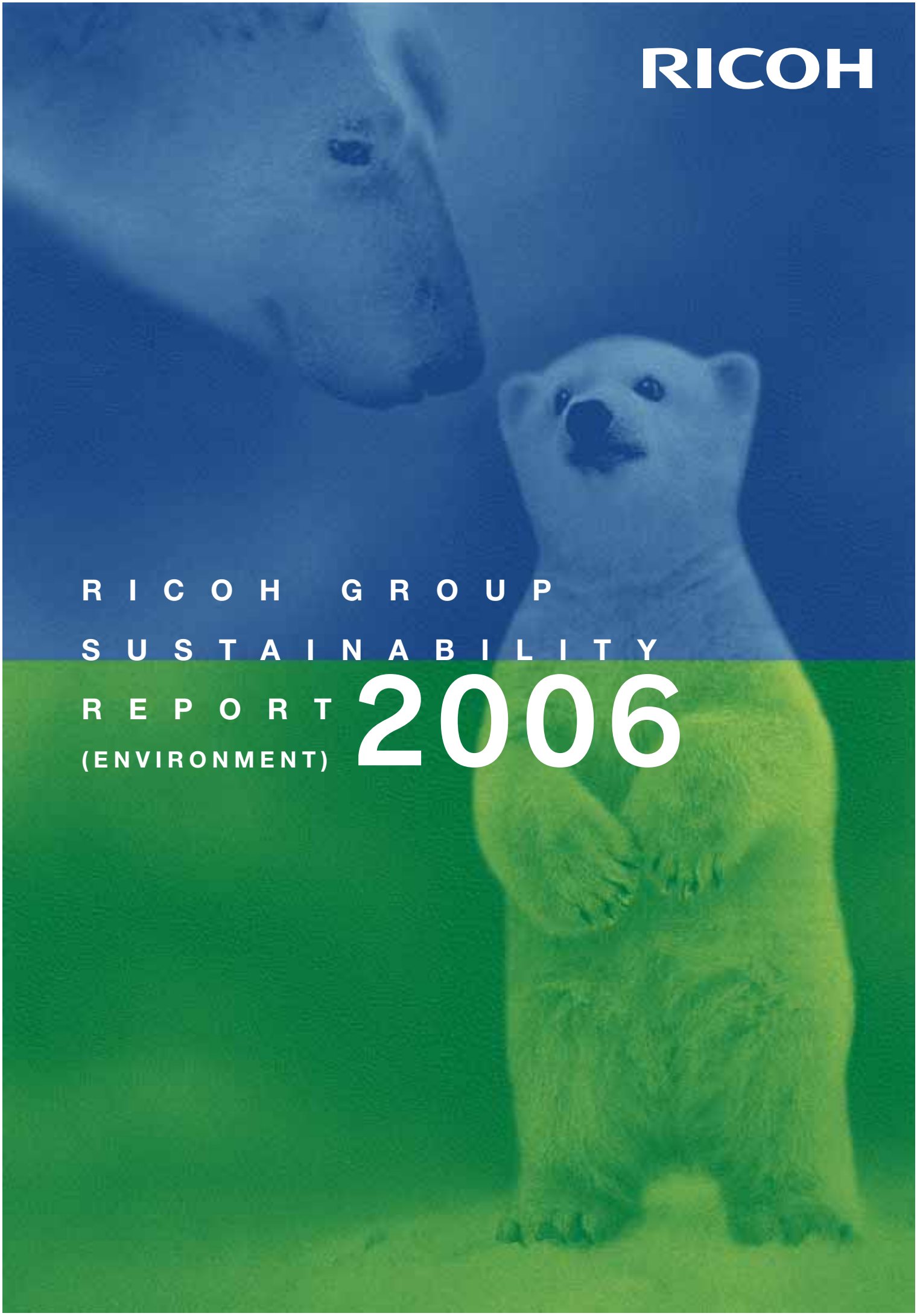
RICOH



RICOH GROUP SUSTAINABILITY REPORT (ENVIRONMENT) 2006

Earning the public's trust
Activity reports from 3 perspectives: "environment," "corporate social responsibility," and "economic"

Being a good corporate citizen means striving to be a valued and respected member of society by contributing to its sustainable growth. To this end, the Ricoh Group believes in being outstanding in all areas of the environment, the economy, and corporate social responsibility as well as openly communicating its activities.

The Ricoh Group publishes information on its activities in reports written from three different perspectives: the environment, the economy, and corporate social responsibility. This report provides our shareholders, customers, and other stakeholders with information on our sustainable environmental management policies and performance in fiscal 2005 to facilitate a better understanding of what we do and how we work.

n **Sustainability Report (Environment) and Other Reports**

[Environment]

Sustainability Report (Environment)

- Concept of sustainable environmental management
- Improving our products
- Improvements made at business sites
- Basis for sustainable environmental management
- Social contribution of environmental conservation/ Environmental communication

[Corporate Social Responsibility]

Sustainability Report (Corporate Social Responsibility)

- Concept of CSR
- Integrity in Corporte Activities
- Harmony with the Environment
- Respect for People
- Harmony with Society

[Economic]

Annual Report

- Management policy
- Management results
- Financial status

l **How to Obtain Ricoh's Corporate Information:**

- **Sustainable environmental management**
  http://www.ricoh.com/environment/index.html
- **Corporate social responsibility**
  http://www.ricoh.com/csr/
- **IR (for shareholders and investors)**
  http://www.ricoh.com/IR/
- **Social contribution (Japanese language only)**
  http://www.ricoh.co.jp/kouken/

n *Cover photograph: Polar bears*
Polar bears, among the largest carnivores that exist on land, are a potentially endangered species.
The Agreement on the Conservation of Polar Bears was signed by the U.S.S.R., Norway, Denmark, Canada, and the U.S. in 1976.

Editorial policy of the Ricoh Group Sustainability Report (Environment) 2006

The Ricoh Group aims to promote sustainable environmental management that contributes to environmental conservation while generating profits. This report provides information on the concept of, and specific measures and activities for, sustainable environmental management as well as on environmental accounting in an easy-to-understand manner in order to facilitate communication with society and to earn its trust.

Target readers

This report is prepared for all present and future stakeholders of the Ricoh Group's sustainable environmental management. Fiscal 2006 highlights are reported in "Feature Article: Sustainable Environmental Management in Action." Activities in which readers might be interested are explained in the section FOCUS for effective communication.

Policy for information disclosure

Disclosing information worldwide

Environmental problems are a global issue, and therefore it is very important to act in close concert with the individual countries and communities in which the Ricoh Group operates in tackling environmental issues. This report describes the Ricoh Group's sustainable environmental management activities that are based on global partnerships.

Disclosing financial information

To successfully carry out sustainable environmental management, the Ricoh Group endeavors to improve its management system by looking at all aspects of management from an environmentally-friendly point of view. The Ricoh Group identifies the effects and economic benefits of environmental conservation for each business unit and for the entire Ricoh Group and discloses relevant information through its environmental accounting.

◎Editorial policy of the Ricoh Group Sustainability Report (Environment) 2006

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To fulfill its mission as a global citizen, the Ricoh Group has taken it upon itself to contribute to the development of a sustainable society by promoting global environmental conservation.

Earning the public's trust

Corporate entities should now strive to assume corporate social responsibility in addition to playing their essential roles of increasing corporate values and pursuing profitability. In terms of corporate social responsibility, companies are required to focus on legal compliance, cope with public needs, define ambitious goals and take positive and responsible actions to attain those goals, and continue to find new added values, thereby earning the public's trust. We strive to promote social responsibility-driven management as a part of our corporate value and engage in global corporate expansion to contribute to the development of a sustainable society.

Our mission is to conserve the global environment

The rich resources of our planet Earth have given birth to many forms of life and have supported the wide-ranging and ambitious activities of mankind. Nevertheless, recent activities have exceeded the life-sustaining abilities of the Earth. This poses a threat not only to our coexistence with other forms of life on this planet, but also to the future of the human race itself. Global environmental conservation is the most urgent issue that the whole of mankind faces. We must be committed to restoring the Earth to its full capacity, and pass this on to future generations. To achieve this, we need to be more aware of the importance of the Earth in our personal lives, not just in our businesses, and strive to continuously modify our corporate activities and lifestyles to reduce the impact our society as a whole has on the global environment to a level that the planet can cope with.

Continuous environmental conservation activities

Based on this idea, the Ricoh Group has for a long time taken it upon itself as a global citizen to conduct environmental conservation activities on a continuous basis with the participation of more people. Companies can continue an activity only if they themselves survive, grow, and develop. We therefore need to gain new economic values through environmental conservation activities. We define sustainable environmental management as the management of a company that contributes to environmental conservation and generates economic values for that company. All Ricoh Group employees are engaged in environmental conservation activities while pursuing profitability based on the concept of the Ricoh Group's definition of sustainable environmental management. These efforts have proved successful. In terms of fiscal 2005 environmental accounting, substantial cost effectiveness was achieved: an economic effect of ¥20.7 billion from an environmental conservation cost of ¥16 billion. When such factors as risk aversion and improvement in brand value were included, the economic effect amounted to ¥29.3 billion.

Commitment to sustainable environmental management through the development of environmental technologies and activities conducted by all employees

To improve sustainable environmental management, we have incorporated our "environmental viewpoint" into all aspects of our management. Also, to limit the environmental impact of our corporate activities to a level that the Earth can deal with, we are conducting environmental management and improvement activities on a daily basis. We market environmentally-friendly products to the public aggressively based on the development of environment-related technologies, and thus, potentially reduce our environmental impact indirectly through our customers.

Environmental conservation activities should not be conducted only by employees in development and manufacturing departments. All our employees, including those in business planning and marketing (both in Japan and overseas), have some impact on the natural environment as a result of their work. Thus the Ricoh Group encourages all employees to participate in environmental conservation activities. Specifically, employees are encouraged to develop and provide environmentally-friendly products and services and to organize their workplaces to have less impact on the environment. These activities are expected to spread to business partners, customers, and employees' families all over the world. With this in mind, the Ricoh Group is strongly supporting the environmental conservation activities of its employees.

Through these measures, the Ricoh Group is committed to continuous environmental conservation activities to improve sustainable environmental management.

Commitment to forest conservation

To recover and maintain the life-sustaining ability of the planet, it is of course not enough to simply reduce the environmental impact of our business activities. It is important to also maintain and enhance the ecosystem, which is the source of the Earth's life-sustaining ability and provides people with clean air and water as well as fertile soil. The Ricoh Group believes that the ultimate goal of environmental conservation activities that businesses conduct as members of society is to recover the balance of the ecosystem on which the very existence of society depends. From this point of view, we particularly look at forest ecosystems with their rich biodiversity and are doing our best to conserve forest ecosystems in cooperation with NPOs and local communities all over the world.

Towards a sustainable society with a long-term perspective

In order to limit the environmental impact we have on the Earth to a level that the natural environment can deal with, what kind of changes should we make in our attitudes and actions? All global citizens, including national and local governments, companies, citizen groups, and individuals, need to be aware of their own environmental impact. Moreover, it is important to discuss the ideal society we pursue and aggressively reduce our environmental impact by cooperating with and learning from each other to realize our ideals. The Ricoh Group describes its long-term vision of the ideal society as a "Three P's Balance." To get closer to this vision, we set an extra-long-term target of cutting the environmental burden caused by all our business activities to one-eighth the fiscal 2000 level in terms of absolute values by 2050. Regarding CO_2 emissions, which cause global warming, we have also set a target to reduce total emissions by 12% compared with the fiscal 1990 level by fiscal 2010. This target is higher than that required by the Kyoto Protocol. The Ricoh Group lends its weight to the development of a sustainable society by demonstrating through the achievement of these targets that a company can conduct environmental conservation activities continuously through sustainable environmental management and by encouraging more people around the world to participate in developing a sustainable society.

Masamitsu Sakurai
Chairman of the Board,
President and Chief Executive Officer

桜井正光

To our readers

Sustainability Report 2006 outlines the activities that the Ricoh Group is conducting on a global scale to contribute to the development of a sustainable society through sustainable environmental management and by solving global environmental problems involving all people around the world. We want to discuss global environmental problems with many people throughout the world and we hope that this report will help as many of you as possible to discover the breadth of the Ricoh Group's concepts for environmental measures. We welcome your feedback to further improve our sustainable environmental management in terms of quality and effectiveness.

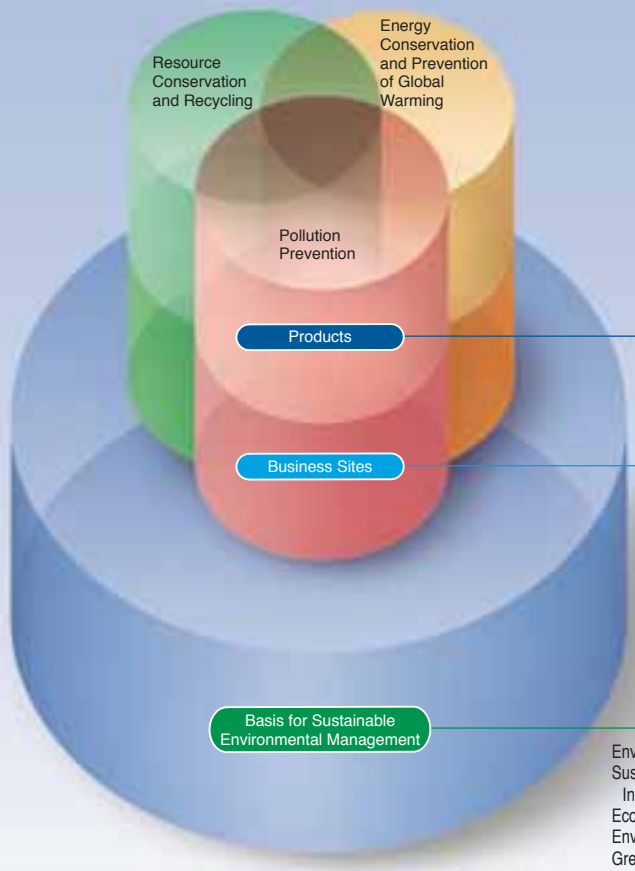
How the Ricoh Group promotes sustainable environmental management is outlined based on its overall picture (basis and three pillars).

This page and the next provide an outline of the entire structure of the report and list major awards and recognition the Ricoh Group received in fiscal 2005 as well as brief descriptions of the content.

Overall Picture of the Ricoh Group's Sustainable Environmental Management (Structure of the Report)

● **Structure of the Report**

This report is structured in the same way the general picture of the Ricoh Group's sustainable environmental management is structured. The report begins with **the concept of sustainable environmental management** and goes on to explain **improving our products (three pillars)**, **improvements made at business sites (three pillars)**, and **the basis for sustainable environmental management**.



Environmental Management System
Sustainable Environmental Management Information System
Eco Balance
Environmental Accounting
Green Partnership
Environmental Education/Environmental Awareness Building
Social Contribution of Environmental Conservation
Environmental Communication

■ Major Awards and Recognition Ricoh Received in Fiscal 2005

Ricoh Given AAA in TECO's Environmental Rating for the Second Year in a Row

Ricoh received a AAA, the highest environmental rating, from Tohmatsu Evaluation and Certification Organization (TECO) Japan. The rating, which involves 491 Japanese companies, was based on the companies' fiscal 2005 environmental reports and information disclosed on their official websites.

Ricoh Stocks Incorporated in Eco Funds and SRI Funds

In Japan, Ricoh's stocks are incorporated in many eco funds and SRI funds. Also, the Morningstar Socially Responsible Investment Index has included Ricoh since its establishment in 2003. In addition, Ricoh has been a constituent member of the Dow Jones Sustainability Indexes (DJSI) for four consecutive years and of the FTSE4 Good Global Index for three years in a row. The latter index is published by FTSE International Ltd., a joint venture between the UK Financial Times and the London Stock Exchange.

The Ricoh Group's Concept of Sustainable Environmental Management is to simultaneously achieve environmental conservation and profits.

The Ricoh Group's sustainable environmental management means simultaneously achieving environmental conservation and profits. This policy is carried out through development of environment-oriented technologies and in activities conducted by all employees. Initiatives have been taken in the three areas of energy conservation and prevention of global warming, resource conservation and recycling, and pollution prevention for both products and business sites. To efficiently advance these activities, a basis for sustainable environmental management was established.

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- Pursuing the Ideal Society "Three P's Balance" ····· Page 13
- Concept of a Recycling-based Society "The Comet Circle" ····· Page 14
- Year 2050 Extra-Long-Term Environmental Vision and Promotion of Sustainable Environmental Management ····· Page 15
- Environmental Action Plan up to Fiscal 2007 and Fiscal 2005 Results ····· Page 17

Feature Article: Sustainable Environmental Management in Action

Various sustainable environmental management efforts are being made by the Ricoh Group at worksites. Some of these activities are reported in an easy-to-understand manner in the feature article.

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Global Ecosystem Conservation Promoted through Partnerships with NPOs

INTERVIEW "Employee Interview" helps readers become more familiar with Ricoh's environmental activities through interviews with staff who are actually involved in such activities.

FOCUS Activities that people are particularly interested in are introduced in detail in the "FOCUS" section.

Developing “Live Offices”

We provide customers with the know-how to improve the environment and business operations. Live offices across Japan, created by Ricoh Group employees, are open to the public.

Yukiko Obata
Sales Process Innovation Office
Marketing Strategy Center
Ricoh Sales Co., Ltd.

Background photograph:
Live office of the Northeast Business Department, Tokyo Business Headquarters, Ricoh Sales Co., Ltd.; no unnecessary paper in the office.

The Ricoh Group promotes paperless offices and stricter compliance with sorting and recycling to create environmentally-friendly offices. We provide customers with the know-how that we have gained from such practices by opening our offices to the public as live offices.

An attendant giving an explanation of a live office

How can we create a paperless office? We created paperless offices at our own company as a showcase.

With the number of customers wanting to create environmentally-friendly offices growing every year, Ricoh promotes improved efficiency and the reduced use of unnecessary paper through office equipment sales. The mere introduction of equipment that digitizes paper documents does not lead to an effective reduction in paper use. Thinking that we need practical experience before offering advice to customers, we began improving our offices from an environmental viewpoint, including creating paperless offices. Now, we have launched a new approach to proposing office improvement, including the know-how that we have gained from our own experience, by opening our offices to the public. For example, at Ricoh Sales Co., Ltd., which supervises overall sales in the Kanto region, a project team was set up in the company in fiscal 2002 to work

on this task. The team started with the piles of paper on desks and in cabinets. They studied paper output and storage to identify documents that really have to be kept on paper and found that such documents accounted for only 20% of the total amount. Based on this result, the office workflow was restructured so that all employees are continuously involved in efforts to keep paper use to the absolute minimum, and rules were established to promote their commitment. For instance, they can reduce paper use through digitization and double-sided/multiple-page printing. Along with these initiatives, such efforts as stricter compliance with the sorting of waste and reduction in electricity consumption have led to not only less environmental burden but also a significant reduction in cost.

A clean office attracts the customer's attention. Live offices serve as a showcase in proposing a new work style.

Live offices—offices that are clean and effective thanks to the efforts of all employees—are open to customers to give an example of office improvement. By the end of 2005, approximately 18,500 customers from 16,480 companies visited Ricoh Sales' live offices in the Tokyo area alone. "We want to start creating a paperless office." "The live office is surprisingly clean." "We would like to gain the know-how to sort waste." These are some of the comments made by customers who visited live offices. Such a new customer approach is now adopted by Ricoh Group sales companies across Japan to propose ideas about office improvement by opening live offices to customers. We endeavor to develop higher sustainable environmental management by continuously solving the challenges customers face.

Customer Interview

Japan Automobile Federation

Being interested in sustainable environmental management, I visited a live office. We promote environmental conservation efforts at our own office so that we can develop environmental communication with 17 million JAF members.

Mr. Koji Konishi
Environmental Management Implementation Department

I was impressed by every employee's commitment to sorting waste and keeping paper use to the absolute minimum.

Because I am in charge of promoting environmental management at our office, I have been watching the Ricoh Group's initiatives in this area. Seeing an ad that says we can visit Ricoh's live offices, I visited a live office before other members of our office did. I was impressed by the orderly desks with no paper on them, systematic waste sorting, and every employee's commitment to environmental conservation at the office. Hoping to learn a lot from Ricoh's live office, a total of 28 staff members from our organization visited the live office in four visits. JAF aims to start active communication targeting 17 million members to raise their environmental awareness. Before we launch such initiatives, we want to promote environmental conservation activities at our own office first.

Live offices across Japan are open to the public!

Mie Ricoh Co., Ltd.

Live offices are crowded with customers who are considering obtaining ISO certification and creating a paperless office.

There were piles of paper and other things on desks before the improvement.

After the improvement, desks are clean.

Mie Ricoh Co., Ltd. started opening live offices to the public in February 2002, and two live offices, one each in Tsu and Iga, are now open. After a period of trial and error, live offices were created by every employee's participation. Because employees were actually involved in the project, they can propose paperless offices to customers with confidence. The remodeled head office is scheduled to be a live office.

Shikoku Ricoh Co., Ltd.

Live offices are open at all business sites in Shikoku, and they are receiving many visitors.

Explaining the concept to visitors

Shikoku Ricoh Co., Ltd. has live offices at all of its 20 business sites. Customers from both private businesses and government bodies visit them from all over Shikoku. One customer who visited our live office introduced it to all his employees through his company's in-house journal. We plan to achieve zero-waste-to-landfill at all business sites.

Practical Application of Copier Materials with Less Environmental Burden

We use plant-based plastic in copiers. Pursuing the possibility of alternative resources to oil.

Ricoh is the first in the industry to adopt new product materials to replace petroleum-based resins used in copier parts. We try to achieve the practical application of materials with less environmental burden to replace oil.

imagio Neo 752ec
"imagio" is the brand name used in Japan.

Not only what we can do but also what we must do. Start making improvements from the things that have significant environmental impact.

The Ricoh Group develops products with the aim of reducing the environmental impact of products throughout their entire lifecycle to a level that the Earth's self-recovery capability can deal with. To attain this goal, we made a detailed analysis of all our business activities, covering all areas of collection of resources, manufacturing, distribution, use, and recycling. Based on this analysis, we started making improvements in areas that have a particularly large environmental impact at an early date. Our efforts in this respect include improving the energy-saving function of our products, reducing environmentally-sensitive substances, and developing a function that helps customers use less paper.

We cannot achieve the sustainable environmental management that Ricoh practices unless we clearly prioritize the issues that we have to address, develop measures for them, and carry out effective reductions in appropriate areas. When we started doing all of this, we found that reducing environmental impact in the procurement process of raw materials and parts was quite a challenge. The environmental impact of this process accounts for about 50% that of all our business activities. Developing product materials that have less environmental impact has become the most important issue for us.

Having cleared major technical hurdles, we succeeded in using plant-based plastic in copiers.

When petroleum-based plastic is incinerated, it is as if the carbon contained in the ground is released into the atmosphere, increasing the total amount of CO_2 in the air. On the other hand, although CO_2 is released when plant-based plastic is incinerated, the gas was originally absorbed by plants through photosynthesis during growth. Therefore, the total amount of CO_2 in the air does not theoretically increase, which means that plant-based plastic has less environmental impact and contributes to preventing the acceleration of global warming.

While plant-based plastic has the advantage mentioned above, we had to clear such technical hurdles as crashworthiness and fire retardancy before using this material in copiers. The Ricoh Group, in collaboration with Mitsui Chemicals, Inc., has been working to solve these problems since 2002 to find ways to put this material into practical use. We have made many improvements to the material and repeated experimental production.

