25	424.05	523.11	417.70	0.20	0.00
Xylene (mixture)	Reduce	392.20	342.10	0.52	0.35	31.42	20.03
Toluene	Reduce	168.81	189.02	0.49	0.00	8.84	8.95
Sulfur Hexafluoride	Reduce	167.40	129.87	101.38	96.82	5.65	0.00
Zinc Compounds	Manage	119.75	103.79	79.24	77.09	28.83	12.51
Perfluorocarbons (PFCs)	Reduce	95.50	80.87	45.19	24.77	0.00	0.00
Lead Solder	Reduce	78.97	74.29	51.62	51.67	27.15	22.34
Formaldehyde	Reduce	50.50	63.19	46.74	57.34	0.00	0.00
Styrene Monomer	Manage	30.74	50.90	0.99	0.00	4.20	0.20
Others (38)		234.61	322.86	95.20	117.02	63.36	109.97
Total (51)		7,218.22	7,076.18	3,440.98	2,749.90	2,882.12	3,333.18

Hitachi, Ltd. + Affiliated companies (domestic)

Hitachi, Ltd. and affiliated companies have records of usage for 85 of 179 chemical substances surveyed by four major electric and electronics organizations. Of these substances, those for which the annual volume handled exceeded 1000 tons in fiscal 2000 are (a coverage of at least 94% of the total handling) detailed below.

Chemical Substance	Management Classification	Volume Handled		Volume Consumed (Including Volume Removed)		Volume Recycled	
		FY 1999*	FY 2000	FY 1999*	FY 2000	FY 1999*	FY 2000
Styrene Monomer	Manage	51,662.97	59,835.94	51,535.21	59,219.97	10.94	1.05
Lead Compounds	Reduce	1,611.33	49,171.92	1,579.84	47,055.24	26.15	2,028.27
Toluene	Reduce	10,094.79	36,341.43	5,845.73	23,604.97	15.63	572.86
Xylene (mixture)	Reduce	6,135.34	15,562.52	5,133.97	4,917.17	33.21	1,355.39
Formaldehyde	Reduce	4,519.61	6,531.18	4,450.76	6,412.34	26.02	106.38
Manganese Compounds	Reduce	3,240.72	5,086.26	3,122.67	4,736.92	76.72	141.59
Ethanolamine	Manage	2,952.18	3,507.23	187.51	221.02	2,656.83	3,146.44
Di (2-ethylhexyl) Phthalate	Manage	1,540.20	3,357.97	1,540.10	3,325.75	0.10	0.00
Lead Solder	Reduce	142.73	2,650.70	102.17	927.64	37.79	1,716.02
Chromium compounds (other than hexavalent)	Manage	462.35	1,922.36	274.75	1,521.73	11.60	8.62
Adipic acid	Manage	214.78	1,879.64	214.78	1,855.91	0.00	23.73
Barium Compounds	Manage	833.32	1,859.52	786.07	1,246.93	29.92	4.12
Ethyl benzene	Manage	0.15	1,843.27	0.06	1,833.66	0.00	0.00
Zinc Compounds	Manage	957.76	1,570.89	878.11	1,182.32	31.67	16.45
Isoprene	Manage	14.50	1,393.80	12.20	1,387.40	0.00	0.00
Molybdenum Compounds	Manage	1,010.40	1,237.45	982.78	1,220.00	2.54	4.44
Hydrochlorofluorocarbons (HCFCs)	Reduce	1,135.02	1,089.84	1,046.92	989.42	1.19	6.75
Others (68)		9,303.11	11,879.60	7,828.15	10,382.13	539.91	271.91
Total (85)		95,831.24	206,721.52	85,521.77	172,040.52	3,500.22	9,404.02

* The data from fiscal 1999 was calculated based on Hitachi, Ltd. and 20 affiliated companies reported in the environment report 2000.

Amount of Ozone Depleting Substances Released

The emission of ozone-depleting substances, by Hitachi, Ltd. and affiliated companies (domestic) was 87.4 tons in fiscal 2000. This can be converted to 4.9 ODPT in terms of ozone depletion.