After all these efforts, we have successfully developed a new plastic material that is made from corn and has a high percentage of plant-based material (more than 50%). In 2005, we used this new plastic for part of our digital multifunctional copiers, imagio Neo 602ec/752ec, for the first time.

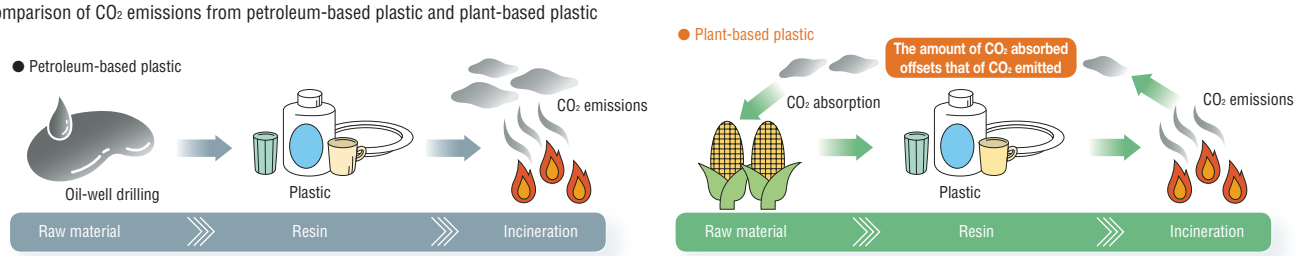
We quickly launched copiers made of this plant-based plastic into the market to spread and promote plant-based plastic.

There is a reason for our quick launch of the product made from this new material into the market.

New materials with a low market penetration rate have the serious disadvantage of entailing a high cost. However, when 10% of the total amount of plastic used in Japan is replaced with plant-based plastic in the near future, it is estimated that more than 700,000 tons of CO_2 will be reduced in a year. From this, we can understand how great a contribution plant-derived plastic is to the global environment. If we rely on and compete for such fossil resources as oil, which are projected to become depleted, our society cannot be called a sustainable society.

With the launch of the imagio Neo 602ec/752ec, more manufacturers will know about plant-based plastic, which may facilitate the cross-industrial development of the material. This will accelerate technological innovation and cost reduction, thus raising the penetration rate of plant-based plastic. Ricoh will further improve such plastic and increase its use in more products.

Comparison of CO_2 emissions from petroleum-based plastic and plant-based plastic



Tadakatsu Harada
Core Technology Research Center, Research and Development Group

Employee Interview

People who are engaged in manufacturing are responsible for developing new materials with less environmental impact.

Because there were various technical hurdles in putting plant-based plastic into practical use, we went through the process of trial and error repeatedly to determine the right raw material as well as to raise the percentage of the material used. We spent three years improving the material to meet safety standards and achieve a recycling function before putting the new plastic to practical applications. Manufacturers are responsible for selecting materials used in their products. I think we must take the initiative in using new environmentally-friendly materials, thus contributing to improving society. When we think about the oil depletion issue, making product materials using raw materials (plants) that can be grown in the cycle of nature is a good thing. Plant-based plastic is merely the first step. Now, we have to continue with the second and third steps.

"Green Sales" in the United States

Customers who are Highly Aware of Environmental Issues Have Need of Green Partners

The Seattle Branch of Ricoh Business Systems (RBS), our sales company in charge of the Americas, is engaged in marketing activities that focus on environmental issues. People in the Northwest are highly aware of environmental issues. To attract customers in that region, it is important to meet customer demand and expectations in terms of not only performance, price, and service but also environmental consideration. "This is a company that we can work with," said one customer about RBS, which strives and makes proposals for a better environment in a positive way.

Ricoh Business Systems

Environmental consideration has become an important selling point for photocopiers and printers

Increased customer need for environmental consideration

The people of Washington and Oregon are very environmentally friendly. Accordingly, the two states have strict legal regulations on air and water quality. Because administrative organs and large companies in Seattle are keenly aware of environmental problems, it is vitally important to meet customer expectations and demand in terms of the environment in conducting our business activities. We are aware of not only the importance of addressing environmental issues as a member of the Ricoh Group, regarding it as a corporate responsibility, but also that of contributing to the reduction in environmental burden placed upon our customers through our business activities.

Offering a comprehensive service from an environmental point of view

Our job is to offer new and unique products to our customers. And today, one of our key selling points is environmental consideration. Environmental performance is important for the success of "green selling." What is most important, however, is that salespeople can share an understanding of the environment with customers. The Seattle Branch of RBS has 54 salespeople. We have made particular efforts toward environmental education so that each one of them can talk about the environment in their own words and share an understanding of the environment with customers. Also, it is important to offer a comprehensive service from an environmental point of view, such as the collection and recycling of toner cartridges. We intend to gain the customer's trust by continuing to meet new customer needs and support environmental preservation in a positive way.

Chuck Laguna (Left)
Sales Manager
Ricoh Business Systems
(In charge of the Catholic Health Initiative)

Richard Ferraro (Middle)
General Manager
Ricoh Business Systems

Jeff Meling (Right)
Senior Government Account Manager
Ricoh Business Systems
(In charge of the Washington State Department of Ecology)

Customer Interview

Washington State Department of Ecology

The Washington State Department of Ecology has 14 offices in addition to its headquarters in Olympia, which are staffed with over 1,000 people. When purchasing office equipment, they evaluate the supplier from an environmental viewpoint as well.

Ms. Karen Phillips (Left)
Network Administrator
Department of Ecology

Ms. Mary Ellen Bradley (Right)
Information Services Manager
2005 Governor's Sustaining Leader, Department of Ecology

The Washington State Department of Ecology is looking to receive comprehensive support for environmental preservation and improved productivity in the workplace.

● Carrying out a new purchasing program

The Department of Ecology carries out a program that selects suppliers from two points of view: the environment and the supplier's contributions toward improving productivity. In a bidding in which RBS was accepted, the department imposed strict conditions concerning the environment, including not only those on environmental performance, such as double-sided printing, but also the establishment of a system to collect expendables, such as toner cartridges, and the possibility of reducing the number of copiers and printers.

Proposals by RBS, which proved the company's environmental friendliness, were greatly appreciated.

The presentation RBS made at the time of the bidding was very impressive. It focused on environmental issues by, for example, presenting how used printers are recycled. The company delivered its products in a short period of time without leaving such waste as packaging materials. Moreover, through the strategic placement of the machines, we were able to reduce the number of copiers and printers from 340 to 190. Ricoh's multifunctional products are popular in the office, too. We believe that biddings that focus on the environment and productivity lead to the "smart buy" being promoted by Washington, and we intend to introduce similar programs to other departments and agencies in the future.

Catholic Health Initiatives

Catholic Health Initiatives has 30 hospitals and 168 clinics across the United States. It endeavors to enlighten staff members aiming to reduce the use of paper resources, including copier paper.

Mr. Keith A. Stauffer
Regional IT Director, Catholic Health Initiatives

We will definitely accept proposals from companies who can share with us a sense of value in giving priority to the environment.

● The global environment as a corporate ideology

Catholic Health Initiatives' corporate ideology is to "respect all things constituting the global environment and created by God." In following this ideology, we believe that all the goods we purchase must be environmentally friendly and be disposed of appropriately after being used. We believe that the business relationships we enter into should only be with companies that can share such ideas and select suppliers according to this belief.

● Promoting the reduced use of paper resources

In 2004, the number of sheets of paper we used for single-sided printing reached several tens of millions. This is equivalent to about 5,400 trees. In light of this, we set about instructing our staff members on duplex and multiple-page printing in 2005 to reduce the environmental burden as well as costs. At present, we are using approximately 800 Ricoh products. We hope RBS will continue to offer us the latest paper saving technologies as well as suggestions on how to fully utilize them.

We need to reduce the environmental impact of society to a level that the Earth's self-recovery capability can deal with.

The purpose of environmental conservation activities is to reduce environmental impact to a level that Earth's self-recovery capability can deal with it and sustain the global environment. The Ricoh Group, by considering how the relationship among the three P's (planet, people, and profit) in environmental, social, and economic activities has changed over time, defines the kind of society we should pursue and carries out its responsibility as a company to create such a society.

Society and the Global Environment in the Past

In the past, the environmental impact caused by society was kept within the limit of the global environment's self-recovery capability. After the Industrial Revolution in the 18th century, however, the world entered an age of mass production, mass consumption, and mass disposal, which significantly increased environmental impact. At the end of the 20th century, some people began to warn against a deteriorating global environment and its impact on human society. Today, companies that are not seriously committed to environmental conservation cannot gain support from society.

Current Efforts by Society and Businesses

Today, people are paying more attention to activities that reduce damage to the global environment, including the sorting of waste, recycling, and prevention of global warming. Manufacturers face such challenges as promoting smaller products with longer lifecycles, energy conservation, and resource recycling, as well as providing the maximum benefit to society and companies with minimum resources. Global companies as well are expected to support and promote the awareness of environmental conservation in developing countries and regions so that they can achieve economic progress with minimum environmental impact. Another important issue is to increase the self-recovery capability of the natural environment by such efforts as improving forest ecosystem conservation.

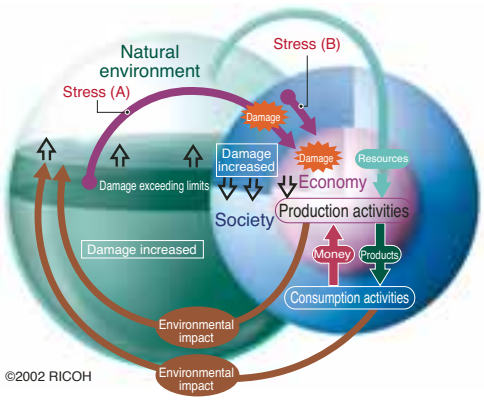
To Achieve the Ideal Society

To keep environmental impact within the self-recovery capability of the natural environment, setting specific goals for the prevention of global warming, the conservation of resources, and the prevention of pollution is important. The Ricoh Group has adopted the Year 2050 Extra-Long-Term Environmental Vision[1], the Year 2010 Long-Term Environmental Goals[2], and the Environmental Action Plan from 2005[3] as milestones on the path to attaining its long-term vision of the ideal sustainable society and has been working in accordance with these policies. To preserve the global environment for future generations, we need to take action with greater environmental awareness and clearer goals.

1. See Page 15. 2. See Page 15. 3. See Page 17.

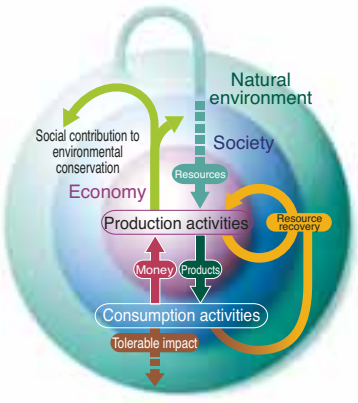
Three P's Balance™: Representing the Relationship between the Global Environment and Society

■ Status quo



Our environmental impact on the Earth has exceeded the planet's life-sustaining abilities as well as its recovering ability.

■ Pursuing the Ideal Society



Environmental impact remains within the recovering ability of the Earth.

For more information, please visit http://www.ricoh.com/environment/management/earth.html.

The Ricoh Group contributes to the development of a sustainable, recycling-based society based on the Comet Circle concept.

The Comet Circle represents a sustainable society that recirculates resources, the kind of society we pursue. Circles in the diagram indicate partners we work together with to achieve a recycling-based society. The upper routes represent arteries of the system, and the lower routes veins of the system. Resources taken from the natural environment by materials suppliers shown at the upper right are processed into products, moving from right to left along the upper route, and are finally delivered to users (customers). The end-of-life products move from left to right along the lower route. The Ricoh Group contributes to the development of a recycling-based society by focusing on the following five activities to make the Comet Circle work effectively.

(1) Identifying and Reducing Environmental Impact at All Stages

All parties involved, i.e., the Ricoh Group, suppliers, customers, and recycling companies, identify the degree of environmental impact at all stages, including the transportation stage, by using a sustainable environmental management information system and strive to reduce overall impact by promoting the development of environmental technologies as well as recycling and recovering products.

(2) Putting Priority on Inner Loop Recycling

Resources have the highest economic value when they are manufactured into products and used by customers. The Ricoh Group puts priority on reusing and recycling products on the inner loops of the Comet Circle with an aim to minimize the resources, cost, and energy needed to return used products to the state of highest economic value.

(3) Promoting a Multitiered Recycling System

Repeated recycling to the greatest extent possible (i.e., multitiered recycling) reduces the consumption of new resources and the generation of waste. The Ricoh Group is promoting the effective use of resources by establishing a system in which products recovered from the market are supplied to the market again.

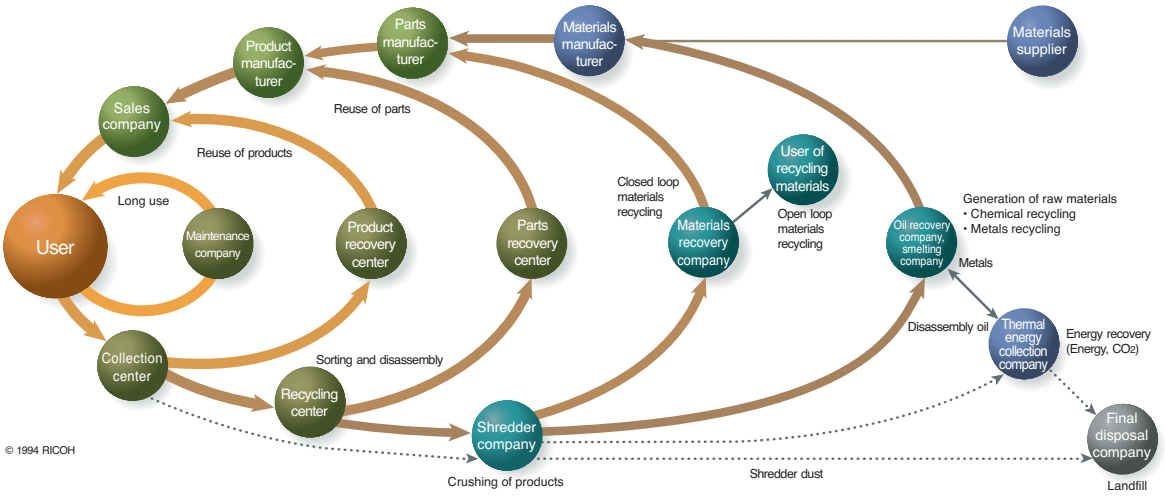
(4) More Economically Rational Recycling

A society that recirculates resources must also establish a recycling system in which products and money flow in opposite directions in both post-product-use stages and original production and marketing stages. The Ricoh Group, making use of an upgraded design, is promoting a more economically rational recycling system in partnership with recycling companies. At the same time, it is important to establish a social system that helps people to be aware of environmentally-friendly business activities and buy products with less environmental impact.

(5) Establishing a Partnership at Every Stage

The Ricoh Group strives to reduce environmental impact in all of its business areas in an economically rational way through partnerships with parties at all stages. The initiatives include the reduction of environmentally-sensitive substances in cooperation with materials and parts manufacturers, improved efficiency in transportation, green marketing, and a reduction in recycling costs and the environmental impact generated by recycling. By disclosing information and know-how garnered through these activities and working with local communities, the Ricoh Group helps reduce the environmental impact of society as a whole.

Concept for Realizing a Society that Recirculates Resources: The Comet Circle™



For more information, please visit http://www.ricoh.com/environment/management/concept.html.

The Ricoh Group aims to reduce the environmental impact of all of its business activities to one-eighth in terms of absolute values by 2050.

Looking at the present from the longest possible distance to create a sustainable society

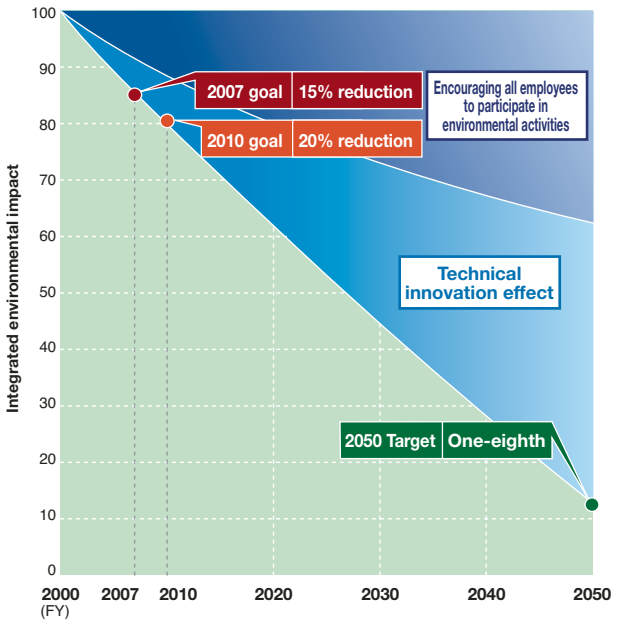
To conserve the global environment and achieve a sustainable society, it is necessary to limit environmental impact to a level that is within the Earth's self-recovery capabilities. The world has now embarked on efforts to achieve a sustainable, recycling-based society. This trend is quite evident in the adoption of the Kyoto Protocol, which came into effect in 2005, and recent developments relating to environmental laws and regulations in nations around the world. However, our goal is not just to comply with these conventions and regulations. Looking ahead as far as we can and reviewing the current situation from a point in the future, we need to share our vision of the ideal society and global environment, set target values to realize our ideals, and aggressively promote environmental conservation activities. The Ricoh Group has described its vision of the ideal society it pursues by its "Three P's Balance"* and adopted the target of reducing environmental impact in all of its business areas to one-eighth in terms of absolute values by 2050 in the Year 2050 Extra-Long-Term Environmental Vision. *See page 13.

Setting targets using the back-casting method to attain final goals

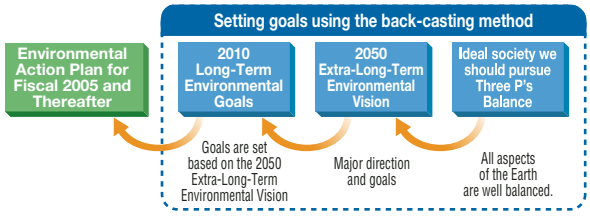
The Ricoh Group uses the back-casting method to set targets. In this approach, we first set final goals and then determine target values as milestones on the journey to those goals. Setting the Three P's Balance as its final goals, the Ricoh Group adopted the Extra-Long-Term Environmental Vision. Based on this vision, we determined the Year 2010 Long-Term Environmental Goals, which aim to reduce environmental impact by 20% by fiscal 2010. Under the Environmental Action Plan, which started in fiscal 2005 according to the Year 2010 Long-Term Environmental Goals, we strive to achieve the target of reducing environmental impact by 15% by fiscal 2007 on the estimation that our business will expand by 8% or more a year. We adopted "integrated environmental impact" as an index for target values and aim to reduce it in terms of absolute values. Integrated environmental impact is obtained by integrating all environmental impact caused by CO_2 emissions, resource use, use of chemical substances, etc.*

* Currently, the Ricoh Group is calculating the integrated environmental impact using EPS, which is an integrated analysis method developed in Sweden. We adopted EPS because its calculation concept of coefficient of integration agrees with the Ricoh Group's sustainable environmental management. The unit is ELU. The integrated analysis method used is subject to change as necessary. (EPS is explained on page 53.)

Extra-Long-Term Environmental Vision and Long-Term Environmental Goals



How to Set Environmental Goals



Consideration in Preparing an Environmental Action Plan

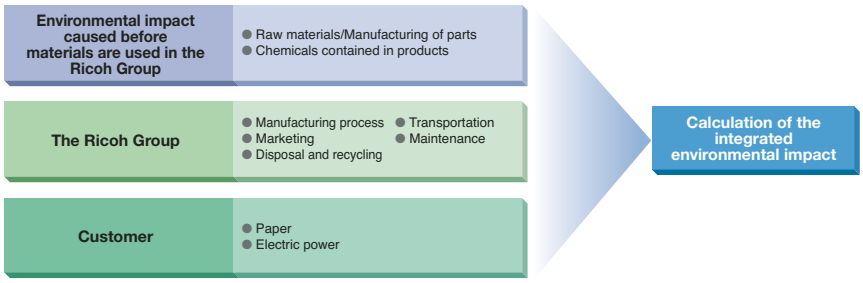
Reducing the environmental impact of all business activities in terms of absolute values

If reduction of CO_2 and resource conservation is promoted separately, environmental impact reduction goals might be achieved in a defined area, but the environmental impact might increase more than the amount reduced in other areas or processes. To ensure that environmental impact is reduced, we have to first identify the environmental impact of all business activities and then determine, from a comprehensive viewpoint, the kind of initiatives that should be taken at each stage of business. Also, goals set based on units and factors alone, which are efficiency-based relative indices, might not be effective for environmental conservation in practical terms. Therefore, it is important to set goals using "absolute values" for environmental impact as well. Thinking this way, the Ricoh Group aims to reduce the integrated environmental impact of its entire business activities by absolute values.

Achieving goals on the sustainable environmental management level

To continue its efforts to reduce environmental impact from a long-term perspective on the basis that environmental impact should be reduced to a level that the Earth's self-recovery capability can deal with, the Ricoh Group needs to continue business and grow as a company by promoting sustainable environmental management that generates economic value through environmental activities. There have been three stages in the Ricoh Group's environmental conservation efforts thus far. After the Passive Stage and the Proactive Stage, we are now in the Responsible Stage. In the Passive Stage, we coped with social pressures by dealing with laws and regulations and competing with other companies. In the Proactive Stage, however, we began to take voluntary actions to reduce the environmental impact of our business activities and products with a sense of mission as a global citizen. In the current Responsible Stage, the Ricoh Group aims to achieve continuous environmental conservation by pursuing economic value while aggressively reducing the environmental impact of its business activities.

Reduction Areas of Environmental Impact (Eco Balance)



Three Steps in Environmental Conservation Activities (From Passive Stage to Proactive Stage and Responsible Stage)

	Passive Stage	Proactive Stage	Responsible Stage
Purpose	Coping with social pressures • Laws and regulations • Competition • Customers	Carrying out its mission as a global citizen • Self-imposed responsibility • Voluntary planning • Voluntary activities	Simultaneously achieving environmental conservation and profits
Activities	Passive measures to meet laws and regulations, competing with other companies, and satisfying customer needs	1. High-aiming, aggressive activities to reduce environmental impact • Energy conservation • Resource conservation and recycling • Pollution prevention 2. Improved awareness of all employees	Environmental conservation activities ≒ QCD activities* Ex.: Reduced number of parts Reduced number of process steps Improved yield and operation rate
Tools		1. ISO 14001 2. LCA 3. Training program for environmental volunteer leaders	1. Strategic goal management system 2. Environmental accounting 3. Sustainable environmental management information system

*Activities to improve quality, control costs, and manage delivery times

Environmental Action Plan up to Fiscal 2007 and Fiscal 2005 Results

The Ricoh Group's Environmental Action Plan (FY 2005–2007) *For items that do not specify a target fiscal year, the target year is fiscal 2007.

1 Improving environmentally-friendly functions and promoting environmental technological development

1) Develop new environmental technologies. (*Details of the progress of new technologies not currently released.) Page 21

① Develop new environmental technologies to reduce resource use.

② Develop new environmental technologies to realize a society that is less dependent on fossil resources.

2) Improve environmentally-friendly functions.

① Promote the use of energy-saving technologies in products. Page 23

- Achieve Ricoh's energy-saving goals.

② Promote the use of resource-saving technologies in products.

- Improve the quantity of reusable parts used by a factor of at least five (compared to fiscal 2003 figures in Japan).
- Increase the quantity of recycled plastics used to 1,000 tons or more.