(Unit: t/yr)

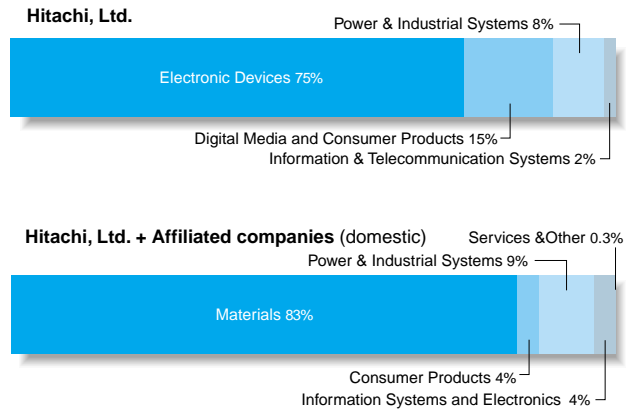
Volume Transferred (Waste Products)		Volume Released (Air or Water)	
FY 1999	FY 2000	FY 1999	FY 2000
91.71	108.49	14.59	17.36
1.18	4.49	0.01	0.00
15.07	82.87	0.00	0.00
0.03	0.15	12.93	15.56
0.22	0.02	11.72	6.33
108.96	100.86	251.30	220.86
19.04	6.23	140.44	173.84
0.05	0.59	60.32	32.46
11.68	14.19	0.00	0.00
0.89	4.29	49.42	51.81
0.20	0.28	0.00	0.00
0.05	5.58	3.71	0.27
1.91	3.67	23.64	47.03
57.74	70.99	18.31	24.88
308.73	402.70	586.39	590.40

ions.
detailed below.

(Unit: t/yr)

Volume Transferred (Waste Products)		Volume Released (Air or Water)	
FY 1999*	FY 2000	FY 1999*	FY 2000
11.03	202.69	105.79	412.24
5.32	88.08	0.02	0.33
464.53	1,806.64	3,768.90	10,356.95
186.65	1,368.59	781.51	7,921.37
36.05	7.44	6.78	5.02
40.89	204.07	0.44	3.68
92.58	122.00	15.26	17.77
0.00	26.89	0.00	5.33
2.63	7.04	0.14	0.00
175.90	391.50	0.10	0.51
0.00	0.00	0.00	0.00
17.33	599.47	0.00	9.00
0.00	2.73	0.09	6.88
47.62	371.57	0.37	0.55
0.00	0.00	2.30	6.40
24.76	12.53	0.32	0.48
5.81	6.25	81.10	87.42
623.35	515.14	311.70	710.42
1,734.44	5,732.64	5,074.81	19,544.34

Proportion of Volume Handled by Segment (FY 2000)



Affiliated Companies (overseas)

Affiliated companies overseas have records of usage for 34 of 179 chemical substances surveyed by four major electric and electronics organizations. Of these substances, those for which the annual volume handled exceeded 500 tons in fiscal 2000 (a coverage of at least 95% on the total handling) are detailed below.

(Unit: t/yr)

Chemical Substance	Management Classification	Volume (t/yr)
Lead (Solder, Metallic lead)	Reduce	15,183.48
Formaldehyde	Reduce	3,289.22
Copper compounds	Manage	2,762.40
Barium Compounds	Manage	1,564.82
Styrene	Manage	1,158.23
Hydrochlorofluorocarbons (HCFCs)	Reduce	1,109.60
Aluminium compounds	Manage	1,065.10
Lead Compounds	Reduce	954.65
Fluorine compounds	Manage	619.99
Others (25)		1,530.51
Total (34)		29,238.00

Exchanges with Society

Disclosure of Information, Communication

Status of Environmental Communications

Third-Party Comments on the "Environment Report 2000"



Chief Executive
E- SQUARE Inc.

Peter David Pedersen

Throughout its text, the report makes the reader realize that the entire group is committed to the management theme of environment activities in a serious manner, and with goals set. The Environmental Action Plan is composed in a relatively easy-to-understand structure and includes numerical targets and target dates, so that outside parties can easily assess the details. The Green 21 Activities can be interpreted as a unique attempt, and also as a unique set of "management indicators." Another thing that I wish to evaluate highly is that the entire report is condensed into less than 30 pages. However, the report has some problems too. For example, I may have to define the Hitachi Group's core values and vision of the environmental issues in a more clear-cut manner. In-house environmental education and the creation of new values are extremely important. I suggest that I should step up their efforts in these areas more and highlight them in the report. The company may also want to put more emphasis on linkage with the employees, their families, customers, clients, NGOs, NPOs, communities, administration authorities, and other stakeholders both inside and outside the Hitachi Group and specify it in the report. Such linkage is indispensable in building up an economy based on recycling. Since the company has a firm basis, I think that the company should find ways to step up its efforts in these areas and communicate its ideas to the outside world.



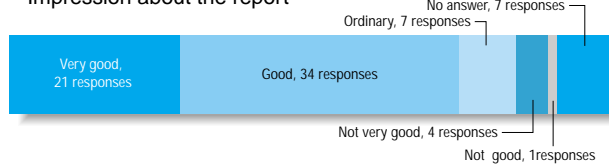
Vice Chairperson of the Organizing Committee
Valdez Society

Kimie Tsunoda

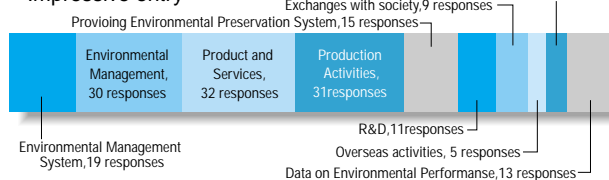
An environmental report is a medium of accountability. I am happy to see that, as compared to the previous one, the current report covers the entire group and discloses more data in general, resulting in the enhancement of information disclosure in terms of both quality and quantity. However, from the viewpoint of a stakeholder, I think that the report entails some problems, including the difficulty to get the entire picture of the environmental burden of the group, the shortage of self-assessment of the environmental burden and improvements in the environmental burden, the unclearness of figures and diagrams, and the positioning of Data on Environmental Activities. I also had the impression that the report still failed to show clearly enough the actual accomplishments in the guidelines for environmental protection actions of the Hitachi Group, which state that "The top priority challenge in management is harmony with the environment." The issuance of environmental reports has not yet become a legal requirement. It is also a unique medium through which corporate culture can be communicated. Firms are also required to respond to such international trends as the guidelines for reporting sustainability. I hope that the company will display its international leadership in the field of information disclosure as a Japanese firm.

Questionnaire Survey Results about the Hitachi Group's Environment Report 2000 (A total of 74 firms responded.)

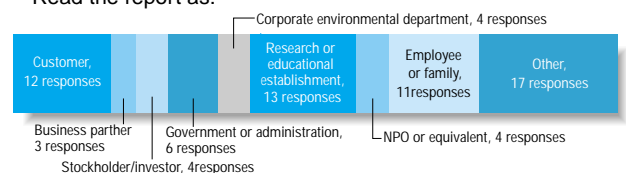
Impression about the report



Impressive entry



Read the report as:



I learned that the report existed, through:



< Main Requests Made >

Why is Data on Environmental Activities a separate booklet?
It would be easier to handle if it came as part of the report.
(NPO or equivalent).

The text in general is in too small font (Customer).

I wish the report would show future policies and directions more specifically (Research or educational establishment).

< The Company's Responses to the Comments Made >

We will reflect the precious comments we received on our future efforts in environmental preservation and information disclosure through environmental reports and other means, thus making improvements. More specifically,

We will try hard to make future reports more specific and easier to understand, including not only the status of the results of our efforts in environmental preservation but also the background behind our implementation of specific measures and our basic ideas and the goals which we will pursue in the future.

Concerning the composition of future reports, we will define more clearly the relationship between the report proper and the separate booklet of data collection. We will also compose the materials so that the general picture and specific discussions will be easier to understand and read.