③ Observe Ricoh standards that cover environmentally-sensitive substances emitted by products. Page 31

- Observe Ricoh standards that cover such substances as ozone, dust, and VOC.

2 Promoting green marketing

① Increase the number of recycled copiers marketed. Page 27

- Increase the number of recycled copiers marketed by a factor of at least 10 (compared to fiscal 2003 figures in Japan).

② Promote the green marketing of paper.

- Improve the recycled pulp use rate for paper products to 60% or more (in Japan).

3 Environmental conservation activities that improve the effect on cost at plants and offices

1) Promote energy conservation at business sites.

① Reduce total amount of CO_2 emitted as a result of business activities. Page 35

- Reduce CO_2 emissions by 12% by fiscal 2010 (Ricoh and manufacturing subsidiaries in Japan, compared to fiscal 1990 figures).
- Reduce CO_2 emissions by 10% by fiscal 2010 (manufacturing subsidiaries outside of Japan, compared to fiscal 1998 figures).
- Reduce CO_2 emissions by 4% (Ricoh and manufacturing subsidiaries in and outside of Japan, compared to fiscal 2000 figures).
- Reduce CO_2 emissions by 4% (non-manufacturing subsidiaries in Japan, compared to figures in the base fiscal year set at each company).

2) Promote resource conservation at business sites.

① Reduce generated waste. Page 41

- Reduce generated waste by at least 3% (Ricoh and manufacturing subsidiaries in and outside of Japan, compared to fiscal 2000 figures).
- Reduce generated waste by the ratio calculated by multiplying the number of years from the base fiscal year to fiscal 2007 by the yearly rate (2%) (non-manufacturing subsidiaries in Japan; the base fiscal year is set at each company).

② Improve the waste recycling rate. Page 41

- Improve the waste recycling rate to at least 95% (non-manufacturing subsidiaries in Japan).

③ Reduce water consumption. Page 41

- Reduce water consumption to a level that is below the results of fiscal 2000 (Ricoh production sites and manufacturing subsidiaries in and outside of Japan).

④ Reduce paper consumption.

- Reduce paper consumption by at least 10% (Ricoh, manufacturing and non-manufacturing subsidiaries in Japan, and manufacturing subsidiaries outside of Japan, compared to fiscal 2002 figures).

3) Promote pollution prevention at business sites.

① Completely eliminate the use of chlorine organic solvents. Page 45

- Completely eliminate chlorine organic solvents used in manufacturing Organic Photo Conductors at manufacturing contractors as well as at Ricoh manufacturing divisions.

② Reduce greenhouse gas emissions (except CO_2). Page 36

- Reduce greenhouse gas emissions (except CO_2) in the semiconductor business division by 15% (compared to fiscal 2000 figures).

③ Examine and improve soil and underground water at Ricoh's non-production sites and leased land. Page 47

- Complete the examination of soil and underground water at Ricoh's non-production sites and leased land (Ricoh and affiliates in and outside of Japan).
- Make and implement plans to improve sites where pollution is detected.

4 Improving the sustainable environmental management system and making it more consistent through systems integration

1) Improve the sustainable environmental management system.

① Improve the ISO 14001 system. Page 49

- Integrate the sustainable environmental management system with that of Ricoh (in fiscal 2005) and the Ricoh Group (in fiscal 2007).

② Create a system of managing chemical substances contained in products. Page 31

- Create and enforce a system of managing chemical substances contained in Ricoh Group products (in fiscal 2005).

③ Improve the sustainable environmental management information system. Page 51

- Introduce the information system, which manages real-time information on the environmental impact caused at resource processing sites, to various business divisions other than the imaging equipment division.
- Introduce the information system, which manages real-time information on the environmental impact caused by transportation processes, to overseas transportation processes.

5 Promoting environmentally-friendly social contribution activities to preserve the ecosystem

① Promote forest conservation activities and environmentally-friendly social contribution activities to preserve the ecosystem. Page 63

- Promote environmentally-friendly social contribution activities to preserve the ecosystem (overseas regional sales headquarters; Ricoh production sites, manufacturing subsidiaries, and marketing subsidiaries in Japan; Ricoh Logistics Systems Co., Ltd.; Ricoh Leasing Company, Ltd.; and Ricoh San-ai Service Co., Ltd.).

* Results for items 1 through 4 were reviewed by a third party.

Progress (fiscal 2005 performance)
For imaging equipment, a range of elemental technologies is being developed to reduce size and weight.
Efforts are being made to adopt new materials to replace oil. In fiscal 2005, plant-based plastic parts were used in multifunctional copiers for the first time in the industry.
Monochrome and color multifunctional copiers that achieved energy-saving targets were put on the market.
Quantity of reusable parts used increased 2.3 times.
Quantity of recycled plastic used amounted to 578 tons.
Ricoh's standards for ozone, dust, and VOC were achieved in 10 models of copiers, multifunctional copiers, and printers launched on the market in fiscal 2005.
Sales of recycled copiers increased 3.1 times.
Composition ratio of recycled pulp in paper was increased to 56% (51% in fiscal 2004).
Total CO_2 emissions decreased 3.7%.
Total CO_2 emissions increased 2.8%.
• Ricoh and manufacturing subsidiaries in Japan: Total CO_2 emissions increased 2.0%. • Manufacturing subsidiaries outside of Japan: Total CO_2 emissions increased 9.0%.
Changes in total CO_2 emissions: 18.1% reduction at sales subsidiaries; 3.1% increase at Ricoh Technosystems; 0.3% reduction at Ricoh Leasing; 8.6% reduction at Ricoh San-ai Service; 7.6% reduction at Ricoh Logistics Systems *Each company's base year for comparison: 2002 for sales subsidiaries, Ricoh Leasing, and Ricoh San-ai Service; 2000 for Ricoh Technosystems and Ricoh Logistics Systems
Generated waste decreased 0.5%.
Changes in generated waste: 9.8% reduction at sales subsidiaries; 21.9% reduction at Ricoh Technosystems; 23.3% increase at Ricoh Leasing; 1.5% reduction at San-ai Service; 26.3% reduction at Ricoh Logistics Systems *Each company's base year for comparison: 2002 for Ricoh Logistics Systems and 2004 for other companies
Waste recycling rate improved from 84.6% to 98.4%.
Water consumption decreased 9.1%.
Paper consumption decreased 1.2%.
Use of chlorine organic solvents was completely discontinued in the consignment production of photoconductors at plants other than Ricoh's in March 2006.
Greenhouse gases other than CO_2 were reduced by 30%.
Examination of all nonproduction sites of the Ricoh Group, approximately 1,000 sites, was completed.
No contamination was found at nonproduction sites where the examination of surface soil was conducted in fiscal 2005.
In fiscal 2005, Ricoh's standardized ground rules for its environmental management system were created. The company is scheduled to acquire integrated certification by a third-party organization by the end of fiscal 2006.
Common guidelines for the Ricoh Group were established. A system of managing chemical substances contained in products was created based on guidelines for the entire Ricoh Group in Japan.
For digital printers, an information system that manages information about environmental impact generated by resource input was created.
Detailed information items to be identified are being examined, and issues to be solved at the introduction of the system are being discussed.
Environmentally-friendly social contribution activities to preserve the ecosystem were expanded at home and abroad in fiscal 2005, and sales subsidiaries and plants in various places actively participated in the projects. • Regional headquarters and sales subsidiaries outside of Japan: 62 projects • Manufacturing subsidiaries outside of Japan: 16 projects • Ricoh manufacturing subsidiaries and production sites in Japan: 72 projects • Sales companies in Japan: 116 projects • Non-manufacturing companies in Japan (Ricoh Logistics Systems, Ricoh Leasing, and Ricoh San-ai Service): 9 projects

Promoting the development of environmentally-friendly products by setting target values based on the environmental impact caused by overall business activities

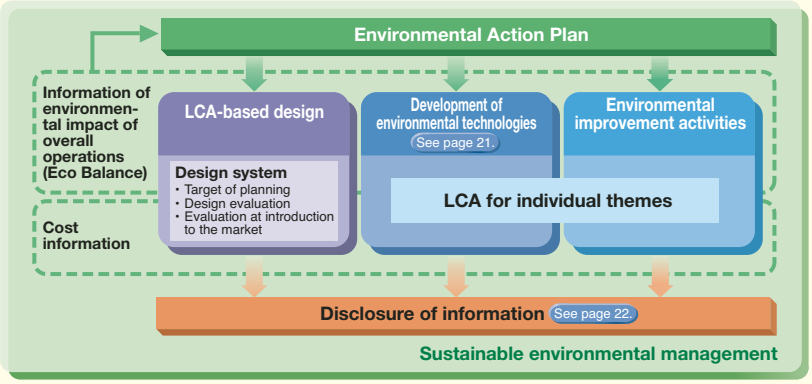
● Concept of Product Development

The Ricoh Group develops products to keep the integrated environmental impact[1] of all products during their life cycles below the limit at which the global environment is sustainable. First, the Eco Balance[2] data on the environmental impact caused by overall business activities are identified, and based on the results, targets for products covered by the action plans are set (Plan). The design division then draws up LCA-based designs to achieve the targets (Do). Results from the LCA-based designs are reviewed again (Check) before being reflected in development goals for the next models (Action).

The Group is also committed to developing new product materials that effectively reduce environmental impact throughout the product lifecycle and environmental technologies that reduce paper consumption. The Group also discloses relevant information.

1. See page 15. 2. See page 53.

Position of LCA in Sustainable Environmental Management



History of the Development of Environmentally-Friendly Products

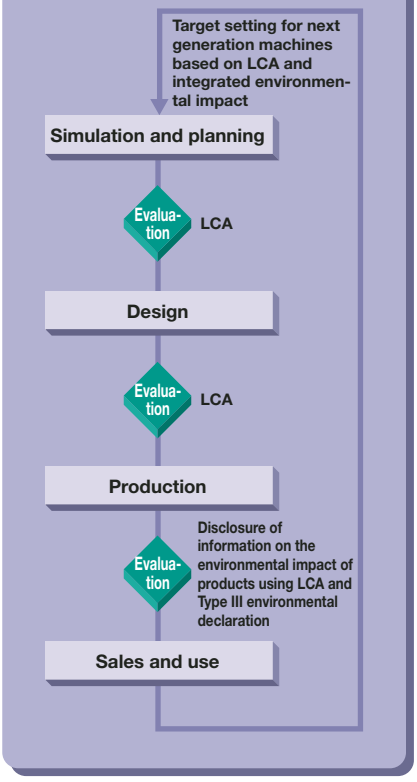
	Activities
1980s–	• Individual environmental standards for products (concerning such items as noise, presence of chemical substances, and energy saving) adopted
1990	• Product Design Committee, Environmental Technology Committee and Eco Mark Committee established.
1994	• The concept of the "Comet Circle" completed. • LCA Study Group established. • LCA activities under individual themes to reduce the environmental impact of each product and overall operations promoted.
1998	• The concept of Eco Balance introduced. • Environmental Action Plan based on the Eco Balance prepared. • The Ricoh Group starts to build the Environmental Impact Information System.* *See page 51.
2000	• The Environmental Impact Information System completed. • The Ricoh Group begins to disclose information on environmental impact of products that was compiled based on the LCA (Type III Environmental Declaration). • The Ricoh Group begins to integrate data on environmental impact caused by each product and by overall operations.
2002	• Environmental Action Plan prepared based on integrated environmental impact.
2003	• The Ricoh Group clarifies the concept of LCA-based design, and begins to improve the system and tools to promote the concept.
2004	• Digital camera with an LCA-based design launched • Launch of products in which environmentally-sensitive substances specified by Ricoh have been eliminated
2005	• LCA calculation tool for designers developed

Lifecycle Assessment (LCA)
LCA means quantitatively identifying which and how much environmental impact exists in the lifecycle of a product, from the gathering of resources for the production of raw materials to manufacturing, transportation, marketing, use, maintenance, collection, recycling, and disposal. LCA may also be applied to part of the above cycle.

Promotion of LCA-based Design

LCA-based design is a process where targets are set to reduce the environmental impact of products throughout their lifecycles, and the PDCA cycle is used to achieve these targets. To effectively reduce the environmental impact of all its products over generations, the Ricoh Group quantifies targets for reduction by "integrated environmental impact" and promotes LCA-based designs. In addition, the Group is developing a CAD system and LCA calculation tool to facilitate the design process.

LCA-based Design Process



● A System for Efficient Promotion of LCA-based Design

CAD System for LCA-based Design

The Ricoh Group introduced its own CAD system to prevent the erroneous designations of materials whose environmental safety has not been verified, or materials that do not conform to the recycling plan, in a drawing prepared by a person in charge of design. The system is interlocked with a database that contains not only information on costs and quality of materials but also information on environmental conservation, such as the use of environmentally sensitive substances and recyclability. In fiscal 2005, the Ricoh Group developed an LCA calculation tool for designers and started using it to design some of its copier models. This tool is planned to be adopted to design all models of copiers in fiscal 2006.

Assessment System for LCA-based Design

Ricoh is developing an operational system, based on data collected by the sustainable environmental management information system to manufacture products that are environmentally friendly throughout their life cycles. This system is utilized in environmental impact assessments by unit and by part as well as for preparing EcoLeaf Type III environmental labels to disclose products' LCA information.

Assessment of Recyclable Design

More efficient reuse and recycling can be realized by simplifying the disassembling and sorting of products collected after use and choosing raw materials that are easily recyclable or contain less environmentally-sensitive substances. In 1993, Ricoh announced its "policy on recyclable design" aimed at reducing the time and cost of recycling by, for example, reducing the number of parts and standardizing materials. Ricoh also applied "recyclable design" and a "product assessment system" to its entire line of copiers, multifunctional copiers, facsimiles, and laser printers. Following the improvements made at some stages, Ricoh implemented level 6 of its recyclable design policy in fiscal 2003.

INTERVIEW

Employee Interview | Tool Created to Help Perform More Effective LCA Calculations

Development of an LCA Calculation Tool for Designers—Newly Developed Tool Allows Designers to Conduct LCA on Computers

Isao Ogata
Business Strategy Center, MFP Business Group

User-friendly tool: For most items, designers can choose from among several constant values

Time and labor required to perform LCA calculations significantly reduced

Ricoh takes the entire product lifecycle into consideration when developing environmentally-friendly products. Recently, we created an LCA calculation tool that allows designers to easily conduct LCA on computers to promote more efficient LCA-based designs. Under the conventional method, designers had to collect and manually input more than 60 items of data to calculate LCA. This method was very time consuming and burdensome to designers. The newly developed LCA calculation tool for designers substantially reduces the number of items of data needed to be input manually by increasing the number of items stored in the software, enabling designers to simply choose from among several constant values. The constant values are revised as necessary based on empirical data to maintain calculation accuracy. Designers now have to manually input only about 15 items, and calculation takes approximately three minutes, thus significantly reducing time and labor.

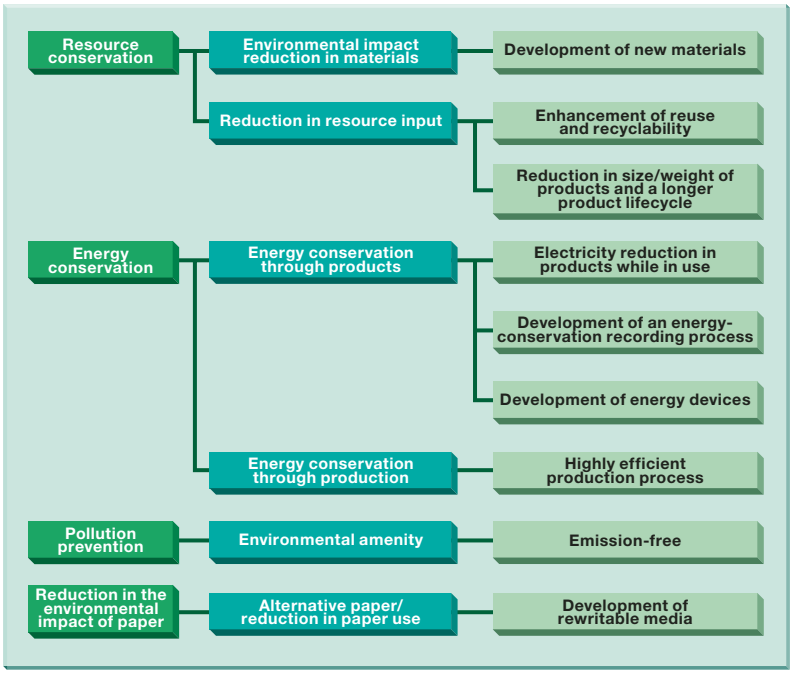
Do products that have an environmental advantage have a cost advantage, too? This is something we would like to verify.

Because the new tool enables designers to run a comparative simulation using their creativity and ideas about environmental impact reduction, they are expected to come up with designs that are more environmentally friendly than ever. We are now ready to proceed with setting detailed reduction targets and developing model-specific technologies. Moreover, we hope that subsequent LCA using this tool will verify our hypothesis that products that have an environmental advantage also have a cost advantage. I believe that a common basis of manufacturing, such as quality improvement and cost reduction, is not in conflict with environmental friendliness. It is important in environmentally-friendly manufacturing for designers to smoothly incorporate the LCA concept into their day-to-day work.

Promotion of Development of Environmental Technologies

The development of environmental technologies is one of the most important efforts to realize sustainable environmental management. It is the basis for providing customers with "products that unobtrusively contribute to a reduction in environmental impact while in use" and for simultaneously realizing both a reduction in environmental impact and the creation of economic value. The Ricoh Group has established medium- and long-term plans for the four fields, namely, "energy conservation," "resource conservation and recycling," "pollution prevention (environmental comfort)," and "reduction in paper use in printing/copying." Not only the R&D Division but also all business divisions and affiliates are engaged in developing environmental technologies and products. In fiscal 2005, we made progress in the development of new product materials.

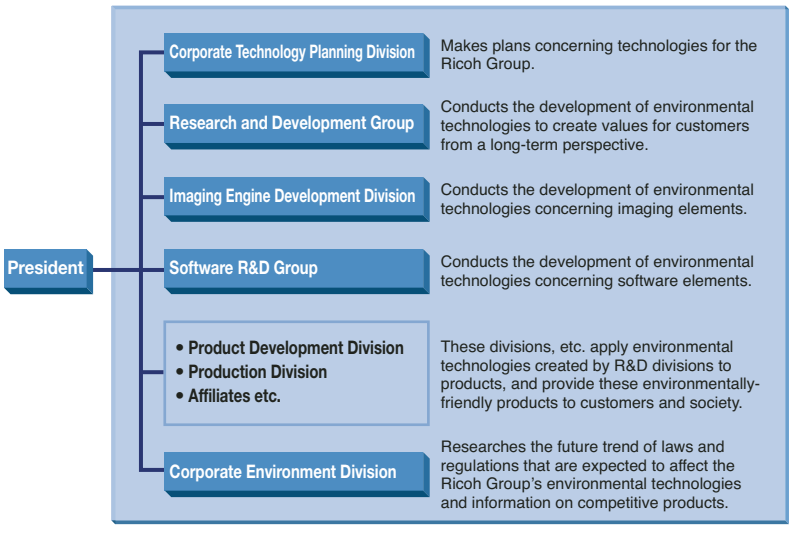
Focused Areas for Environmental Technologies



Putting Plant-Based Plastic into Practical Use* in Copiers

The Ricoh Group, in collaboration with Mitsui Chemicals, Inc., has cleared technical hurdles associated with plant-based plastic, such as crashworthiness and fire retardancy. We have successfully developed and put into practical use a new plastic material that is made from corn and has a high percentage of plant-based material (more than 50%). We used this new plastic for part of our digital copier, imagio Neo 602ec/752ec, for the first time in the copier/printer industry. *See page 9.

Structure to Develop Environmental Technologies



(The Ricoh Group's) Environmental Technology Committee

Development of Color-Rewritable Media

Ricoh, using a photochromic compound, has developed a new medium to control color development with light. When light is applied to the photochromic compound, its chemical structure changes according to the wavelength of the absorbed light, producing coloration and decoloration. By individually controlling substances, each one of which produces one of three primary colors (yellow, magenta, or cyan), vivid full color display becomes possible. This technology may lead to the development of media such as papers and films on which color images can be rewritten a number of times. Rewritable media may reduce paper consumption by a significant margin. Right now, we are studying the stability of coloration so that developed color images are not weakened by the light applied.

Disclosure of Environmental Information of Products

The main purpose of disclosing environmental information of products is to inform customers of the excellent environmental performance of Ricoh's products. In addition, it is also important to inform society of Ricoh's environmental conservation activities and their results, and disclose environmental information in a positive manner. For this purpose, Ricoh is firmly committed to publicizing the results of LCA studies, technology development, and evaluation methods at academic societies and conferences. Furthermore, Ricoh is contributing to the formation of various environmental labeling in the world, and is making an effort to acquire various certifications.

● Disclosure of Information Using Environmental Labels

Type I Environmental Labels

Type I environmental labels have been established in countries and regions pursuant to ISO 14024 standards. These labels, which are placed on products and shown in brochures, help customers decide which products to buy. Ricoh's criteria for product design used to promote global green marketing are actually more severe than those set by the international Type I environmental label. Moreover, Ricoh actively contributes to establishing Type I environmental labeling criteria in many countries. In fiscal 2005, Ricoh acquired Ten Circle, China's environment label. In accordance with a revision to Eco Mark criteria for copiers in August 2005, Ricoh is gradually launching products that meet the new criteria.

Type II Environmental Labels

Type II environmental labels are given to products that satisfy standards independently set by each company. The Ricoh Group has defined the Recycle Label, and has set its own standards for recyclable designs, reuse rate of parts, and environmental safety.

Recycle

* For details, refer to the following Web site.
http://www.ricoh.com/environment/label/type2/index.html

Type III Environmental Declaration

As green purchasing is increasingly popular at present, the timely and global disclosure of information is increasingly important, not only for the selection of products by customers but also for sustainable environmental management by the Ricoh Group. The Ricoh Group, following the Type III Environmental Declaration, continuously endeavors to quantify the environmental impact of products using LCA and discloses this information. In addition, the Ricoh Group is making efforts to promote the Type III Environmental Declaration. In fiscal 2005, the Ricoh Group obtained Eco Leaf Type III environmental label for its recycled multifunctional digital copier, imagio Neo 350RC/450RC, which means that this model has acquired all eco labels, including types I, II, and III.

International Environmental Labels for which the Ricoh Group Qualifies

* Type I Environmental Labels http://www.ricoh.com/environment/label/type1/index.html

● Eco Mark* Japan	An example of the Eco Mark on an imagio MP C3000 series model (certification no. 05117022)	● Blue Angel* Germany	
● Green Label* Thailand		● Environmental Choice Program (ECP) Mark* Canada	
● International Energy Star Mark Japan, the United States, Europe, etc.		● Green Mark* Taiwan	
● Environmentally Friendly Label* Hungary		● Environmental Choice* New Zealand	
● Energy Efficiency Labeling Scheme (EELS) Hong Kong		● China Environmental Label* (Ten Circle) China	

Development of User-Friendly and Energy-Saving Technologies

● Concept

Products that are not easy to use will not be chosen by customers, even if their energy-saving performance is good. Such products can neither contribute to energy conservation nor help prevent global warming. Ricoh further develops its unique energy-saving QSU technology*, which enables quick recovery from energy-saving mode, allowing users to make copies whenever they need to. It is also expanding the product line of QSU-equipped machines. Meanwhile, reducing unnecessary paper consumption is important since paper production consumes a lot of energy (indirect energy saving). Ricoh helps decrease the environmental impact caused by customers' paper consumption by offering user-friendly duplex copying functions, digitization, and promoting sales of recycled paper.

* Ricoh's original energy-saving technology that enables quick recovery from energy-saving standby mode.