Main Home Pages for the Hitachi Group's Environmental Activities

Company Name	Home Page Address
Hitachi Group	http://www.hitachi.co.jp/Div/kankyo/khoukoku/index_e.htm
Consumer Electronics and Digital Media Group	http://kadenfan.hitachi.co.jp/kankyo/
Hitachi Maxell, Ltd.	http://www.maxell.co.jp/company/00kankyo.pdf
Hitachi Cable, Ltd.	http://www.hitachi-cable.co.jp/eco/index.htm
Hitachi Chemical Co., Ltd.	http://www.hitachi-chem.co.jp/honsha/environment/index.html
Hitachi Metals, Ltd.	http://www.hitachi-metals.hbi.ne.jp/j/guide/e_p2000.htm
Hitachi Plant Engineering & Construction Co., Ltd.	http://www.hitachiplant.hbi.ne.jp/kankyou/kankyou_frame.html

Issuance of Environmental Report

Company Name	Printed Volume	
	Japanese version	English version
Hitachi, Group.	15,000	3,000
Hitachi Maxell, Ltd.	4,000	2,000
Hitachi Cable, Ltd.	500	-
Hitachi Chemical Co., Ltd.	3,000	2,000
Shin-Kobe Electric Machinery Co., Ltd.	2,000	-
Hitachi Powdered Metals Co., Ltd.	100	-
Hitachi Metals, Ltd.	3,000	1,000

Participation in Exhibitions

For three days from Thursday, December 14 through Saturday, December 16, the Eco-Style Fair for the Earth and Myself, "Eco Products 2000" was held at the Tokyo Big Sight. Under its theme of "Inspire The Next: A Fresh Air for Making a Recycle-Oriented Society a Reality," the Hitachi Group displayed its exhibits under as many as 56 themes, including the group's environmental management, Green products and production, environmental IT solutions, and next-generation technologies. The three-long exhibition attracted about 68,000 visitors, with many of them coming over to the booth of the Hitachi Group.



Social Contribution

Progress in Social Contribution Activities

The Green Award for Social Contribution was set up in May, 1999 to promote and assist the communications activities of factories and offices of the Hitachi Group to society through activities of environmental preservation in the communities. The new program is designed to qualify the factories and offices in terms of uniqueness, leadership, continuity, degree of employee participation, and degree of contribution to the community, according to the policy specified above.

Award Winners of Fiscal 1999 and Their Activities (The performance of fiscal 2000 is under qualification.)

Grand Prize	Tree-planting for the BHK Forest of the 21st Century Kure Works of Babcock Hitachi Co., Ltd.	They started in 1994 to plant trees in the forest containing a water source secured by the Public Corporation for Forests of the Greens and Waters of Hiroshima Prefecture. Volunteer employees (100 persons per year) have been planting trees corresponding to the consumption of paper used by the company.
Excellent Prize	Exchange with local elementary schools through activities of the Forest of Wild Birds Enterprise Servers Division Hitachi, Ltd	In 1993, they set up a "Forest of Wild Birds" project. They made a Forest of Wild Birds on the premises of the works and have been presenting information to local students of elementary schools and organizing tours of the premises, hanging of bird nest boxes, joint bird watching sessions, and other events. These activities won the Award of the Natural Protection Bureau of the Environmental Agency ('99) at the National Congress for Presenting Accomplishments in Protection of Wildlife.
Special Prize	"I Love the Earth Seminar" organized Matsudo Institute Hitachi Plant Engineering & Construction Co., Ltd.	The "I Love the Earth Seminar" has been held once a year since 1998 for students of local elementary schools.

Adherence to Regulations

Status of Adherence to Regulations

The Hitachi Group did not receive any penalty or fine during fiscal 2000. However, there was one instance of exceeding the standard BOD due to a repair mistake on an integrated treatment drum for sewage and waste water in Japan, and there was one instance of exceeding the VOC regulation standard on a site abroad. There were already corrected by revising the standards for repair and maintenance work to prevent recurrence, making more strict settings for voluntary standards and taking other measures.

Awards

Products Awards

Area	Award Name	Award-Winning Product	Month and Year of Award	Conferring Organization(s)
Measures to Prevent Global Warming	Energy Conservation Prize Minister of Economy and Industry Prize	Fully Open PAM Air-conditioner, "Shirokuma-kun" Series	February, 2001	The Energy Conservation Center, Japan
	Energy Conservation Prize Energy Conservation Center Chairman's Prize	Gas-absorptive large temperature difference systems	February, 2001	The Energy Conservation Center, Japan
	New Energy Grand Prix Chairperson of the New Energy Foundation Prize	Natural gas cogeneration "Gas Eco Pack"	February, 2001	The New Energy Foundation
	Recognition of Excellent Energy-saving Equipment Chairperson of the Federation of Machine Manufacturers Prize	Super amorphous transformers	February, 2001	The Japan Federation of Machine Manufacturers
	Green Product	Air conditioner	December, 2000	The Fund of Environmental Protection of China
	Energy-Saving Product	Air conditioner (KF-36GW)	February, 2001	Economic Committee of Shanghai Government
Environmental Preservation	Environment, Excellence Award	Devices for recovering CFCs from refrigerator insulation	January, 2001	The Environmental Research Center The Nikkan Kogyo Shimbun, Ltd.
Other	Nikkei Global Environmental Technology Prize	Development, and enhancing the practicality of, online continuous measuring monitors for dioxin precursors in incinerator emissions	November, 2000	Nihon Keizai Shimbun, Inc.
	IMS Award	Recyclability Evaluation Method (REM) and Environmentally Conscious products	December, 2000	Inverse Manufacturing System Symposium

Operations Awards (*Award to Hitachi, Ltd.)