● Targets for Fiscal 2007

◎ Achieve Ricoh's energy-saving goals.

● Review of Fiscal 2005

We launched monochrome multifunctional office copiers with a copying productivity of 45 pages/min. and a recovery time from energy-saving mode of 10 seconds[1]. In the area of color multifunctional copiers, we introduced the imagio MP C2500/3000 series[2] and imagio MP C1500 SP/SPF series[3]. While the former has a recovery time from energy-saving mode of 45 seconds, which is less than half that of the previous model, the latter has a warm-up time of 5.5 seconds and electricity consumption in standby mode of 2.6 W. We have steadily increased sales of copiers equipped with QSU technology that enables a fast warm-up time of less than 10 seconds, thus reducing CO_2 by 23,000 tons a year (see graph ❺).

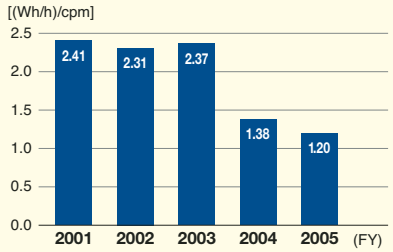
1. This applies to only the model for Japan.
2. The same speed for color and monochrome copies; 25 pages/min. copies for imagio MP C2500 and 35 pages/min. copies for imagio MP C3000
3. For color (6 pages/min.) and monochrome (15 pages/min.) copies (Jel Jet method)

<Japan>

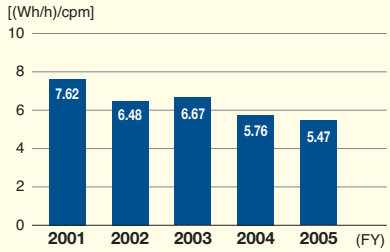
Changes in Energy Consumption

❶ Black-and-White Copiers and Multifunctional Copiers

Black-and-white plain-paper copiers, excluding those that accommodate wide-format paper



❷ Color Copiers and Multifunctional Copiers

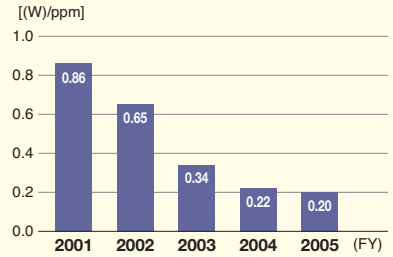


◎ Energy conservation values for copiers are calculated as follows:
Σ [<Energy consumption efficiency (Wh/h)>[1]/<copying speed[2]> × the number of units marketed]/Σ the number of units marketed

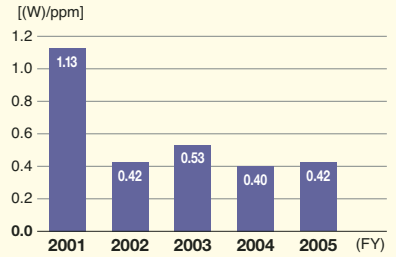
1. Energy consumption efficiency was measured in accordance with the Ministry of Economy, Trade and Industry's Law in Japan Concerning the Rational Use of Energy.
2. Copying speed = copies per minute (cpm)

Data for multifunction black-and-white copiers, color copiers and multifunction copiers are pursuant to the measurement standard for energy consumption efficiency of the Law Concerning the Rational Use of Energy.

❸ Black-and-white Printers



❹ Color Printers



◎ Energy conservation values for facsimiles and printers are calculated as follows:
Σ [<Energy Star energy consumption in standby mode[3] (W)>/<printing speed[4]> × the number of units marketed]/Σ the number of units marketed

3. Energy Star energy consumption in standby mode = energy consumption in standby mode pursuant to the standards of the International Energy Star Program.
4. Printing speed = print per minute (ppm)

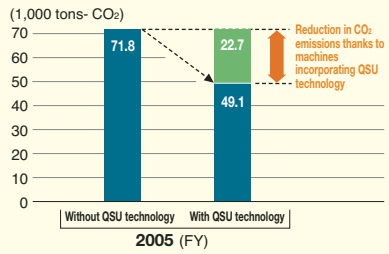
* Data for the four graphs above are calculated based on the number of units marketed in Japan.

● Future Activities

We will further improve QSU technology, so that more customers will use energy-saving mode, and pursue user-friendliness (shorter recovery time from energy-saving mode) and energy saving for color copiers.

<Global>

❺ Reduction in CO_2 Emissions through the Use of QSU Technology



Segment Environmental Accounting of Product Energy Conservation (Benefit on cost in QSU product development)

Costs			Effects		
			Economic benefits		Effect on environmental conservation
Item	Main costs	Costs	Internal benefits	Customer benefits	
R&D cost	Cost of developing energy-saving units	¥400 millon	Amount of profit contribution ¥2,312.6 million	Reduction in payment for consumed power supply ¥1,387.5 million	Reduction in CO_2 emissions 22,742.8 (t)
	Cost of molds, jigs, parts, etc.	¥671.5 millon			

* The reduction in payment for consumed power supply and CO_2 emissions is the annual benefit brought from 8 hours of operation per day, 20 days of operation a month. Internal benefits refer to benefits on gross profits in sales results in fiscal 2004.

User-Friendliness and Energy-Saving by QSU Technology Welcomed by Customers in the United States and Europe

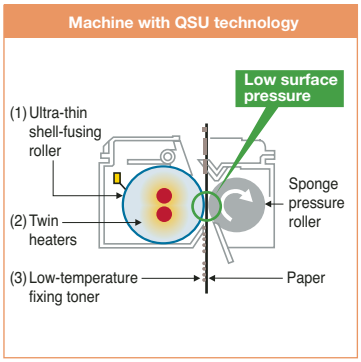
Ricoh provides multifunctional digital copiers equipped with QSU, Ricoh's original energy-saving technology that enables quick recovery from energy-saving standby mode. According to our market research, Japanese customers who use copiers that are not equipped with QSU tend not to use energy-saving mode, and QSU technology helps more customers use energy-saving mode. In fiscal 2005, we conducted similar market research targeting customers in the United States and Europe and found that even customers who use QSU-equipped machines tend not to use energy-saving mode and that the number of such customers is larger than that in Japan. Therefore, we explained QSU technology features to customers so that they can better understand its effectiveness. Then, we asked them to set their machines' recovery time to fewer seconds and see how they work for a week. As a result, many customers appreciated QSU technology, and we received such comments as: "I was really surprised by the quick recovery time," "We will set the recovery time of all Ricoh machines in the office to fewer seconds," and "Thank you for teaching us how to save energy."

● **QSU technology incorporated in Aficio (imagio Neo) series**

(1) Ultra-thin shell-fusing roller
In order to realize quick start-up, the fusing roller was thinned as much as possible to shorten the temperature rise time.

(2) Twin heaters
Because a thin roller is apt to get cold, the temperature is carefully and effectively adjusted by using two separately controlled heaters.

(3) Low-temperature fixing toner
This toner ensures a fixity that is equal to or higher than that of conventional toner even at low temperatures.



INTERVIEW

Customer Interview | **Seattle City Hall**

Ricoh took a survey on the use of the energy-saving mode of its photocopiers in the United States, covering customers mainly in Seattle, Washington. Seattle City Hall has nothing but praise for Ricoh's energy-saving QSU technology, saying, "Ricoh's copiers help improve productivity. We can save energy without even thinking about it."

We changed the setting of our copiers so that they would go to energy-saving mode 10 minutes after use. The recovery time of Ricoh products is short, which makes it easy for us to use.


Office building where the Seattle City Hall is located.

Surprised at the speedy recovery realized by QSU technology

We realized for the first time that our photocopiers are equipped with energy-saving QSU technology thanks to the survey. We were surprised at the recovery speed of 10 seconds. "I thought that the recovery time from energy-saving mode was longer. The short waiting time will lead to better work efficiency," said one of our staff members.


Ms. Roseanne M. Garrett, Department of Planning and Development

Expected to contribute to a better environment and improved productivity

Seattle City Hall has green procurement policies that provide for the use of recycled paper, recycling, and energy saving. Because the people of Seattle are highly aware of environmental issues, it is expected that they will demand even more consideration be given to such issues. As such, we hope to offer products that have higher productivity. If copies can be made more quickly, more work can be done in a given time, which will result in changes in the behavioral patterns of the people working in the office. The invisible effects of QSU technology, which contributes to energy saving and environmental preservation as well as improved productivity in the office, is worth appreciating.

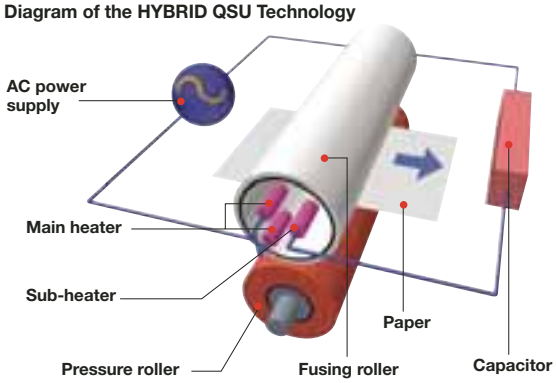
HYBRID QSU Technology

In fiscal 2003, Ricoh introduced the HYBRID QSU, an integration of quick start-up (QSU) technology and capacitors (electric storage devices), to the imagio Neo 752 series of high-speed digital multifunctional copiers. This enabled a 30-second recovery time from energy-saving mode. Subsequently, by improving the HYBRID QSU, Ricoh launched the imagio Neo 752ec/602ec, which achieves a 10-second recovery time from energy-saving mode.

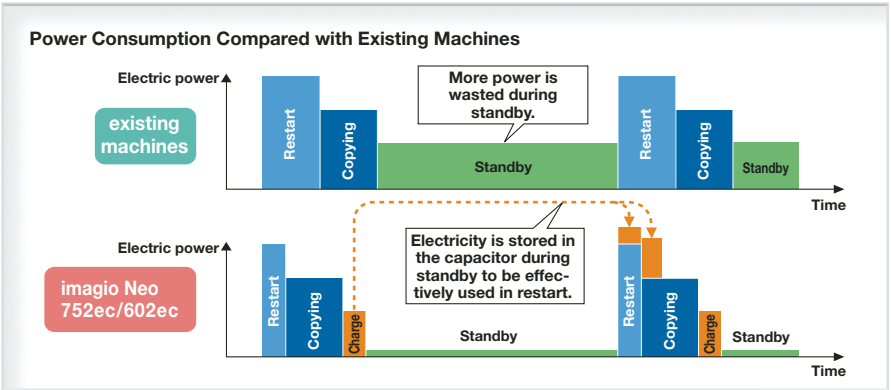
The capacitors have a quick charge and discharge capability. In the past, capacitors were used to supply heat to the fusing roller. This is because although the ultra-thin fusing roller, one of the QSU technologies, shortens the temperature rise time, papers tend to absorb heat easily from the fusing roller during high-speed printing, such as at 75 pages/min, which resulted in a failure to maintain copy quality and productivity. In the imagio Neo 752ec/602ec, capacitors are used both for printing and to help the restart. Using capacitors in this way, Ricoh succeeded in achieving a 10-second recovery time from energy-saving mode without lowering productivity. This is the first time in the world that a 10-second recovery time has been achieved in the field of high-speed digital copiers.

* Capacitors are incorporated only in the 100V machines marketed in Japan

Diagram of the HYBRID QSU Technology



Power Consumption Compared with Existing Machines



Indirect Energy Saving through Reduced Paper Consumption

Development of User-Friendly Duplex Copying Function with High Productivity

In an effort to cut paper consumption, Ricoh has developed more user-friendly and more high-speed duplex and multiple-page copying functions (copying multiple pages on one sheet of paper) so that more customers use less paper. The imagio MP 7500/6000 series, in which a single-path system is used, simultaneously reads both sides of a two-sided document with a single scan by two scanning sections, and realizes more high-speed duplex copying of two-sided documents at the same speed as single-sided document copying. Many of our multifunctional digital copiers also achieve 100% duplex copying productivity* while in continuous operation.

* Duplex copying productivity (%) =(Time spent on simplex → duplex copying)/(Time spent on simple → simplex copying) ×100. The time is measured from the moment the desired number of copies is entered and the "Copy" button is pressed to the moment the copier is ready for the next batch of copying.

Ricoh Receives Low Carbon Leaders Award

In December 2005, Ricoh was ranked fourth in the Green Technology Innovator's category of Low Carbon Leaders Awards supported by The Climate Group, an NPO dedicated to advancing business and government leadership on climate change. The awards aim to recognize businesses, national/local governments, cities, and individuals around the world who have taken a dynamic and proactive approach to climate change. In the innovation category, awards are given to companies that have developed innovative technologies. Ricoh was recognized for its contribution to the prevention of global warming through the development of a nifty copier, i.e. a high-speed copier that has a warm-up time of 10 seconds and is equipped with HYBRID QSU user-friendly energy-saving technology.

Low Carbon Leaders Awards trophy

RECO-View® IC Tag Sheet—Capable of Displaying Data on Rewritable IC Tags

In fiscal 2003, Ricoh developed the RECO-View® IC Tag Sheet by combining IC tags with Ricoh's own rewritable technology, making the RECO-View® IC Tag Sheet capable of rewriting and displaying data written on cards or sheets. This sheet displays digital data recorded on a tag, and the display changes as the tag is rewritten. Operators are thus able to visually confirm management information regarding the operation process written on IC tags. Because this helps prevent human error, RECO-View® IC Tag Sheets are now being used by customers in various industries, including distribution and healthcare. As a sheet is capable of being rewritten approximately 1,000 times, customers using this sheet as a shipping label have significantly reduced paper consumption. Such customers used to consume 100,000 conventional paper shipping labels a year. It is estimated that the amount of CO_2 emissions is reduced by about 80% through the use of this sheet compared with that of paper. RECO-View® IC Tag Sheets are drawing attention as a new medium that satisfies multiple needs, such as reducing environmental impact, by replacing paper, improving efficiency, and ensuring security.

Printer for IC tag sheet

RECO-View® IC tag sheet

INTERVIEW

Employee Interview | **Combining Rewritable Technology and RFID Technology**

By identifying customers' potential needs, we developed a new product that enables both improvement in operations and reduction in paper use.

Tatsuro Saito
Project Office of Thermal Rewritable for Industrial Use
Thermal Media Company

Applying rewritable technology to IC tags to display recorded data

Industries began paying close attention to RFID* technology in around 2001, when the JR RFID train pass was introduced. For instance, if workers could accurately read product information at a distance for process management on production lines or inventory/distribution management, scanning the bar code of each product would no longer be necessary. RFID, however, had a serious drawback: the information recorded on tags cannot be seen. Because operators cannot understand data recorded on tags, they make mistakes or other inconvenient events occur. To solve this problem, it is necessary to develop a system that is capable of both displaying data recorded on IC tags and enabling the simultaneous rewriting of information on IC tags and displayed images. Ricoh believed it could use its own rewritable technology to overcome this challenge and began development.

Sheet cleaner

Human error—the challenge to be addressed at the introduction of IC tags—eliminated

To verify the practical application of rewritable sheets with IC tags, a trial run was conducted on a toner filling line. The results proved that human error, such as mix-ups, that occurred when conventional IC tags were used was eliminated. There were a number of issues yet to be solved, however, such as the tag's durability, prevention of sheets from curling and wrinkling, and improvement in legibility and clean erasures, but we studied them one by one. There were also problems that customers pointed out after using the sheets experimentally. Collectively, the problems we had to address included how to prevent oil and dust from damaging the tags and how to identify a printing speed that does not delay operations. After clearing all these hurdles, we succeeded in producing the RECO-View® IC Tag Sheet on a commercial basis in the fall of 2003. To meet the diversified customer needs that were revealed during the development period, we also developed a cleaner and a special pen designed for the user's business and convenience. Now, we not only provide sheets but also offer customers a system consisting of sheets and other items, such as cleaners and pens. As for the brand name RECO-View® IC Tag Sheet, RE stands for *rewritable*, *recycle*, and *reusable*, and ECO stands for *economy* and *ecology*.

*RFID stands for radio frequency identification and is an individual data recognition system using radio. The IC tag is its tool.

Global Promotion of Sales of Recycled Copiers Based on the "Comet Circle"

● Concept

Based on the concept of the Comet Circle that puts "Priority on Inner Loop Recycling*," the Ricoh Group is working on recycling materials with less environmental impact and high economic efficiency. Our efforts are thus focused on the following activities (in order of priority)—recovering products, reusing parts, and recycling materials. Ricoh, with recognition that the flow from collection of used products to the recycling of materials is one business unit, is making efforts to improve profitability in the recycling business on a global scale by increasing sales of recycled products. Improvement of profitability will make continuous activities to reduce environmental impact possible. *See page 14.

● Targets for Fiscal 2007

◎ Improve the quantity of reusable parts used by a factor of at least five (compared to fiscal 2003 figures in Japan).

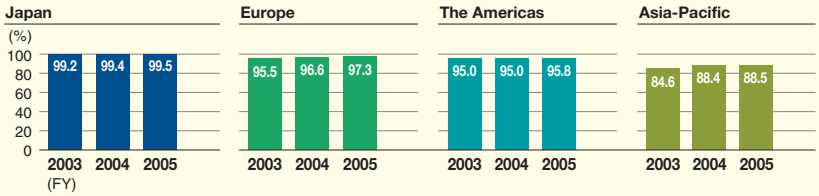
◎ Increase the quantity of recycled plastics used to 1,000 tons or more.

◎ Increase the number of recycled copiers marketed by a factor of at least 10 (compared to fiscal 2003 figures in Japan).

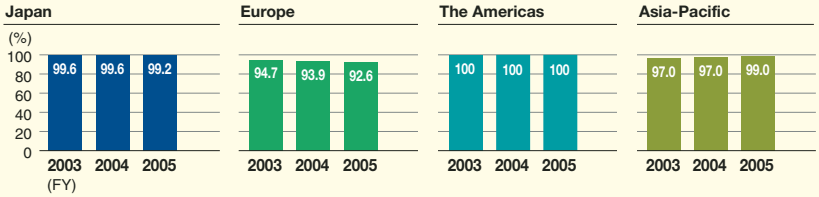
<Global>

Resource Recovery Rate

❶ Copiers

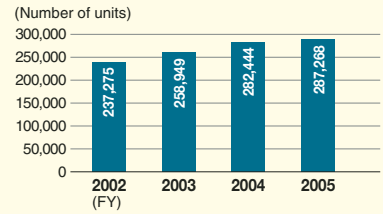


❷ Toner Cartridges

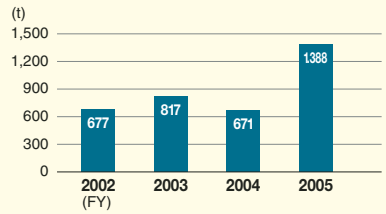


Collection Results

❸ Number of Copiers Collected



❹ Amount of Toner Cartridges Collected*



* The method of calculating the quantity of collected cartridges in Japan was revised in fiscal 2005. (The average weight per cartridge that was used to calculate the quantity of collected cartridges was replaced by the latest actual figure.)

Segment Environmental Accounting of the Product Recycling Business (Japan)

Costs		Effects			
		Economic benefits		Effect on environmental conservation	
Items	Costs	Items	Benefits		
Product recycling cost	¥740 million	Sales	¥6,421 million	Amount of resource recovery: 31,660 (t) Down 1,436 (t) from that in the previous year	Amount of final disposal: 199 (t)
Collection/resource recovery cost	¥3,053 million				
Total cost	¥3,793 million	Social effect	¥2,533 million		

* Social effect refers to the cost of waste disposal that customers no longer have to pay.

● Review of Fiscal 2005

In addition to various environmental targets, in fiscal 2005 we set a target for the amount of recycled plastic to be used in products. In fiscal 2005, the recycled plastic used in our products increased 2.3 times compared with the amount used in fiscal 2003. Meanwhile, sales of recycled copiers in Japan increased 3.1 times compared with fiscal 2003. The recycling rate of used products remains at a high level (see graphs ❶ and ❷). The number of collected copiers has been steadily increasing on a global basis (see graph ❸). In addition, the quantity of collected toner cartridges shows substantial growth, which is due to an increase in sales of heavier cartridges and the revision of the basis of calculating the quantity of cartridges in Japan from fiscal 2005 (see graph ❹).

● Future Activities

While endeavoring to further improve the collection rate and collection quality of used products, we will increase production and sales of recycled copiers as well as the use of recycled parts and materials. By utilizing used products more effectively, we will provide customers with products with less environmental impact and higher economic efficiency.

Practicing Recycling with Less Environmental Impact Based on the Comet Circle

The Ricoh Group clearly prioritizes recycling methods to promote its recycling activities. Recycling collected products into commercially useful products generates less environmental impact and creates greater associated economic benefits than if they were disassembled and sorted to be recycled into resources/energy. This idea is represented in the Comet Circle.* The flow of the recycling process, from the recovery of copiers collected from the market to the launch of recycled copiers on the market again, is shown in the second innermost loop. The recycled copier business contributes to the creation of a recycling-based society, and we will, without a doubt, develop it.

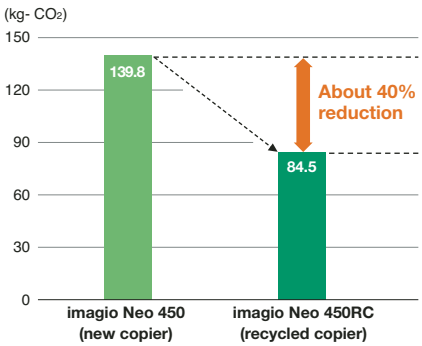
*See page 14.

Increased Sales of Recycled Copiers

<Ricoh (Japan)>

Since the launch of the recycled multifunctional digital copier, imagio MF6550RC, in December 2001, Ricoh has increased the number of models available. In fiscal 2003, recycled machines with a copying productivity ranging from 35 pages/min. to 70 pages/min. became available. In fiscal 2004, the new recycled digital copier imagio Neo 350RC/450RC was added to the lineup. This new model is equipped with Ricoh's original QSU energy-saving technology that improves energy consumption and gives a fast warm-up period of only 10 seconds. Thanks to our efforts to respond to the needs of more customers, environmentally-friendly businesses, governments, and schools have become more interested in our products, which is leading to a steady increase in sales of recycled machines. Because more than 82% (mass ratio) of the parts used in recycled machines are recycled parts, the imagio Neo 350RC/450RC gives around a 40% reduction in environmental impact over its whole lifecycle compared with newly-produced machines.

❶ LCA Comparison Between a New Machine and a Recycled Copier (CO_2 Emissions)



* A comparison is made by calculating the annual environmental impact of new and recycled copiers over a 5-year period and 10-year period, respectively.
* Figures for CO_2 emissions by copiers in operation at customer sites were not included in the calculation of the data.

INTERVIEW

Customer Interview | **TAIYO YUDEN Co., Ltd., Case Report on the Introduction of Recycled Copiers**

TAIYO YUDEN contributes to reducing environmental impact in society as a whole by developing user-friendly and Earth-friendly "green products" through "green processes," which have less environmental impact. TAIYO YUDEN has developed a number of green products, including lead-free high capacitance ceramic capacitors and CD-Rs with less packaging material. TAIYO YUDEN has introduced 29 imagio Neo 350RC/450RC copiers to its offices.