Area	Award Name	Award-Winning Product	Month and Year of Award	Conferring Organization(s)
Measures to Prevent Global Warming	Award for Factory Energy Management Excellence Agency of Natural Resources and Energy Director's Award	* Information & Computer Systems Mechatronics Systems Division	February, 2001	Ministry of Economy and Industry
	The Energy Conservation Center Director's Prize at the National Convention on Cases of Energy Conservation Excellence	* Automotive Products	February, 2001	The Energy Conservation Center, Japan
	Award for Factory Energy Management Excellence (Electrical Division), Ministry of International Trade and Industry (MITI)'s Kantou Bureau Director's Prize	Hitachi Electronics Engineering Co., Ltd. Saitama Works	February, 2001	The Committee for Rationalizing the Electricity Use of the Kanto Region
	Contributor to Energy Management	* Consumer Products Refrigeration & Air Conditioning Division	December, 2000	The Energy Conservation Center, Japan
	Highest Award for Excellence in Electricity-Use Rationalization	* Information & Computer Systems Group Enterprise Server Division * Telecommunication & Information Infrastructure Systems Telecommunication Systems Division * Semiconductor & Integrated Circuits Kodaira Site Hitachi Tokyo Electronics Co., Ltd. Head Office Hitachi Chemical Filtec Inc.	February, 2001	The Committee for Rationalizing the Electricity Use of the Kanto Region
	Excellent Factory in Energy Management Recognition by the Head of the Tohoku Bureau of Economy and Industry	Akita Electronics Co., Ltd. Hitachi Yonezawa Electronics Co., Ltd.	February, 2001	Tohoku Economy and Industry Bureau
	Top Performance in Electric Safety and Use Rationalization Prize	* Central Research Laboratory	June, 2000	Tama Power Association
	Award for Factory in Energy Management Excellence, 7 prefectures in Tohoku Recognition by the Chairperson of the Power Use Promotion Committee	Akita Electronics Co., Ltd.	February, 2000	The Committee for Promoting the Power Use of the Seven Prefectures in Tohoku
Akita Prefecture Environmental Grand Prix, Recognition by the Prefecture Governor	Akita Electronics Co., Ltd.	June, 2000	Akita Prefecture	
Recycling and Reduction of Waste Products	Award in Recognition of Recycling Promotion Activities Recycling Promotion Council Chairman's Prize	* Power & Industrial Systems Power Transmission & Distribution Division * Industrial Components & Equipment Nakajo Division * Digital Media Systems Division Gifu Site * Displays Mobara Site * Automotive Products Hitachi Shonan Denshi Co., Ltd. Hitachi Air Conditioning Systems Co., Ltd. Shimizu Works	October, 2000	Recycling Council
	Earth-friendly Corporation Award The Ibaragi Prefectural Governor's Award (Resource Conservation Division)	* Instruments Naka Site	June, 2000	Ibaragi Prefecture
	Ibaraki Prefecture Excellent Place of Business in Recycling	* Industrial Machinery Systems Division	January, 2001	Ibaragi Prefecture
	Niigata Prefecture Environment Prize (Circulating Department)	* Industrial Components & Equipment Nakajo Division	October, 2000	Niigata Prefecture Environmental Conference
	Contributor to the Appropriate Disposal of Industrial Wastes	* Displays Mobara Site	November, 2000	Chiba Prefecture
	Recognition of Excellent Business Operator	Siiontec Corporation	February, 2001	Kawasaki City
	High Performance in Voluntary Waste Management Prize	Hitachi Engineering & Services Co., Ltd. Hitachi Via Mechanics, Ltd.	February, 2001	The Kanagawa Conference for Coordinating Voluntary Waste Management
	Environmental Preservation	Stratospheric Ozone Protection Prize	* Displays Mobara Site	February, 2001
Registration of an Eco-friendly Place of Business in the Gifu Prefecture		Hitachi Joei Tech Co., Ltd. Gifu Works, Takayama)	February, 2001	Gifu Prefecture
Yokohama Environmental Conservation Prize		Hitachi Shonan Denshi Co., Ltd.	February, 2001	Yokohama City
Recognition of Environmental Conservation		Hitachi Via Mechanics, Ltd.	February, 2001	The Kanagawa Council for Environmental Conservation
Contributor Prize from the Shimizu City Environmental Conservation Cooperation Society		Hitachi Air Conditioning Systems Co., Ltd. Shimizu Works	February, 2001	The Shimizu City Society for Environmental Conservation
Prize from the Head of the Bureau of Machine Information and Industries of the Ministry of International Trade and Industry Special Prize from the Shizuoka Prefecture CFC Recovering Business Association		Hitachi Metals, Ltd. Kyushu Works Hitachi Air Conditioning Systems Co., Ltd. Shimizu Works	February, 2001 February, 2001	Materials Center Shizuoka Prefecture Association of CFC Recovering Businesses
Planet-friendly Company Prize Recognition by the Prefecture Governor (Resource Saving Department)		* Hitachi Research Laboratory	February, 2001	Ibaragi Prefecture
Prize for the Best Factory with Continued Performance in Kaohsiung Machining Outlet Environmental Protection		Hitachi Chemical Co. (Taiwan) Ltd.	November, 2000	Taiwan, Economy Department
Exchanges with Society -Environmental Communication	Award for Excellence in the Environmental Report Awards (Global Environmental Forum, President's Award)	* Hitachi Group's "Environment Report 2000"	November, 2000	Earth and Human Environment Forum National Federation of Environmental Conservation
	Letter of Thanks for Environmental Conservation in Rivers	Hitachi Chemical Co., Ltd. Shimodate Works	February, 2001	Kinu Kogai Fishery Cooperative

Contact :

Hitachi, Ltd. Corporate Environmental Policy Division
6,Kanda-Surugadai 4-Chome, Chiyoda-ku, Tokyo 101-8010, Japan
Phone:+81-3-3258-5810 Facsimile:+81-3-3258-5810
Email: kankyohon@hdq.hitachi.co.jp



**Thank you for reading
the *Hitachi Environmental Report!***

We want to make the best possible use of your opinions and advice in dealing with the environmental issues and in compiling environment reports in the future.

Please take a few moments to fill out this questionnaire and mail or fax it to the address below:

Corporate Environmental Policy Division

Hitachi, Ltd.

6, Kanda-Surugadai 4-chome,
Chiyoda-ku, Tokyo 101-8010, Japan

Fax: (81) 3-3258-5810