Mr. Kimio Hayashi
Deputy General Manager, Supplies and Purchasing Department, Supplies and Logistics Control Management and Administration Headquarters, Egi Plant, Takasaki Global Center

We Like the Idea of Reducing Environmental Impact and Costs at the Same Time

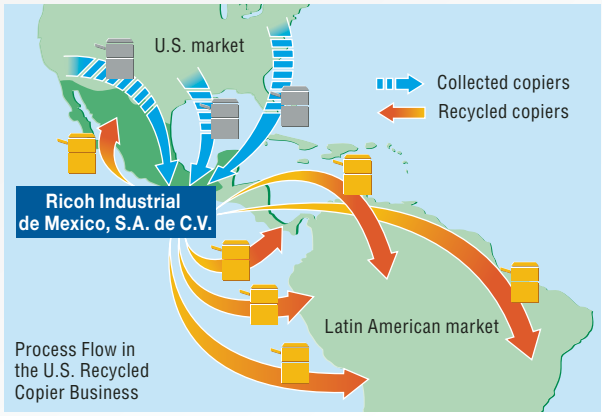
Adding a cost perspective to green purchases

Keywords in our green purchasing are cost, quality, delivery, environment, speed, and partnerships. Ricoh's proposal to use recycled copiers was excellent in terms of the environment, cost, and speed. When Ricoh was taking the cost perspective into account, in addition to conventional green purchasing, the company proposed the use of recycled copiers to simultaneously reduce environmental impact and costs.

We appreciate recycled copiers from an environmental viewpoint

Generally, people want to purchase brand-new products. However, this does not apply to us. We greatly appreciate recycled copiers because they reduce both environmental impact and costs. There is no problem with copy quality, and nobody notices that the machines are recycled because they look new. When we successfully implemented green purchasing in Japan, as we did this time, we began sharing our know-how with overseas offices to promote green purchasing globally.

Recycled Copier Business in the Americas



We promote the recycled copier business for environmental management in the Americas.

For the Ricoh Group to achieve environmental management, success in the recycled copier business is the critical key. In 2004, all Ricoh Group subsidiaries in North America and Latin America as a whole started a project to launch the full-scale business of recycled copiers. Subsequently, June 2005 saw the start of a Pan-American recycled copier business to recycle used copiers collected in the North American market at Ricoh Industrial de Mexico (RIM), one of Ricoh's manufacturing subsidiaries, and sell the recycled copiers through Ricoh Latin America (RLA), which manages sales in Central America and South America.

INTERVIEW

The sales and marketing unit Interview — Business model for recycled copiers in the Americas

We created a mechanism to provide high-quality recycled copiers that we, as a manufacturer, can guarantee.

Kiyoshi Shimizu
President, Ricoh Latin America, Inc.

The Latin American market has wide-ranging needs, from new machines to used ones.

The sales volume of used copiers reportedly surpasses that of new machines in the copier market in the Latin American countries. Therefore, it is worth providing high-quality recycled copiers to the Latin American market, where many customers do not necessarily look for new products. Because global companies from Europe and the United States have entered the large markets of Latin America, such as Mexico, in recent years, high-quality recycled copiers may also have an advantage in doing business with these large corporate customers.

We promote environmental management using a business model specific to the Americas.

The mechanism of recycled copiers collected in the North American market at a factory in Mexico and selling them in the Latin American market is a business model specific to the Americas. Machines that may have no other option but to be recycled in the North American market can be recognized as having high commercial value in the Latin American market. In the recycled copier business, joint efforts of Ricoh Group subsidiaries in the Americas would expand business opportunities and ensure the effective use of resources. Accordingly, we are committed to making the recycled copier business a success, recognizing that it is important from the environmental perspective as well as business perspective.

Manufacturing subsidiaries Interview — Production of recycled copiers

We will gain the customer's trust with our high-quality recycled copiers.

Ranulfo Gómez B.
Plant Manager
Ricoh Industrial de Mexico, S.A. de C.V.

We built a production line for high-quality recycled copiers that we, as a manufacturer, can guarantee.

Ricoh Industrial de Mexico (RIM) started the production of recycled copiers in April 2005 and moved into mass production in June of the same year. RIM is committed to developing human resources that have the skill to recycled copiers and building up the recycling process under the technical support of Ricoh Electronics, Inc., Ricoh's manufacturing subsidiary in the United States that has expertise in producing recycled copiers. These recycled copiers, which have the manufacturer's guarantee for quality, are shipped to RLA after going through a quality inspection according to Ricoh standards.

Providing products that better meet market needs through improved communication with the market

In addition to the recycling technology, supply chain management (SCM) holds the key to offering high-quality recycled copiers to customers. We continue to provide recycled copiers that better meet market needs by actively listening to the opinions and comments of dealers and customers in establishing a production system that enables us to respond to market needs in a timely fashion and reviewing packing materials and transportation routes.

Promoting "Packageless" Delivery and Factory Kitting

<Ricoh Group (Japan and Europe)>

Ricoh Group companies in Japan have introduced resource-recirculating eco-packaging, which enables the repeated use of packaging materials, and simple packaging, which means wrapping products simply, in order to reduce the use of packaging materials. Today, more than 80% of mid- and high-speed copiers are shipped in resource-recirculating eco-packaging. Also, by implementing "factory kitting" in which machines are equipped with options in the factory according to each customer's specifications and directly delivered to customers, we considerably reduce the use of packaging materials and delivery time required at the customer's site. When copiers furnished with the kitting are delivered in a simple packaging to customers, delivery time is shorten by approximately 50% compared with the conventional method. The same approach is adopted at Ricoh Group companies in Europe. Products shipped from factories in European countries are temporarily gathered in a warehouse, where the kitting operation takes place, and then delivered to customers.

Resource-recirculating eco-packaging used in Japan

Used PET Bottles as Cushioning Material

<Ricoh Group (Japan)>

The Ricoh Group has started using used PET bottles as cushioning material in the resource-recirculating eco-packaging of large copiers. Looking at the shock absorbing characteristics of PET bottles, we have been working to verify the feasibility of using them as cushioning material since fiscal 2004. For a copier that weighs 300 kg, 130 used 500-ml PET bottles were used as cushioning material at the bottom and on the sides of the packaging. Because cushioning material made of PET bottles, which has a higher shock absorbing ability than conventional materials, can be used at least 20 times, CO_2 emissions will be reduced by around 10 tons over four years compared with the use of traditional cushioning materials. This new cushioning material has been used in delivering the imagio MP 1350, a large copier produced at Tohoku Ricoh, since February 2006. Used PET bottles collected at the Tohoku Ricoh office are used to produce the material. We are going to apply this material to other products and develop it as a Ricoh Group business model.

A total of 130 used PET bottles are used at the bottom and on the sides of the package.

Collection of Used Toner Cartridges via Post Offices

<Ricoh Norge A.S. (Norway)>

Ricoh Norge A.S., a sales company in Norway, runs a system to collect used cartridges via post offices, with post office delivery labels included in the toner cartridge packages to promote collection. Furthermore, the company introduced a new system in August 2005 to automatically print out labels asking for cooperation in collection when an order for toner cartridges is accepted. These labels are then put on the packing boxes at the time of shipment. The collection of used cartridges via post offices has steadily increased since the introduction of this system, resulting in approximately a 30% increase from the previous year.

Of the used cartridges collected, the reusable ones are sent to the European Green Center, the group's collection and recycling base, to be refilled and sold as recycled products. Those that are not reusable undergo material recycling by recycling companies.

The green seal on the package asking for cooperation in collecting used products

We are reducing the environmental impact that a product has during its lifecycle by reducing and strictly managing environmentally-sensitive substances contained in our products.

● Concept

Aiming to reduce the impact on the global environment and enhance end-user comfort levels, the Ricoh Group is tackling important issues, specifically the establishment of a strict management system for environmentally-sensitive substances contained in its products and reduction of ozone, dust, and volatile organic compounds (VOCs)[1] emissions at the end-user stage. Environmentally-sensitive substances contained in products do not affect the environment when the products are in use, but they will affect the environment when the products come to the end of their lifecycle and are improperly disposed of. An eco-balance[2] assessment shows that reducing the use of these substances will ultimately lessen the environmental impact a product has during its lifecycle and reduce recycling costs to a great extent. The Ricoh Group is making efforts to reduce environmentally-sensitive substances and create a reliable management system that covers the entire manufacturing flow, including suppliers.

1. VOC stands for volatile organic compound.
TVOC stands for total VOC.

2. See page 53.

● Targets for Fiscal 2007

◎ Create and enforce a system of managing chemical substances contained in Ricoh Group products (in fiscal 2005).

◎ Observe Ricoh standards that cover environmentally-sensitive substances emitted by products. (Observe Ricoh standards that cover such substances as ozone, dust, and VOC.)

<Global>

❶ Achievement of Standards for Environmentally-sensitive Chemical Substances

	Models that Achieved the Standards[3]	Ricoh Standards (mg/h)	Blue Angel Standard (mg/h)
Ozone	10	2.0	2.0
Dust	10	4.0	4.0
TVOC	10	10	10

3. Figures indicate the number of product series, including copiers, multifunctional copiers, and printers, launched in fiscal 2005 that achieve these standards.

● Review of Fiscal 2005

In fiscal 2005, we launched a number of products that comply with the RoHS Directive in Europe. Also, Ricoh established the Ricoh Group's common guidelines for the management of chemical substances contained in products, and the entire Ricoh Group in Japan completed the creation of a system of managing chemical substances contained in products in order to enhance its management system. Concerning emissions of environmentally-sensitive substances generated by products, a range of products, including copiers, multifunctional copiers, printers, and 10 model series, launched in fiscal 2005 have attained Ricoh's standards for ozone, dust, and VOC.

● Future Activities

Combining the Ricoh Group's system of managing chemical substances contained in pro-ducts with Ricoh's own Chemical Substance Management System (CMS) created by suppliers, we will carry out chemical substance management that encompasses the entire supply chain of the Ricoh Group. We will continue our efforts to further reduce environmentally-sensitive substances of products to cope with the new standards of Germany's Blue Angel, which are scheduled to be revised in January 2007.

Promoting Complete Elimination of Use of Environmentally-sensitive Substances

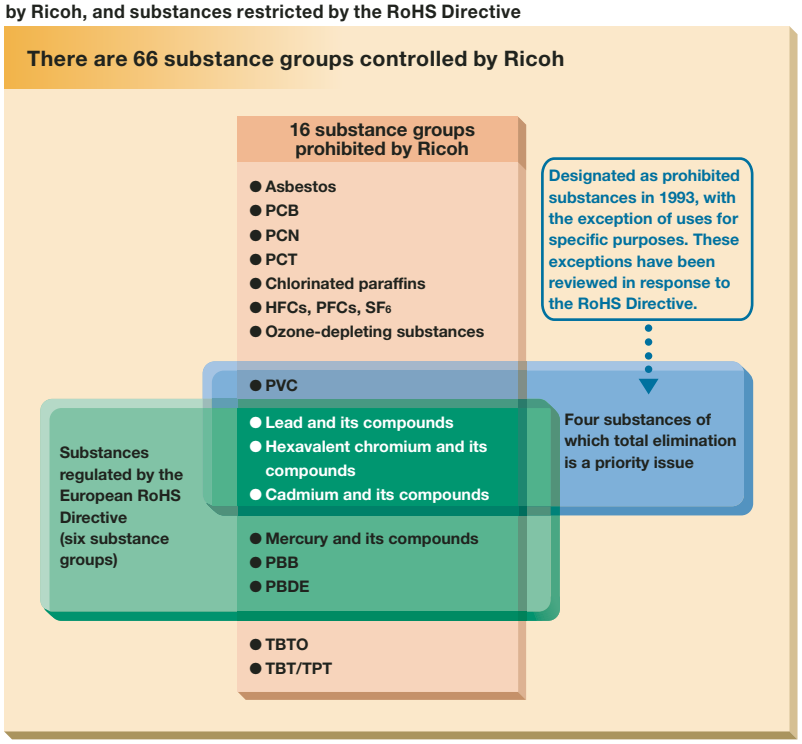
<Ricoh Group (Global)>

Ricoh set original standards for environmentally-sensitive substances that could be used in its products in 1993 as part of efforts to reduce these substances. In fiscal 2002, it set out a policy to further reduce the use of the remaining 4 prohibited chemical substance groups out of the 14 product groups (currently 16 groups; 2 groups were added in fiscal 2004) prohibited by Ricoh, while all the divisions engaged in production (the design, procurement, and manufacturing divisions) have jointly launched a project to enhance the chemical substance control system. Meanwhile, at the end of March 2006, a system of preventing chemical contamination at suppliers was created on a global basis. At the same time, the chemical substance control system within the Ricoh Group was strengthened, completing management system for chemical substances contained in products within Japan. As for the system outside of Japan, we aim to complete the building of the system by July 2006. To manufacture products that do not contain environmentally-sensitive substances and promptly disclose information to customers, we will continue our efforts to enhance the chemical substance control system that covers the entire production flow, including suppliers.

Marketing Products Pursuant to the RoHS Directive

Ricoh, which has been engaged in reducing environmentally-sensitive substances and enhancing its management system for a long time, has been sequentially launching products complying with the RoHS Directive since fiscal 2004. In fiscal 2005, we marketed the imagio MP C2500/3000 series of color multifunctional copiers. We will promote conformance to the RoHS Directive not only in new products but also in those already on the market.

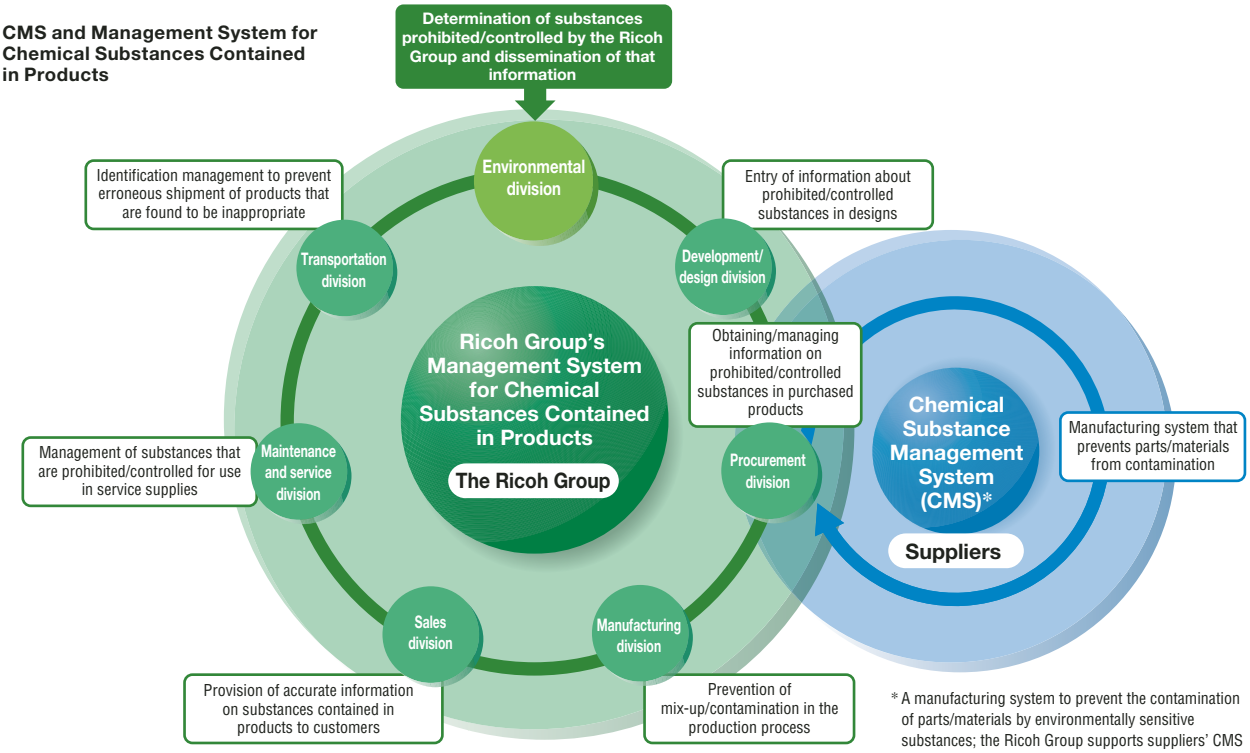
Relationship among substance groups controlled by Ricoh, substance groups prohibited by Ricoh, and substances restricted by the RoHS Directive



RoHS Directive and Ricoh's Chemical Substance Control Standards

The RoHS Directive, which stands for the Restriction of Hazardous Substances Directive, is an EU Directive that restricts the use of certain hazardous substances in electrical and electronic equipment. The directive is scheduled to take effect on July 1, 2006. The RoHS Directive sets the levels of six groups of substances contained in products. Cadmium is set at 100 ppm, and the other five groups are set at 1,000 ppm or less. On the other hand, Ricoh sets stricter standards (to be complied with) than those of the RoHS Directive: 100 ppm for the five groups of substances, excluding cadmium, which is 75 ppm or less.

CMS and Management System for Chemical Substances Contained in Products



* A manufacturing system to prevent the contamination of parts/materials by environmentally sensitive substances; the Ricoh Group supports suppliers' CMS by providing relevant information and verifies their CMS.

2006 FOCUS 01

Establishment of a Management System for Chemical Substances Contained in Products

The Ricoh Group as a whole is striving to establish a management system that aims to more reliably manage environmentally-sensitive substances.

Yoshimasa Honda
Engineering System Innovation Department, Engineering Process Innovation Center, MFP Business Group

Kazuhiko Fukushima
Production Planning Office, Production Strategic Center, Imaging System Production Business Group

Kenichi Kobayashi
Process Improvement Support Section, Quality System Audit Department, Quality Assurance Center, MFP Business Group

Hideaki Tago
Business Planning Department, Imaging System Production Division, Imaging System Production Business Group

Shunichi Ogawa
Procurement Improvement Group, Procurement Strategic Department, Procurement Control Center, Imaging System Production Business Group

Ricoh's management system covers 66 substance groups in total, comprising 16 prohibited substance groups, including 6 substance groups regulated by the European RoHS Directive, and those that it believes should be treated appropriately even though they are not prohibited. We have traditionally worked on selecting parts and materials that do not contain environmentally-sensitive substances and establishing a scheme that prevents the mixing in of such substances during some processes at supplier companies. To upgrade the management of chemical substances contained in products, we are promoting the establishment of a management system for chemical substances contained in products involving the whole Ricoh Group.

INTERVIEW

Employee Interview | Drawing up the Ricoh Group Management Guideline for Chemical Substances Contained in Products

Hideyuki Kashiwa
Quality Management Department, PC Unit Products Company

We examined the risks of mixing in environmentally-sensitive substances and drew up a guideline.

We first strove to study drafts and clarify the range to be managed by the system.

The draft guideline of the Ministry of Economy, Trade and Industry (METI) was prepared on the assumption that it would be widely applied to manufacturers. To actually apply it at a production site, it would be necessary to interpret it into concrete terms. First we clarified the application range of the system. As for production processes, for example, we decided to use the system to manage consumables for production, including not only parts and components but also solder, adhesives, cutting oil, cleaning agents, and pens used in checking. We also decided to apply the system to the management of grease, which is used after shipment by service staff for the maintenance of products, from the viewpoint of corporate social responsibility. Thus, we discussed what should be managed to what degree regarding respective functions and in respective processes based on the draft guideline.

Q What did you do first in establishing a management system for chemical substances contained in products?

We first prepared the Ricoh Group Management Guideline for Chemical Substances Contained in Products.

In 2004, Ricoh examined the effectiveness of establishing a management system based on Guideline for Material Declaration Assurance System (draft) prepared by the Ministry of Economy, Trade and Industry (METI) in cooperation with an ISO certifying organization and confirmed its effectiveness. Based on this, Ricoh drew up an original guideline by modifying METI's Draft Guideline in accordance with the company's actual business activities and issued the Ricoh Group Management Guideline for Chemical Substances Contained in Products in May 2005.

To draw up the guideline, Ricoh organized a working group to prepare for the establishment of the management system, inviting people from divisions concerning product planning, development/design, procurement of materials, and manufacturing as well as those who are well-informed of environmental management systems (EMS) and quality management systems (QMS), and clarified the division of roles among them.

Q What did you do to establish the management system in an efficient way?

We endeavored to reduce the burden that the introduction of the system placed on workers at the site.

The Ricoh Group Management Manual for Chemical Substances Contained in Products was completed in October 2005 by applying the completed guideline to actual operational processes. In drawing up the manual, we tried to make the best use of the EMS and QMS that were already established. Also, we carefully compared the guideline with the management manuals of respective divisions and made concerted efforts to select the items to be added or modified, aiming to (1) add only management items that had not been covered and (2) fortify parts where the management system was not strong enough. We tried to let the new system establish itself smoothly by reducing the burden placed on respective divisions to the utmost and securing more reliable management. As a result of such efforts, all business sites in Japan, including Group companies, completed the establishment of the system by the end of March 2006. Overseas business sites are expected to have the system established by July 2006.

Q What efforts will you make in the future toward the sounder operation of the management system?

We will try to raise the level of the system by fostering internal environmental auditors, etc.

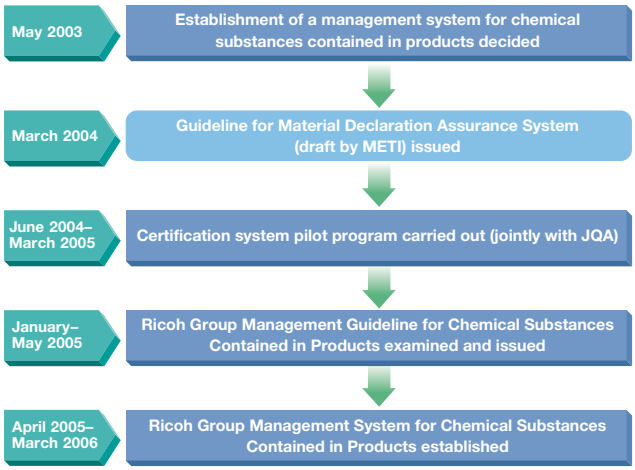
Since October 2005, we have been providing the education and accreditation necessary to audit the management system in respective divisions, gathering 80 qualified internal environmental auditors for QMS and EMS. Environmental auditors play an important role in the operation of the management system. In the future, we will increase the number of such auditors and upgrade the content of the education we provide so that it will raise the level of the management system.

Also, we will strive to improve the guideline by addressing issues that will surface through the operation of the system and reflecting changes to laws/regulations and standards in other countries. As for information disclosure, we will make thorough efforts not only in the management of information and unification of disclosure levels of respective divisions but also in prompt and accurate responses to inquiries from customers and business partners. In addition, the establishment of a system will be promoted to further ensure that the interests of society as a whole are addressed.

Drawing up the guideline from the worker's point of view
Judging the risk of mixing in

The risks of mixing in environmentally sensitive substances were examined in all respective processes, including the assembly of copiers and the manufacturing of semiconductors and printed-circuit boards. Repeated discussions were made on such risks from the worker's viewpoint, including the possibility of mixing in through such tools as soldering irons and screwdrivers. Based on the results of these discussions, we figured out some ways of clearly giving all the necessary instructions to workers at respective job sites and incorporated them into the guideline. In the future, efforts will be made to further upgrade the guideline and ensure the sounder operation of the management system.

Flow Chart up to the Establishment of Ricoh Group Management System for Chemical Substances Contained in Products



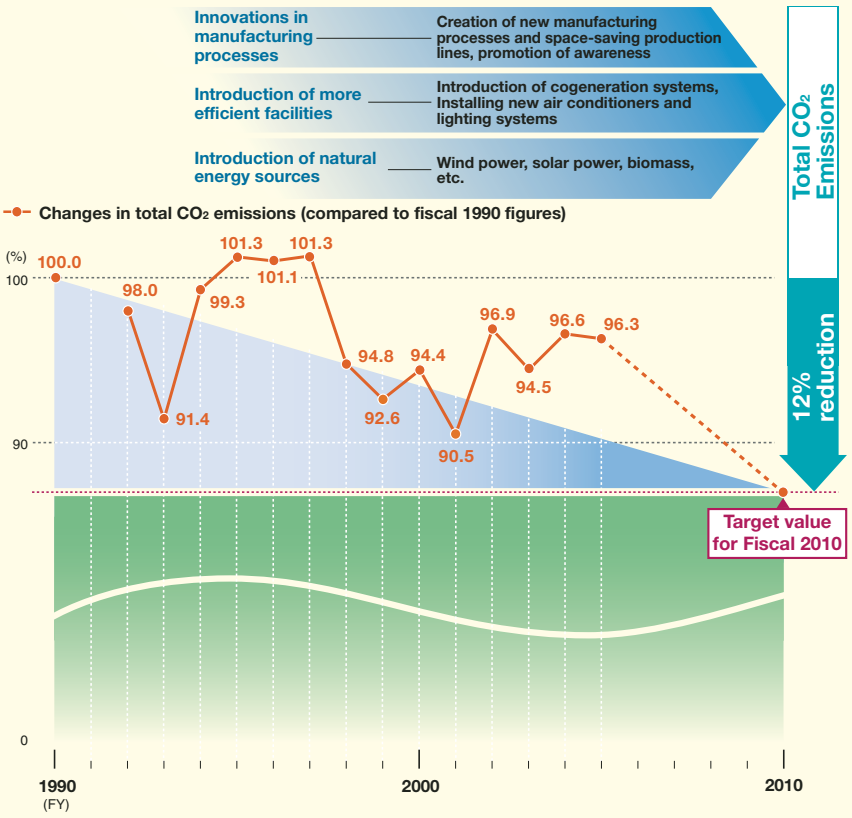
We will reduce total CO_2 emissions by 12% by the end of fiscal 2010 to help prevent global warming at a faster pace than set out in the Kyoto Protocol.

● Concept

The Ricoh Group has set goals that it wants to achieve by the end of fiscal 2010, aiming not only to attain the goals set out in the Kyoto Protocol, but also to lead the efforts to prevent global warming. Since a reduction in total CO_2 emissions is important in preventing global warming, the Ricoh Group companies in Japan have set a higher goal of reducing total emissions by 12% over the figures in fiscal 1990 by the end of fiscal 2010, compared with the goal for Japan of a 6% reduction set out in the Kyoto Protocol. Our group companies are striving to reduce global warming under this goal, which has been set in anticipation of an expansion in the scale of business. To attain this goal, the Ricoh Group is working to innovate its production processes[1], introduce more efficient facilities, and utilize natural energy sources. The Group positions its clean development mechanism (CDM)[2] as a scheme to prepare for the risks of unexpected expansions of production and fluctuating power supply rather than as a major CO_2 reduction measure. Efforts will be made to reduce greenhouse effect gases other than CO_2 by 10% over the level in fiscal 1995 by the end of fiscal 2010.

1. See page 37. 2. See page 38.

❶ Scenario for Reductions in Total CO_2 Emissions for Ricoh Group (production) in Japan up to Fiscal 2010



* Figures in and after Fiscal 2000 are recalculated using 2005 conversion factors.

Segment Environmental Accounting of Energy Conservation Activities at Business Sites (The Entire Ricoh Group)

Costs			Effects			
			Economic benefits		Effect on environmental conservation	
Item	Main cost	Costs	Item	Benefits	Reduction item	Amount
Business area cost	Cost of global warming prevention	¥741.9 million	Reduction in lighting and heating expenses	¥105.8 million	CO_2 emissions	3,432.4 (t)

* Reduction in CO_2 emissions is a total of amounts reduced through measures to prevent global warming at production sites.

● Targets for Fiscal 2007

◎ Reduce CO_2 emissions by 4% (Ricoh and manufacturing subsidiaries in and outside of Japan, compared to fiscal 2000 figures).

◎ Reduce CO_2 emissions by 4% (non-manufacturing subsidiaries in Japan, compared to figures in the base fiscal year set at each company).

◎ Reduce greenhouse gas emissions (except CO_2) in the semiconductor business division by 15% (compared to fiscal 2000 figures).

● Targets for Fiscal 2007 and Fiscal 2010

The Ricoh Group's Targets for Reducing CO_2 Emissions (Total Amount Emitted)

		Target for fiscal 2007	Target for fiscal 2010
Japan	Ricoh and Ricoh Group manufacturing subsidiaries	4% reduction (compared to fiscal 2000 figures)	12% reduction (compared to fiscal 1990 figures)
Japan	Ricoh Group non-manufacturing subsidiaries	4% reduction (goals for each company)	—
Outside Japan	Ricoh Group manufacturing subsidiaries	4% reduction (compared to fiscal 2000 figures)	10% reduction (compared to fiscal 1998 figures)

The Ricoh Group's Targets for Reducing Greenhouse Effect Gases Other Than CO_2 (Manufacturing, Total Amount Emitted)

	Target for fiscal 2010
The Entire Ricoh Group	10% reduction (compared to fiscal 1995 figures)

● Review of Fiscal 2005

CO_2 emissions at production sites increased 2.0% at home and 9.0% abroad over fiscal 2000 levels (see graphs ❷ and ❺). This was because the increased energy consumption caused by the larger production of consumables supplied in Japan, the larger production of parts in China, and the larger production of supplies in France and the United States more than offset the amount of energy saved from improvements, such as the introduction of a cogeneration system at Fukui Plant and the development/introduction of energy-saving manufacturing processes. CO_2 emissions at nonproduction sites in Japan increased approximately 0.4% over the previous fiscal year's levels (see graph ❸). As for greenhouse gases other than CO_2, the semiconductor business division achieved a 30% reduction and the entire Ricoh Group a 25% reduction over fiscal 2000 levels (see graph ❻).

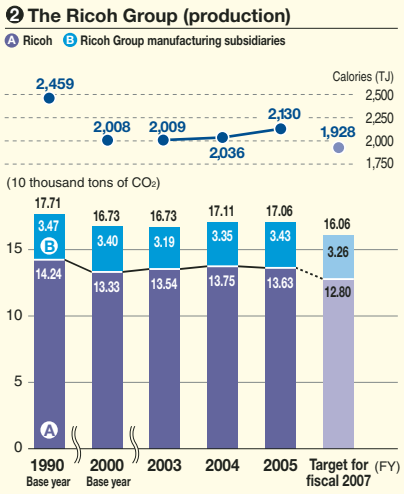
● Future Activities

In promoting activities to expand its business in fiscal 2006 and thereafter, Ricoh will strive to create a production process that uses less energy by taking various measures, such as developing an energy-saving production process through the concerted efforts of the development, design, technology, and production divisions, to reduce CO_2 emissions at production sites. Additionally, efforts will be made to improve the energy efficiency of air-conditioning and illumination systems and introduce new energy sources as a long-term project. Ricoh will also promote the sharing and horizontal development of information on the improvement activities of each business site.

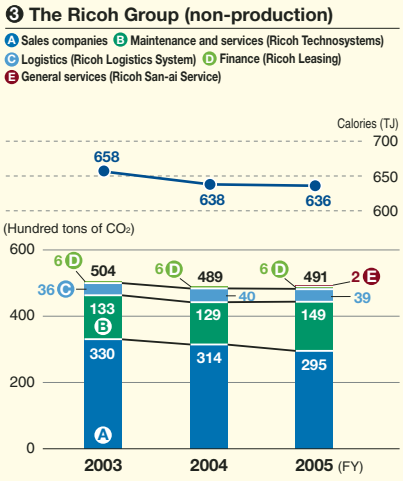
<Japan>

Energy Consumption (CO_2 conversion[1] and calories)

❷ The Ricoh Group (production)



❸ The Ricoh Group (non-production)



Breakdown of Major Energy Consumption

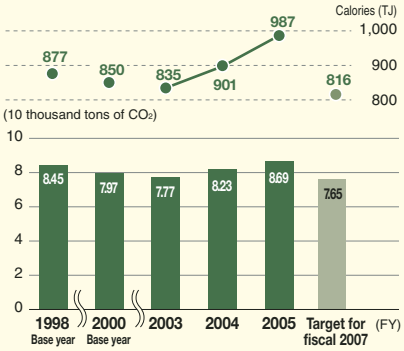
❹ The Ricoh Group (production)

	FY 2002	FY 2003	FY 2004	FY 2005
Kerosene (kℓ)	7,628	6,652	5,989	2,205
Heavy oil A (kℓ)	2,945	2,819	2,748	2,701
Town gas (1,000 m³)	12,823	14,640	15,339	15,400
Natural gas (1,000 m³)	0	0	0	6,079
Electric power purchased (1,000 kWh)	284,554	289,770	295,042	274,273

<Outside Japan>

Energy Consumption (CO_2 conversion and calories)

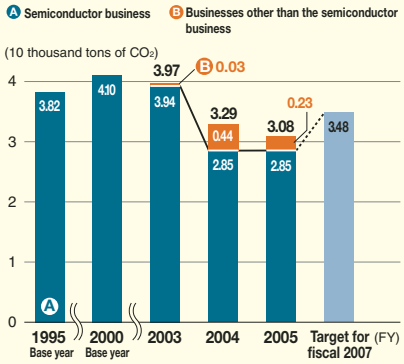
❺ The Ricoh Group (production)



<The Entire Ricoh Group>

Greenhouse Gas Emissions other than CO_2* (CO_2 conversion)

❻ The Ricoh Group (production)



* NF_3 and substances that have a global warming effect and designated in the Kyoto Protocol

* The following CO_2 emissions coefficients are used in the graphs above.
❶, ❷, ❸, and ❻: Guidelines for accounting and reporting of greenhouse gas emissions from industrial commercial sectors (2003) by the Ministry of the Environment
❺: GHG Protocol
* Data on Ricoh Printing Systems and Shanghai Ricoh Digital Equipment are not included in graphs ❶ through ❻.

Innovations in Manufacturing Processes to Achieve the Goal of CO_2 Reduction

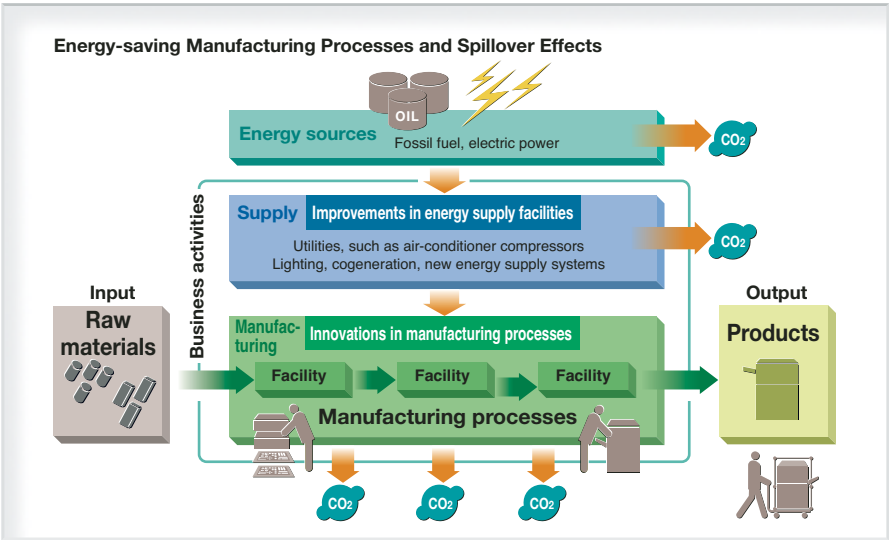
<Ricoh Group (Japan)>

To achieve the ambitious goal of reducing CO_2 emissions by 12% of the fiscal 1990 level by fiscal 2010, the Ricoh Group established in fiscal 2004 an energy-saving production process committee made up of people in charge of the Group's major production sites in Japan. The committee checks the manufacturing processes of those production sites, identifies energy losses, and assigns a quota on reducing CO_2 emissions. Focusing on innovations in manufacturing processes may save energy at downsized production lines and have a spillover effect on associated equipment, such as air conditioners and air compressors, at production lines. In fiscal 2004, downsized production lines for photosensitive materials used in copiers were put in operation. Improving this manufacturing process further, we introduced new downsized production lines in fiscal 2005.

Downsized Production Lines for Large Photoconductors

<Tohoku Ricoh Co., Ltd. (Japan), Ricoh Asia Industry (Shenzhen) Ltd. (China)>

In fiscal 2004, by implementing innovations in the photoconductor production process, we introduced downsized mass-production lines (one-at-a-time production method) for small photoconductors into Ricoh Asia Industry (Shenzhen) Ltd. (RAI), our manufacturing subsidiary in China. This production method was further improved to double productivity, and the enforced twin compact lines were adopted at RAI in fiscal 2005. Also, in September 2005, Tohoku Ricoh Co., Ltd. succeeded in downsizing production lines for large photoconductors by applying, for the first time, its accumulated technologies and know-how to photoconductors used in large copiers. The new lines have lowered costs, reduced installation space to one-twelfth, and cut CO_2 emissions per photoconductor substantially, to one-sixteenth. In addition, such goals as shortened lead time for facility setup, detergentless operations, and zero-waste-to-landfill were achieved.



Introduction of a Cogeneration System

<Ricoh Fukui Plant (Japan)>

Fukui Plant carried out a fuel switch from kerosene to natural gas and introduced a gas-engine-type cogeneration system, which has been in operation since July 2005. Subsidies from the New Energy and Industrial Technology Development Organization (NEDO) System were used to introduce the system. The system was launched in November 2004 and resulted in about a 5,000-ton reduction in CO_2 annually, including the amount reduced by the fuel switch, which means a 20% reduction in Fukui Plant's total emissions.

Exterior of the cogeneration system: Liquefied natural gas tank (left) and gas engine power generator building (right)

Introduction/Promotion of the Use of Natural Energy Systems

<Ricoh Unitechno Co., Ltd., Tohoku Ricoh Co., Ltd., Ricoh Elemex Corporation, Ricoh (Japan)>

Many of the Ricoh Group's plants are promoting the introduction of natural energy systems to utilize solar and wind power, as well as other natural sources. Ricoh Unitechno Co., Ltd. has reduced annual CO_2 emissions by 3 tons with a solar power generation system (10kW), while Tohoku Ricoh Co., Ltd. has achieved a 0.5-ton annual reduction in CO_2 emissions by using solar and wind power generation systems (1.5kW). Ricoh Elemex Corporation has reduced annual CO_2 emissions by 2.7 tons with a solar power generation system (6kW). In the meantime, Ricoh purchased energy produced by wind power from Japan Natural Energy Company Limited under the Green Power Certification System* in 2002, reducing annual CO_2 emissions by about 357 tons. Ricoh also concluded a five-year agreement in March 2003 to purchase biomass green electricity. This will lead to a reduction in annual CO_2 emissions of about 100 tons.

* This system is carried out by power companies to promote the expansion of natural energy.
http://www.natural-e.co.jp/english/press1-e.html#J01

Green Power certification mark

Introduction of CDM

The Clean Development Mechanism (CDM) allows industrialized countries to conduct anti-global warming projects in developing countries, thereby helping those countries comply with their commitment to reduce greenhouse gas emissions specified under the Kyoto Protocol. If businesses in developed countries reduce greenhouse gases through projects in developing countries, they may have that reduction reflected in their own CO_2 reduction goals under certain rules, and ultimately such a reduction is used by the governments of their countries to meet national targets. Developing countries benefit from this mechanism as well since they are given opportunities to receive investments and technology transfers. Ricoh uses CDM as one of its risk management strategies in achieving its CO_2 reduction goal for 2010, even if its production volume far exceeds expectation. When selecting CDM projects, Ricoh takes cost performance into account. In addition, by using networks that were created through environmental activities with environmental NPOs, Ricoh tries to choose projects that contribute to the conservation of ecosystems and improvement of living standards of the local people. In terms of the organizations that execute projects, Ricoh assesses their commitment to corporate social responsibility. In fiscal 2005, Ricoh signed an agreement with the executing organization for a bagasse-based electricity generation project in El Salvador, bringing Ricoh's total CDM number to four.

The Ricoh Group established the following criteria for the selection of CDM projects.

■ **Requirements for Ricoh's CDM projects**

① Projects should be valuable from the perspective of biodiversity and ecosystem conservation. As for environmental afforestation projects, they should be recognized by environmental NGOs.
② Projects should be socially recognized by every stakeholder.

■ **Procedure to select projects and evaluation criteria**

Ricoh established evaluation criteria for each stage of selecting CDM projects, as shown below.

Procedure	Areas Evaluated
First evaluation	• Projects' basic elements
Second evaluation	• Value as a CDM project • Recipient country • Credit assessment of executing organizations/intermediaries
Third evaluation	• Contract

CDM Project on Which Ricoh Signed Agreements in Fiscal 2005

Bagasse Electricity Generation Project <El Salvador>

Among the number of projects that El Salvador is promoting to reduce its dependence on fossil fuel, electricity generation from bagasse is drawing attention as a new project to contribute to the country's environmental activities. Sugar refining is one of the major industries in El Salvador, and its CO_2 emissions can be reduced by switching from fossil fuel fired power generation to bagasse (pulp left after the juice has been extracted from sugar cane) power generation to supply energy to refining factories. To use bagasse as fuel, factories replaced their generators with high-efficiency boilers or steam turbine generators. Ricoh participated in this project and introduced generators capable of producing a total of 45 MW from 2002 to 2005. In addition, Ricoh helped improve energy utilization efficiency by introducing a cogeneration system and has created a system of selling surplus electricity through electric power companies.


Newly switched equipment

CDM Projects on Which Ricoh Signed Agreements by Fiscal 2004

Afforestation Project to Conserve Biodiversity <Ecuador>

In the Maquipucuna Nature Reserve and La Perla Forest in Ecuador, forests were cut down by stockbreeders who needed pastures for their cows, but afterwards the deforested areas were abandoned as the livestock business in Ecuador went into a recession. Conservation International (CI), an environmental NGO, has a plan to collect seeds to grow seedlings for reforestation purposes and employ local people to conduct afforestation and maintain/manage virgin forests. Ricoh has been involved in this project because of the benefits the project provides, such as afforestation, improving people's living standards, and CO_2 absorption.

Wind Power Project <India>

The rapid economic growth in India has caused concern about the increased number of coal-fired power stations that satisfy the growing need for power. Ricoh is taking part in a number of wind power projects carried out in various parts of India in order to switch from fossil fuel to wind energy to generate electricity.

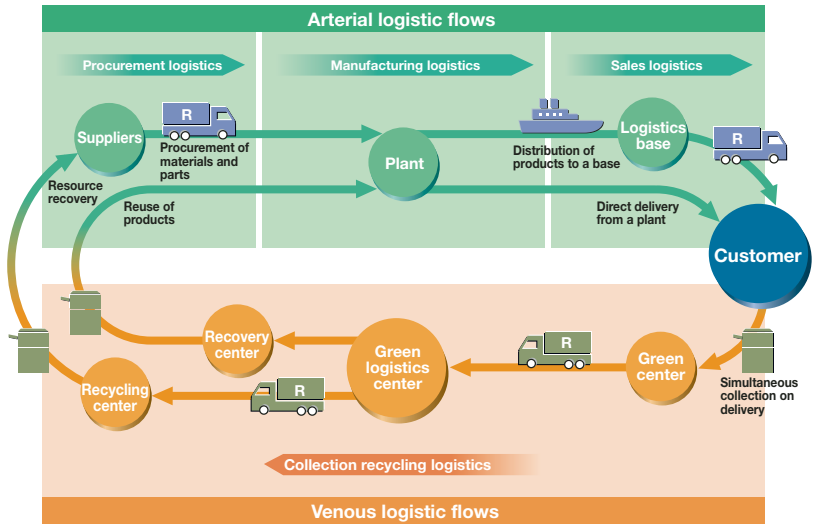
Treadle Pump Project <India>

In India, small-lot farmers used to rent diesel pumps to draw underground water. In addition to their CO_2 emissions, diesel pumps were also a heavy burden for these farmers in rental fees and fuel costs. Ricoh participated in the project to introduce 20,000 treadle pumps.

The Ricoh Group is working to reduce CO_2 emissions from transportation by creating a resource-recirculating logistics system and promoting modal shifts.

To achieve a sustainable resource-recirculating society, one important issue is the establishment of a logistics system for transporting products. The Ricoh Group is striving to create a resource-recirculating logistics system that integrates the arteries and veins of the logistics flow, including a system for direct transportation to and collection from customers. Another issue that Ricoh tackles is a reduction in environmental impact of transportation networks by promoting modal shifts and introducing low-emission vehicles. Examples that are successful in Japan will be introduced around the world, aiming at establishing global supply chain management (SCM).

Resource-recirculating Logistics System that Integrates the Arteries and Veins of the Logistic Flows (Japan)



Arterial logistic flows

- Establishment of a direct transportation system from plants to customers
- Modal shift from truck to railway and marine transportation
- Uses of reusable packaging materials

Venous logistic flows

- Establishment of a direct collection system for used products
- Expansion and improvement of infrastructure including collection centers

Global Logistics Innovations to Improve Distribution Efficiency and Reduce Environmental Impact

In June 2005, Ricoh set up an organization to promote logistics innovations on a global basis, aiming to improve distribution efficiency and reduce environmental impact. It has already started working on identifying the environmental impact of arterial logistic flows, including procurement logistics, internal plant logistics, and domestic inventory bases, and arterial logistic flows from Japan to overseas as well as venous logistic flows within Japan and Europe. Based on the results, we are endeavoring to improve distribution efficiency, reduce CO_2 and waste by using less packaging materials, and strengthen our cost competitiveness.

Promoting Modal Shift

<Ricoh Logistics System Co., Ltd. (Japan)>

Ricoh Logistics System Co., Ltd. is actively promoting a modal shift to transportation methods that have less environmental impact. In fiscal 2005, the transportation of medium-sized copiers from Ricoh Gotemba Plant to Osaka, and parts from Nagoya to Tohoku Ricoh were shifted to railroads. The modal shifts so far have resulted in 26 routes: 3 maritime routes and 23 rail routes. These shifts contributed to a reduction of 4,678 tons of CO_2 emissions per year from transportation compared to when truck transportation was used.

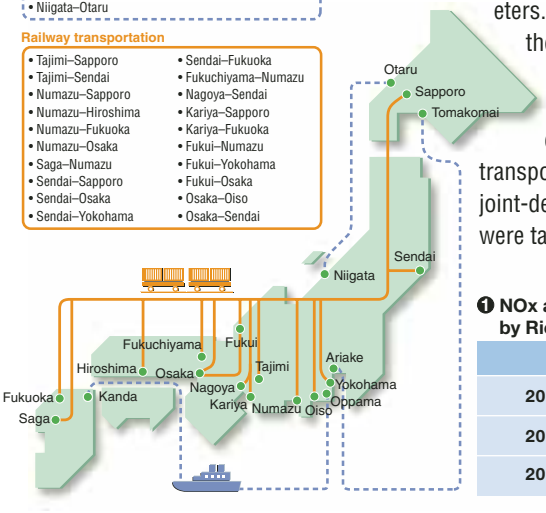
Major Cases of Modal Shift in Japan

Marine transportation

- Ariake–Tomakomai
- Niigata–Otaru
- Oppama–Kanda

Railway transportation

- Tajimi–Sapporo
- Tajimi–Sendai
- Numazu–Sapporo
- Numazu–Hiroshima
- Numazu–Fukuoka
- Numazu–Osaka
- Saga–Numazu
- Sendai–Sapporo
- Sendai–Osaka
- Sendai–Yokohama
- Sendai–Fukuoka
- Fukuchiyama–Numazu
- Nagoya–Sendai
- Kariya–Sapporo
- Kariya–Fukuoka
- Fukui–Numazu
- Fukui–Yokohama
- Fukui–Osaka
- Osaka–Oiso
- Osaka–Sendai



Improvement in Vehicle Mileage and Introduction of Low-Emission Vehicles

<Ricoh Logistics System Co., Ltd. (Japan)>

Ricoh Logistics System Co., Ltd. is striving to improve vehicle mileage by utilizing digital tachometers and giving energy conservation and safety education to drivers. As of the end of March 2006, approximately 42% of all company vehicles, or 113 vehicles, were equipped with digital tachometers. As a result of drivers recognizing their own eco-drive levels, mileage improved by 25%. Other initiatives, such as introduction of 30 CNG cars and 12 hybrid cars, improving transportation efficiency by implementing joint-delivery and roundtrip distribution, were taken to reduce fuel consumption.

❶ NOx and SOx Emissions in Transportation by Ricoh Logistics System

	NOx (t)	SOx (t)
2003	2.6	0.4
2004	2.8	0.4
2005	2.8	0.4

INTERVIEW

Employee Interview | Promoting a Modal Shift

Promoting a modal shift in all sales and procurement logistics routes to reduce the environmental impact of distribution

Promoting the "Modal Shift Challenge 5,000" to attain a target of 5,000 containers

Ricoh's RS Products Division, which manufactures such reprographic supplies as toners, is carrying on the "Modal Shift Challenge 5,000" campaign as part of its sustainable environmental management. It aims to increase the number of rail freight containers used in transportation to 5,000 a year by the end of fiscal 2006. All sales logistics routes (delivering products to customers) and procurement logistics routes (procuring raw materials) are examined, and routes that can be switched from truck to rail transportation without additional costs are identified to promote a modal shift. The important issues in achieving a modal shift are forecasting load amount, identifying load efficiency, and simulating freight discounts generated by switching transportation methods. Although the modal shift initially seemed to cause additional costs in some routes, the shift was achieved by conducting a detailed simulation.

There was significant cooperation from suppliers in the area of procurement logistics. We not only implemented a modal shift but also simultaneously carried out innovations in the entire supply chain, including reducing lead time, and this helped accelerate our campaign. As of the end of March 2005, we established a rail transportation system utilizing 3,540 containers a year. Although we have not identified the amount of CO_2 emissions generated by the whole procurement logistics, those of sales logistics were reduced by 722 tons from the fiscal 2003 level. The percentage of rail transportation in the whole sales logistics of the RS Products Division was nearly 19%.

Thanks to its daily efforts, Ricoh was among the first to gain the Eco-Rail Mark.

The Eco-Rail Mark certification system was launched in April 2005 by the Ministry of Land, Infrastructure and Transport to certify companies that actively make efforts to protect the environment through rail transportation and products transported in such efforts. When we examined the RS Products Division's transportation modes for land transportation of 500 kilometers or more in distance, one of the conditions for certification, we found that 72% of all products, including toner, OPC, diazo paper, and PPC paper, were carried by rail freight container. When it comes to toner alone, the percentage reached 50.7%. Because these figures are much higher than the requirements, Ricoh was awarded an Eco-Rail Mark certification in July 2005, ahead of other companies.

Members promoting a modal shift
(From left) **Shigeo Sakai**, **Mitsuhiro Shiga**, **Tetsuya Uchino**
Business Planning Office, RS Products Division

Requirements for Eco-Rail Mark Certification

- For a company to be certified, the transportation distance from its plant must be 500 kilometers or more, at least 15% of which must be on railways.
- For a product to be certified, the transportation distance from the plant must be 500 kilometers or more, at least 30% of which must be on railways

Purchasing "Ricoh Use Only" containers supported by subsidies of the Green Logistics Partnership Model Program

In March 2006, Ricoh purchased seven new rail containers that displayed its corporate logo and the Eco-Rail Mark to be used exclusively by Ricoh. Our modal shift case was selected as one of the model projects for the Green Logistics Partnership Program by the Ministry of Land, Infrastructure and Transport, and we were given subsidies. Using the subsidies, we purchased our own containers. These containers, which are based in Numazu, travel a wide area that runs from Hokkaido to Kyushu. Improved distribution routes using these rail containers are expected to reduce CO_2 emissions to about one-seventh the amount generated by conventional transportation. Also, we look forward to other associated benefits, such as cost reduction and publicity.

Ricoh's new containers displaying its logo

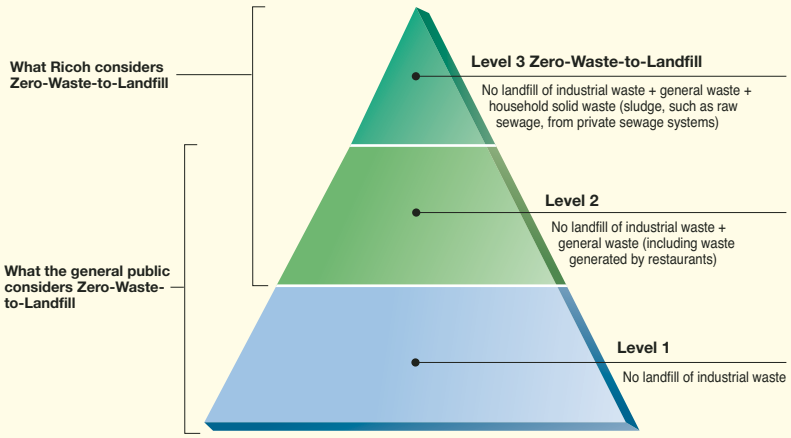
We promote Zero-Waste-to-Landfill Activities Worldwide while Reducing Waste and Costs

● Concept

The Ricoh Group is globally working to maximize resource productivity, primarily limiting the production of waste, reducing water consumption, and reducing paper consumption. The Ricoh Group promotes Zero-Waste-to-Landfill* activities as a part of its sustainable environmental management system by efficiently using resources, improving production efficiency, reducing waste disposal costs, and improving corporate quality by promoting employee awareness of environmental conservation. In fiscal 2001, the Ricoh Group achieved Zero-Waste-to-Landfill at its major global production sites. These activities are now promoted at non-production sites and sales companies at home and abroad. Meanwhile, in addition to waste reduction, proper waste processing and cost reduction are also important. From fiscal 2005, we review and enhance the auditing of waste disposal.

* Zero-Waste-to-Landfill means a 100% resource recovery rate and no waste used as landfill.

Definition of Zero-Waste-to-Landfill Levels by the Ricoh Group



● Targets for Fiscal 2007

◎ Reduce generated waste by at least 3% (Ricoh and manufacturing subsidiaries in and outside of Japan, compared to fiscal 2000 figures).

◎ Reduce generated waste by the ratio calculated by multiplying the number of years from the base fiscal year to fiscal 2007 by the yearly rate (2%) (non-manufacturing subsidiaries in Japan; the base fiscal year is set at each company).

◎ Improve the waste recycling rate to at least 95% (non-manufacturing subsidiaries in Japan).

◎ Reduce water consumption to a level that is below the results of fiscal 2000 (Ricoh production sites and manufacturing subsidiaries in and outside of Japan).

◎ Reduce paper consumption by at least 10% (Ricoh, manufacturing and non-manufacturing subsidiaries in Japan, and manufacturing subsidiaries outside of Japan, compared to fiscal 2002 figures).

● Review of Fiscal 2005

In fiscal 2005, nonmanufacturing subsidiaries in Japan set goals for waste reduction and took initiatives to both improve the recycling rate and reduce waste. On the other hand, waste reduction at production sites improved marginally, by 0.5%, due to the larger production of supplies and an increase in packaging materials used associated with the expanded production of machines (see graph ❶). In terms of water consumption, our continued efforts have contributed to a 9.1% reduction over the fiscal 2000 level (see graph ❷). Also, we achieved a 1.2% reduction in paper consumption compared with the fiscal 2002 level.

● Future Activities

The amount of waste generated is expected to increase substantially in the years to come because it largely depends on production volume. To respond to this trend, we will promote waste reduction mainly in the upstream production process, such as development and design. At the same time, by clarifying how waste is generated and identifying problems, we will improve the yield rate by eliminating losses and developing efficient packaging materials.

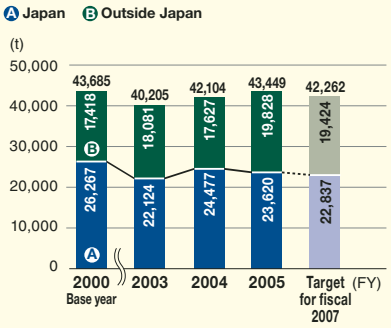
Segment Environmental Accounting of Recycling Activities at Business Sites (The Entire Ricoh Group)

Costs			Effects			
			Economic benefits		Effect on environmental conservation	
Item	Main cost	Costs	Items	Benefits	Reduction item	Amount
Business area cost	Resource circulation cost	¥1,068.0 million	Reduction in waste disposal expenses	¥–3.0 million	Amount of waste disposed/ reduced	549.1 (t)
			Proceeds from sale of valuables	¥1,327.6 million		

<The Entire Ricoh Group>

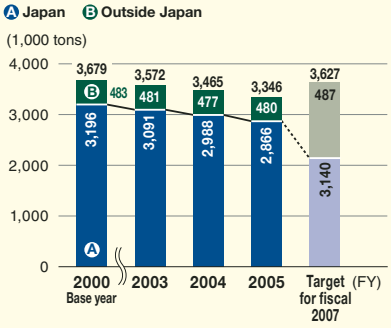
Total Amount of Waste Generated

❶ The Ricoh Group (production)



Volume of Industrial Water Used

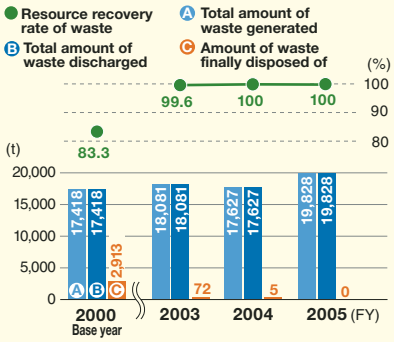
❷ The Ricoh Group (production)



<Outside Japan>

Resource Recovery Rate of Waste/Total Amount of Waste Generated/Total Amount of Waste Discharged/Amount of Waste Finally Disposed of

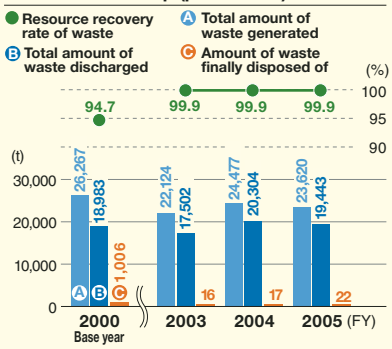
❺ The Ricoh Group (production)



<Japan>

Resource Recovery Rate of Waste/Total Amount of Waste Generated/Total Amount of Waste Discharged/Amount of Waste Finally Disposed of

❸ The Ricoh Group (production)



❹ The Ricoh Group (non-production)

	Resource recovery rate of waste (%)	Total amount of waste discharged (t)	Amount of waste finally disposed of (t)
Sales Companies	91.8	2,035	166
Maintenance and Services (Ricoh Technosystems)	98.4	1,935	30
Logistics (Ricoh Logistics System)	98.1	3,999	74
Finance (Ricoh Leasing)	95.6	70	3
General Services (Ricoh San-ai Service)	84.6	26	4

* At non-manufacturing subsidiaries, the amount of waste generated and the amount of waste discharged are the same, because waste is not processed at the business site. Therefore, only the total amount of waste discharged is listed.

Resource recovery rate of waste: Amount of resource recovered/amount discharged
Total amount of waste generated: Amount of waste generated at business sites
Total amount of waste discharged: Amount of waste discharged outside business sites (including the waste undergoing disposal processing inside the plants)
Amount of waste finally disposed of: Amount of discharged waste used in landfills and incinerated

* Data on Ricoh Printing Systems and Shanghai Ricoh Digital Equipment are not included in graphs ❶ through ❺. Waste generated from the manufacturing of polymerized toner at Ricoh's Numazu Plant is not included either. Data that include waste from these sources are shown on Page 77.

Integrated Auditing of Waste Disposal Service Providers and Creating an Auditor Recognition System

<Ricoh (Japan)>

Ricoh has been working on integrating the auditing of waste disposal service providers and creating an auditor recognition system in order to ensure proper waste disposal and reduce related costs. In the past, because each business site audited service providers individually, such problems as different evaluations of the same providers and duplication of audit operations have emerged. To address these issues, Ricoh created an auditor training curriculum and recognition system targeting its production sites and manufacturing subsidiaries in Japan in fiscal 2005. The company also began sharing information on waste disposal service providers within the Ricoh Group. From fiscal 2006 onward, Ricoh will conduct audits by the Group's certified auditors and implement an audit rotation system among business sites and companies to further improve the audit level and ensure proper waste disposal.

Auditor training

INTERVIEW

Employee Interview | Reuse of fine waste toner (U.S.)

Ricoh Electronics, Inc. has successfully developed technology that reuses fine waste toner generated in toner production lines and effectively reduced production cost by 50%.

Dilip Potnis
Director
New Business Development, Reprographic Supply Group
Ricoh Electronics, Inc.

Ricoh Electronics, Inc.'s Santa Ana plant started toner production in 1983. Toner is a plastic powder used in copiers, laser printers, etc. Fine waste toner particles are smaller in diameter than usual toner particles. During the production of toner, these fine particles are generated and they are usually known as waste and cannot be used. Normally this fine waste toner is stored in toner factories and later it is sent for energy recycle. The North American market is considered to be extremely cost competitive for toner products, especially those not covered by Ricoh's business. Due to the competitive North American market, we started considering ways of utilizing fine waste toner of one product into another type of toner. After conducting studies on production processes based on the idea of introducing fine waste toner and changing the original toner formulation, we succeeded in our idea of reusing fine waste toner and produced new toner at a cost that is 50% less than the conventional cost.

By applying reuse of fine waste toner technology groupwide has contributed a lot in reduction of waste.

By the end of fiscal 2005, we reused 120 tons of fine waste toner through a newly developed production method. Previously, fine waste toner was recycled as fuel for energy resources. By recycling fine waste toner as a new material, "we prioritized recycling products in the inner loops of the Comet Circle*". As a result, we achieved production with less environmental impact and greater economical gain. Reusing 120 tons of fine waste toner saved Ricoh Electronics $600,000 for material cost reduction. REI started collecting fine waste toner from other factories including Numazu and Fukui plants in Japan and also from Ricoh Industrie France S.A. and in the process helped the Ricoh group to reduce waste. With our activities, we contributed in reducing environmental impact within all of the Ricoh family group.

*See page 14.

Reducing Waste by Developing a New Method of Producing Thermal Paper

<Ricoh Electronics, Inc. (United States)>

Thermal paper is used in making bar code labels for perishable food, parcels, etc. The Ricoh Group supplies such thermal paper to label manufacturers, etc. by the roll. The rolls are originally very large, being several meters wide and several hundreds of meters long, and are cut into different sizes according to customer specifications before delivery. As a result, thermal paper that does not meet specifications is left with Ricoh. Traditionally, if this material violated the splice rule of the customer, then that material had to be recycled. If the customer allowed the splice, then it would be constructed with a non-printable vinyl tape and the customer had to remove it at the process stage. Nevertheless, the number of splices per roll was sometimes restricted for the benefit of the customer's productivity. As a result, many short pieces of thermal paper that could not be reprocessed into rolls remained. The Georgia Plant of Ricoh Electronics, Inc., Ricoh's American production company, developed a new production method called Run-a-Splice™, which joins thermal paper together without the use of vinyl tape. As a result, short pieces of thermal paper that previously could not be reprocessed can be now incorporated into rolls. The advantage of this Run-a-Splice is that the end user can actually use the splice as a label with barcode and printing. This results in a reduction in costs of approximately $20,000 per month and that of waste by about 1,000 kg.

Joining the rolls

Raising the Level of Zero-Waste-to-Landfill Activities to Realize Sustainable Environmental Management

<Ricoh Numazu Plant (Japan)>

Because the volume of waste generated and the cost of waste disposal are likely to increase significantly after the new plant starts operation in December 2006, Numazu Plant started working on reducing waste by reviewing waste as a whole. Packages for materials and parts, waste oil, wastewater, and thermal sludge are major waste generated at Numazu Plant. Recycling routes have been established for all waste generated, and Zero-Waste-to-Landfill has been achieved through the 5Rs. An increase in the volume of waste generated, however, would lead to an increase in environmental impact in terms of recycling and cost. Therefore, the plant reviewed its activities from four points of view: reducing waste, reducing the unit cost of waste disposal, turning waste into valuable materials by reviewing sorting methods, and raising the value of valuable materials. Concrete examples include controlling the unit cost of waste disposal by reviewing the waste water disposal route, asking suppliers to collect waste oil, collecting and selling such waste oil, and turning plastic and film waste into valuable materials through efficient sorting. As a result, the plant succeeded in reducing costs by more than ¥70 million and waste volume by approximately 300 tons in fiscal 2005.

Ideas for Raising the Level of Zero-Waste-to-Landfill at Numazu Plant

Building Awareness and Turning Waste into Valuable Materials in Cooperation with Resource Recovery Companies

<Ricoh Numazu Plant (Japan)>

In December 2005, Numazu Plant held a meeting for managers from different production sites to study waste disposal. The meeting was aimed at building awareness among managers at production sites and ensuring that all waste is turned into valuable materials by reviewing how waste is sorted. Resource recovery companies were invited to the meeting, and they confirmed how actual waste generated during production was treated and discussed the best way to sort waste in order to realize the most economic means of disposal. “I didn’t expect to get paid for such a thing” and “I once again realized the importance of sorting” were some of the comments made by participants. Thus, the meeting helped participants understand recycling better. Thanks to the meeting, of the 15 types of plastic waste that could not be previously turned into valuable materials, 10 could now be turned into valuable materials and 5, with some exception, could be turned into valuable materials by removing those that are dirty and further sorting the rest.

Waste-reduction efforts are being made in consideration of the amount of chemical substances used/discharged and based upon the idea of risk management.

● Concept

The Ricoh Group categorizes and controls chemical substances that are regulated in various countries around the world according to whether they are to be prohibited, reduced, or controlled. As for chemical substances classified as those to be reduced, the Ricoh Group is engaged in reduction based on a concept of risk management. This is a method to reduce chemical substances whose environmental impact is serious. The environmental impact is determined by calculating the amount of chemical substances used/discharged and the environmental impact potential[1]. Additionally, the Group sets a standard to prevent environmental risk from occurring. Based on the standard, each business site thoroughly controls the amount of chemicals used, emitted, discharged, and disposed of in order to prevent percolation or outflow to the environment.

1. The environmental impact potential is set by Ricoh, taking toxicity, carcinogenicity, and the possibility of ozone depletion into consideration.

● Targets for Fiscal 2007

◎ Completely eliminate chlorine organic solvents used in manufacturing Organic Photo Conductors at manufacturing contractors as well as at Ricoh manufacturing divisions.

● Review of Fiscal 2005

The substitution of chlorine organic solvent dichloromethane used in the manufacturing of photoconductors—supplies for copiers—which had been realized at Ricoh Group companies, was expanded to manufacturing contractors. As a result, Ricoh completely eliminated the use of chlorine organic solvents in the consignment production of photo conductors at plants other than Ricoh's by the end of fiscal 2005. The use of environmentally-sensitive substances was reduced 48% from fiscal 2000 and about 5,200 tons from the previous fiscal year[2]. The amount emitted decreased 88% from 2000 and about 2,500 tons from the previous fiscal year[2] (see graph ❶).

2. The figures have been converted with an environmental impact coefficient.

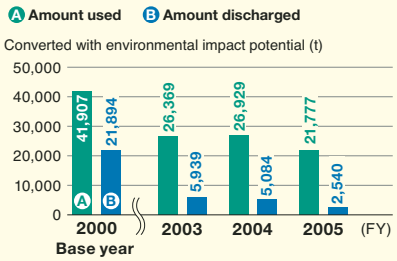
● Future Activies

We will continue our efforts to reduce the use and emissions of chemical substances so that they are kept at current levels even though business operations will be significantly expanded under the leadership of respective divisions and business sites. In fiscal 2006, we plan to introduce solvent-combustion equipment to Numazu Plant, aiming to reduce emissions of VOC. In addition, we will strive to upgrade efforts toward the management of chemical substances and risk communication.

<The Entire Ricoh Group>

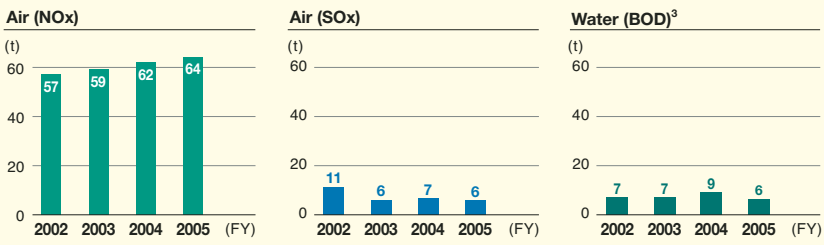
Changes in the Amount Used and Discharged of Ricoh Target Substances for Reduction

❶ The Ricoh Group (production)



Changes in the Amount of Nox, SOx and BOD

❷ The Ricoh Group (production)



3. Represents total emissions directly released into water areas for public use.

* The Ricoh target substances for reduction are defined as the PRTR substances designated by four electric/electronic industrial associations in Japan between fiscal 1998 and fiscal 2000. Coverage of chemical substances by Ricoh may differ slightly from those provided by the PRTR Law. As for the uses and emissions of respective substances, please refer to our Web site at http://www.ricoh.com/environment/data/index.html

*Graphs ❶ and ❷ do not include data for Ricoh Printing Systems and Shanghai Ricoh Digital Equipment.

Segment Environmental Accounting of Pollution Prevention Activities at Business Sites (The Entire Ricoh Group)

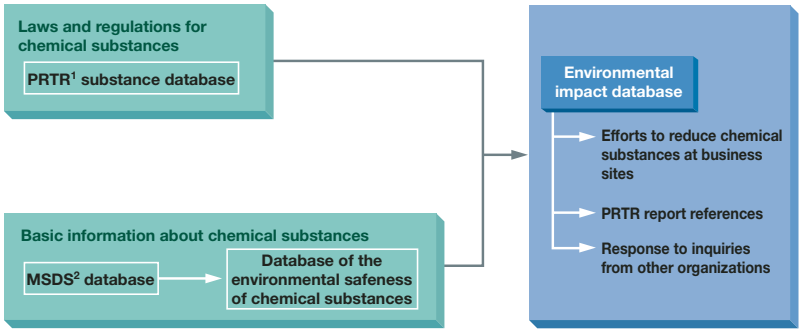
Costs			Effects			
			Economic benefits		Effect on environmental conservation	
Item	Main cost	Costs	Items	Benefits	Items	Amount
Business area cost	Pollution prevention cost	¥486.6 million	Reduction in social cost	¥378.6 million	NOx SOx BOD PRTR substances (calculated with the conversion potential)	–1.3 (t) 0.6 (t) 3.2 (t) 2,543.8 (t)
			Amount of risk avoidance effect (incidental effect)	¥1,127.5 million		

Chemical Substance Control Using IT System and Information Disclosure

<Ricoh Group (Global)>

The Ricoh Group established RECSIS to monitor data on chemical substances used, discharged, and disposed of at business sites. RECSIS is designed to promote reduction in the use of chemical substances, to prepare materials for PRTR reporting, and to speedily respond to inquiries from customers around the world, original equipment manufacturers, and citizens' groups.

Environmental and Chemical Safety Information System for Business Sites

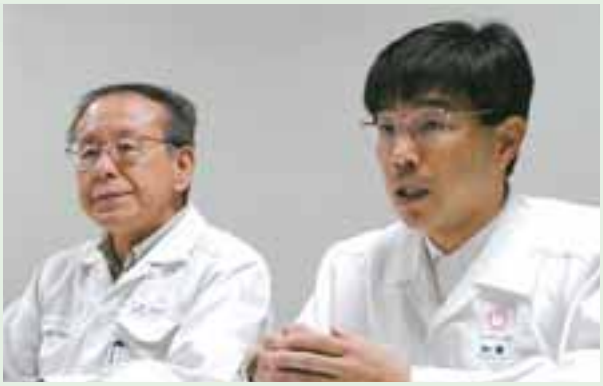


1. Pollutant Release and Transfer Register
2. Material Safety Data Sheet

INTERVIEW

Employee Interview | Management of Chemical Substances at the Plant

Numazu Plant Receives PRTR Merit Award. "Our strengths and weaknesses will be reflected in our future activities."



Akiyoshi Nagakura (left) and **Hiroki Kato** (right)
Environment Safety Promotion Group, Numazu General Affairs Center, RS Products Division

Innovative efforts, such as the SS monitor system and coefficient setting, are greatly appreciated.

Under the leadership of the PRTR Reduction Working Group, Ricoh Numazu Plant has traditionally striven toward the management of chemical substances, but such efforts have not been objectively appreciated. We, however, applied for the PRTR Awards 2005[1] to clarify our own strengths and weaknesses and have them reflected in our future activities. PRTR Awards are given to companies that have made excellent efforts in the management of chemical substances and actively promoted the communication of risks to citizens. We eventually won the PRTR Merit Award. This was mainly because the system and scheme for the management of chemicals were firmly established at our plant; innovative efforts were made, including the setting of discharge coefficients for respective types of chemical substances in accordance with their environmental impact; and continuous efforts were made in communicating risks in cooperation with local residents through the social satisfaction (SS) monitor system[2].

1. Sponsored by the Center for Environmental Information Science, PRTR Awards were held twice in 2005.
2. SS monitors selected from neighboring areas are requested to present their opinion on activities of the plant through questionnaires or meetings to exchange information.

PRTR Merit Award certificate and trophy

Encouraged by the winning of the award, we will further upgrade our activities and strive for the solution of problems.

Also, comments from judges and examples from other companies, including the one that won the grand prize, helped us clarify our own issues to be addressed, such as those on the evaluation of environmental risks, clarification of our stance on risk communication, and disclosure of information on respective substances. We have taken measures for some of these problems, including the monitoring of chemical substances emitted. For other issues, we intend to hold discussions in working groups as soon as possible and take concrete measures. In particular, many companies have yet to solve problems in risk communication, and it will be necessary to quickly promote efforts toward their solution. Because we do not usually appear front and center, winning the award gave us courage. We will endeavor to continue raising the level of our activities.

From the viewpoints of corporate social responsibility and environmental risk management, all business sites are being surveyed and purified on a global scale.

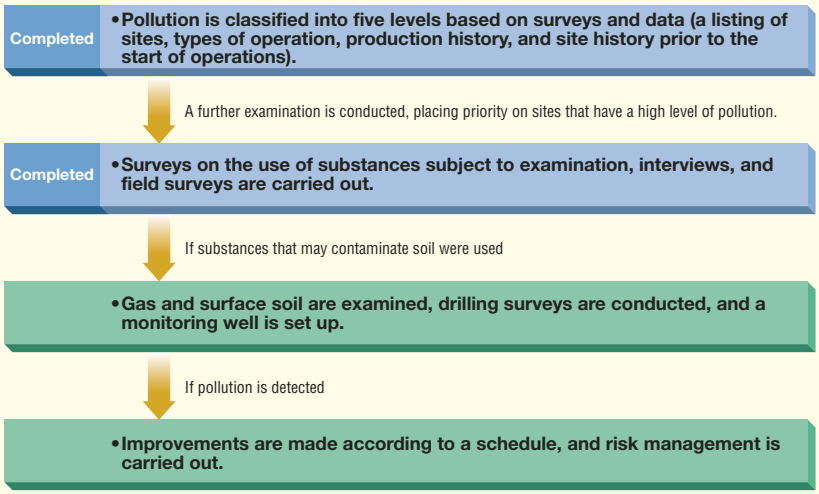
● Concept

Soil and underground water contamination is a significant environmental issue for business facilities. If left alone, it could damage the health of people in neighboring areas. In light of this, the Ricoh Group has been surveying and purifying major production sites since the 1990s. The purification of contaminated soil entails huge costs and significantly affects the business, which makes it necessary to take action from the two viewpoints of corporate social responsibility and environmental risk management. The Ricoh Group established Basic Policies Concerning Soil and Underground Water Contamination and Standards for the Management of Risks Related to Soil and Underground Water Contamination. In addition, the Group started surveying the history of all Group business sites, including both the production and non-production sites of subsidiaries of Ricoh's subsidiaries, in fiscal 2004.

Ricoh Group's Basic Policies Concerning Soil and Underground Water Contamination

(1) Top priority is given to controlling impact on the living environment in the neighborhood.
(2) Efforts will be made to carry out surveys and measures to cope with contamination caused by the Ricoh Group's business activities.
(3) Laws, regulations, and ordinances set by the national and local governments shall be observed.
(4) Efforts will be made to establish risk communication with local governments and residents.
(5) Soil is checked for contamination when land is purchased/transferred or rented/returned.

Steps for Soil Examination at Non-Production Sites



● Targets for Fiscal 2007

◎ Complete the examination of soil and underground water at Ricoh's non-production sites and leased land (Ricoh and affiliates in and outside of Japan).
◎ Make and implement plans to improve sites where pollution is detected.

● Reviewing Fiscal 2005

History surveys of approximately 1,000 sites worldwide were completed in fiscal 2005. Data surveys showed that some of the non-production sites used to be production sites. However, no accidents, such as leakages, that could lead to serious risks occurred at these non-production sites. As for the 6 sites that have used chemicals that could lead to soil contamination and the 11 sites that might have used such chemicals, the uses of these chemicals were examined in further detail in a survey, and field surveys and fact-finding inquiries were conducted in the presence of in-house site assessment experts. These surveys helped us understand the contamination risks of all Ricoh Group business sites.

● Future Activities

Based on the history surveys, 5 sites were picked out as sites where topsoil should actually be surveyed. Relevant surveys will be completed by September 2006. Through such efforts, risk management at an even higher level will be conducted on a global scale.

Surveys of Business Sites That Have Used Chemicals

<Ricoh India Ltd. (India)>

Ricoh India Ltd., Ricoh's sales company in India, found that its office in Salt Lake used to have a gilding process, and in August 2005, Ricoh's staff in charge visited the site. They conducted a detailed survey of usage records and treatment facilities. In collaboration with state government agencies, they also conducted surveys concerning hexavalent chromium and free cyanogen contained in topsoil in February 2006 and confirmed that there was no contamination.

Survey of topsoil by Ricoh India

Survey of Soil on the Acquisition of Sites

<Ricoh (Japan)>

On the acquisition of the site for the Ricoh Technology Center, which will function as a design and development base, Ricoh requested the former owner of the site, Hitachi, Ltd., to conduct a soil survey and take appropriate measures. Ricoh confirmed that they were completed in October 2005. The confirmation was based on a survey of the site with the presence of the parties concerned and an examination of a report. According to the survey, "the whole site, including places other than those that might be contaminated, was surveyed" and "research was conducted for substances whose use had not been recorded," which are stricter than legal provisions. This is because Ricoh thought that even substances whose use had not been recorded might have been brought in from the outside during construction work. Based on this experience, in fiscal 2005, the Ricoh Group established rules for conducting surveys and purifying soil that should be followed at the time of purchasing and selling land.

Soil improvement work at the Ricoh Technology Center

Promotion of Purification at Plants where Contamination Is Detected

<Ricoh Optical Industries Co., Ltd. (Japan)>

In April 2004, trichloroethylene contamination was detected at Ricoh Optical Industries Co., Ltd. As an emergency measure, dirt and minute iron powder were mixed in to reduce the contaminant to a nontoxic substance to purify the soil. In November 2005, it was confirmed that the relevant area had been completely purified.

Ricoh Optical Industries' soil purification method

❶ Survey Results of Underground Water Pollution and Purification Efforts at Ricoh Production Sites and the Ricoh Group's Manufacturing Subsidiaries in Japan (As of March 2006)

Business site	Pollutant (Japan's environmental standard)	Survey result	Measures in implementation	Measures implemented
Ricoh Ohmori Office	Cis 12 dichloroethylene (0.04mg/L) Tetrachloroethylene (0.01mg/L) Trichloroethylene (0.03mg/L) Heavy metals, etc.	0.0470mg/L 0.0338mg/L 0.1086mg/L No pollution	• Purification of underground water • Regular monitoring	Soil was removed. The neutralization of gas was completed.
Ricoh Optical Industries	Cis 12 dichloroethylene (0.04mg/L) Tetrachloroethylene (0.01mg/L) Trichloroethylene (0.03mg/L) Lead (0.01mg/L) Arsenic (0.01mg/L)	0.310mg/L 0.569mg/L 0.192mg/L 0.059mg/L 0.011mg/L	• Purification of underground water • Regular monitoring	Purified with a reducing agent to its original position. The lead and arsenic are possibly nature derived (approved by the municipality).
Tohoku Ricoh	Cis 12 dichloroethylene (0.04mg/L) Arsenic (0.01mg/L)	0.006mg/L 0.015mg/L	• Regular monitoring	Soil was removed. The neutralization of gas was completed. The purification of underground water was completed. The arsenic is possibly nature derived (approved by the municipality).
Ricoh Elemex, Okazaki Plant	11-dichloroethylene (0.02mg/L) Cis 12 dichloroethylene (0.04mg/L) Trichloroethylene (0.03mg/L) Cadmium and its compounds (0.01mg/L) Hexavalent chromium compounds (0.05mg/L) Lead and its compounds (0.01mg/L)	0.39mg/L 0.057mg/L 1.5mg/L 0.10mg/L 3.1mg/L 0.005mg/L	• Containment and purification of underground water • Neutralization of gas, Purification of underground water • Regular monitoring	
Ricoh Elemex, Ena Plant	Cis 12 dichloroethylene (0.04mg/L) Trichloroethylene (0.03mg/L) Hexavalent chromium compounds (0.05mg/L) Fluorine and its compounds (0.8mg/L)	0.25mg/L 3.7mg/L 0.16mg/L 0.6mg/L	• Containment and purification of underground water • Neutralization of gas, Purification of underground water • Regular monitoring	
Ricoh Keiki	11-dichloroethylene (0.02mg/L) Heavy metals, etc.	0.027mg/L No pollution	• Purification of underground water • Regular monitoring	Soil was removed.

- As for a list of domestic business sites, including those that do not have any contamination records, please visit our Web site at http://www.ricoh.com/environment/data/index.html
- The areas surrounding all business sites, including the above-mentioned sites, are not affected by pollutants.

❷ Survey Results of Underground Water Pollution and Purification Efforts at the Ricoh Group's Manufacturing Subsidiaries Outside Japan (As of March 2006)

Business site	Pollutant (Japan's environmental standard)	Survey result	Measures in implementation	Measures implemented
Ricoh Electronics Inc., Irvine Plant (U.S.A.)	Cis 12 dichloroethylene Trichloroethylene Tetrachloroethylene Heavy metals, etc.	0.33mg/L 0.36mg/L 16mg/L No pollution	• Purification of underground water • Oxidizer purification test • Regular monitoring	Soil was removed.
Ricoh Industrie France S.A.S. (France)	Tetrachloroethylene	0.378mg/L	• Purification of underground water • Regular monitoring	The neutralization of gas was completed.
Ricoh UK Products Ltd.* (U.K.)	Cis 12 dichloroethylene Trichloroethylene Tetrachloroethylene Vinyl chloride Total petroleum hydrocarbon (TPH): oil Heavy metals, etc.	1.926mg/L 0.184mg/L 7.493mg/L 0.265mg/L 3.261mg/L No pollution	• Regular monitoring	

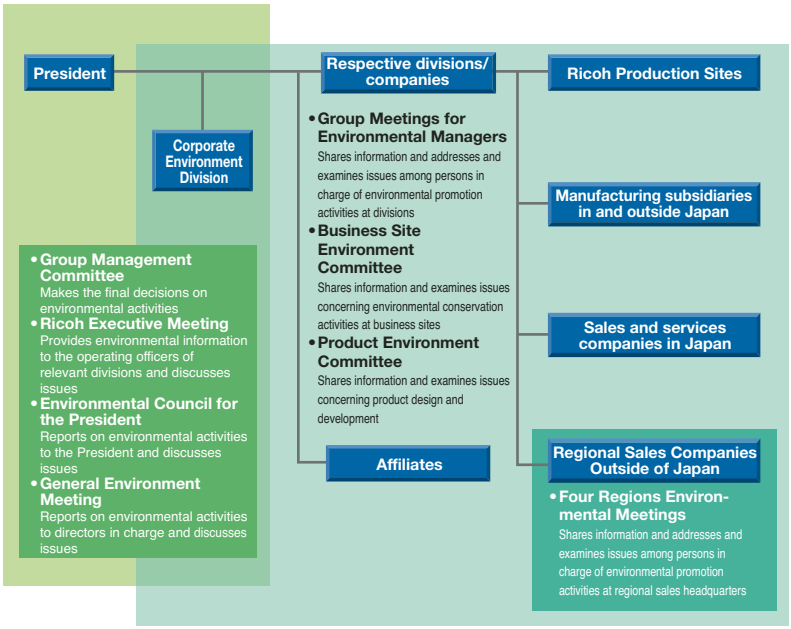
- As for a list of overseas business sites, including those that do not have any contamination records, please visit our Web site at http://www.ricoh.com/environment/data/index.html
- The areas surrounding all business sites, including the above-mentioned sites, are not affected by pollutants.
- Ricoh Wellingborough Products and Tustin, Santa Ana, and Georgia Plants of Ricoh Electronics apply the new standards to conduct research.

* The contamination of underground water was detected in a research conducted at Ricoh UK Products Ltd. in fiscal 2005 in compliance with the new standards.

Ricoh promotes the harmonization of environmental preservation and the operation of business, aiming at the realization of sustainable environmental management.

The Ricoh Group's environmental management system (EMS) is an important tool in facilitating sustainable environmental management on a global scale. A system is established to reflect the environmental action plan set by management in the goals of respective divisions and provide feedback on the results of their actions to management. Under the system, the group as a whole, and each of its business sites and divisions, promotes the plan-do-check-action (PDCA) cycle. Furthermore, based upon the Group-wide Strategic Management by Objectives (SMO), which takes an environmental conservation perspective, the Ricoh Group continually evaluates the performance of respective divisions. Sustainable environmental management will be further promoted by incorporating EMS into the processes of respective businesses.

Organizational Chart for the Ricoh Group's Sustainable Environmental Management System

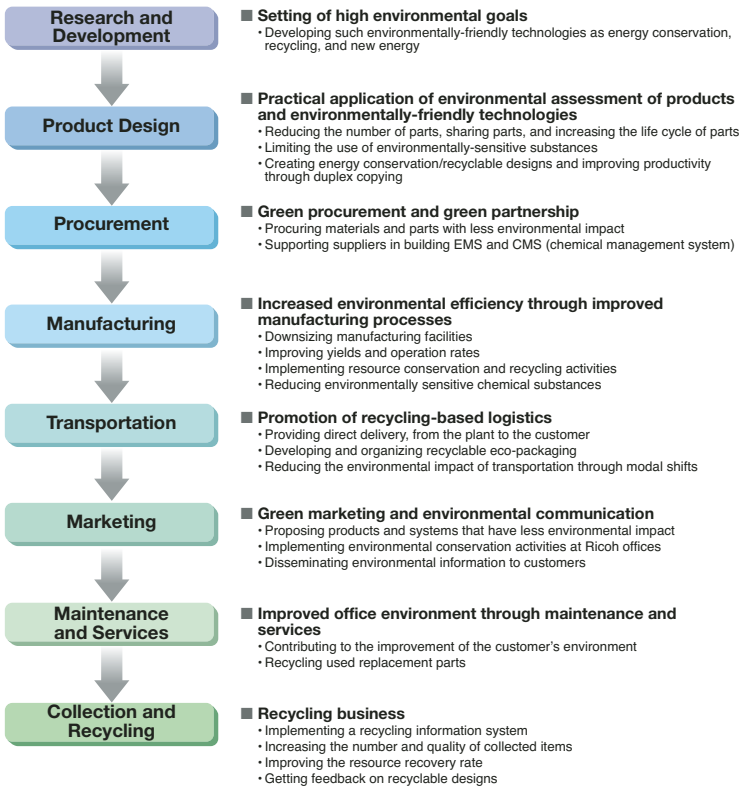


Participatory Approach by All Employees

The Ricoh Group is making an effort to improve sustainable environmental management based on a "all-employee participatory approach." This "all-employee participatory approach" means that all employees in all divisions, such as R&D, product design, materials procurement, manufacturing, transportation, sales, maintenance/services and collection and recycling, participate in environmental activities. These activities are regarded as just as important as "QCD activities,"* which involve pursuing profitability. To improve environmental activities, internal benchmarks and know-how are provided to all employees from time to time to make them more environmentally aware.

* QCD means activities to improve the management of Quality, Cost, and Delivery.

Sustainable Environmental Management Activities Participated in by All Employees

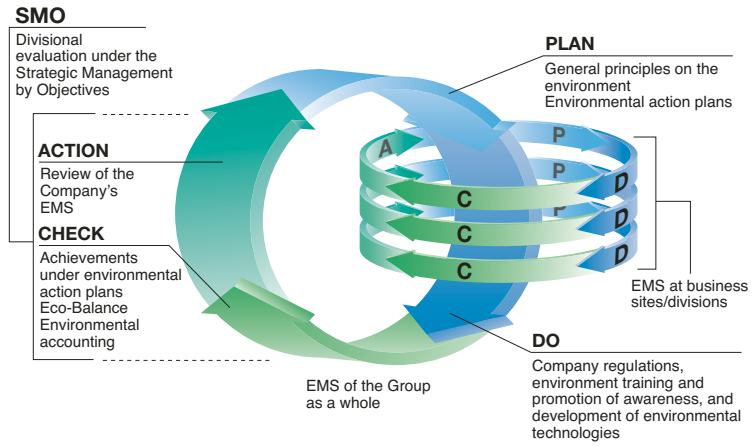


Acquisition of ISO 14001 Certification

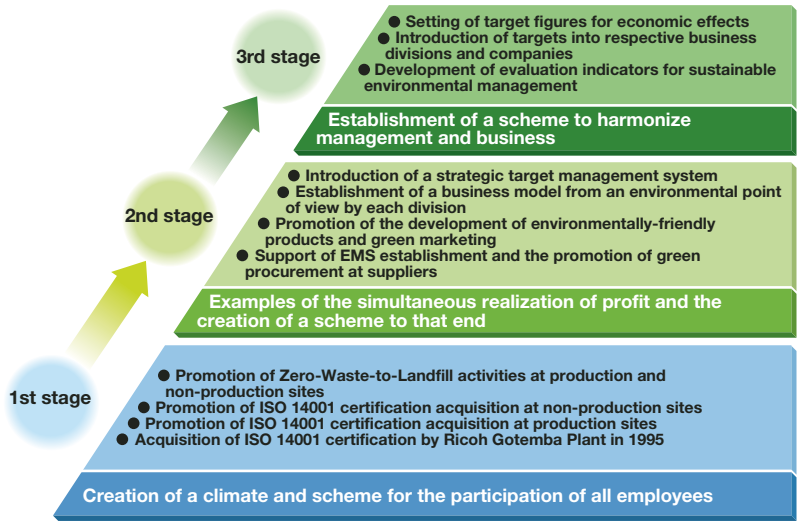
Environmental perspectives need to be incorporated into business to realize sustainable environmental management instead of carrying out business and environmental preservation activities separately. The Ricoh Group has traditionally promoted the acquisition of ISO 14001 certification by each business site and division, aiming to fortify its environmental management system. Starting with Ricoh Gotemba Plant, which received ISO/DIS 14001 certification in 1995, all major Ricoh production sites in the world were ISO 14001 certified as of March 2000. In 2001, the sales group in Japan as a whole was ISO 14001 certified. Sales companies other than those in Japan are also making every effort to acquire ISO 14001 certification. Thus, the Group has promoted the creation of a climate for sustainable environmental management by all employees through the acquisition of ISO 14001 certification. In this climate, the Group carries out various business activities that incorporate environmental viewpoints. At present, the Group is promoting the integration of management systems aiming at further harmonizing business and the environment. The range of system integration is expected to continue expanding in the future.

* For the status of the Ricoh Group's ISO 14001 acquisition, please visit http://www.ricoh.com/environment/base/iso.html.

EMS of the Ricoh Group



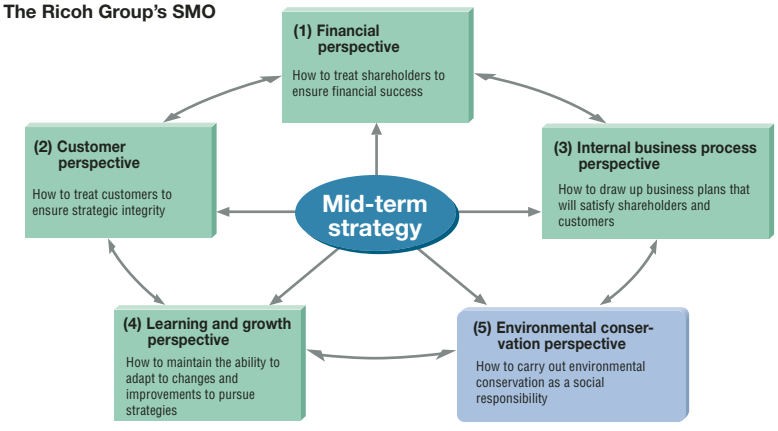
Improvement in the EMS Activity Level



Strategic Management by Objectives (SMO)

Ricoh introduced SMO in 1999 to clarify evaluation standards for environmental conservation activities that are used in divisional performance evaluations. This system is based on the Balanced Scorecard system, a performance management system developed in the 1990s in the United States and characterized by the use of four perspectives. Ricoh has added a specific environmental conservation perspective to the system and is promoting SMO for global sustainable environmental management.

The Ricoh Group's SMO



The Sustainable Environmental Management Information System supports the decision-making process concerning sustainable environmental management and promotes environmentally-friendly design.

The Sustainable Environmental Management Information System is designed to identify and promote the progress of sustainable environmental management. The system utilizes the Environmental Impact Information System to collect and process data about environmental impact and the Environmental Accounting System to collect and process data on environmental costs and effects. The collected data are processed and analyzed to identify the Eco Balance[1] of overall operations; draw up environmental action plans[2]; support decision-making in sustainable environmental management; promote environmentally-friendly design[3]; improve activities by each division; process Corporate Environmental Accounting[4]; and disclose information to the public.

1. See page 53. 2. See page 15.
3. See page 19. 4. See page 57.

Environmental Impact Information System

This system collects and processes data on environmental impact caused by each operational process, including procurement, design, manufacturing, transportation/sales, use, maintenance/services, and collection/recycling, as well as by overall operations. Besides identifying the environmental impact of overall operations, the system automatically collects environmental data from the operational flow of each process, and such data is used to support PDCA in environmental improvement activities carried out at each process. In fiscal 2005, efforts were made to improve the system so that it can be used more easily for data analyses and improvement activities as well as for the expansion of the items and range of collected data and improvement in precision.

Environmental Accounting System

This system enables "Corporate Environmental Accounting" in a timely manner by collecting data on environmental conservation effects obtained from the Environmental Impact Information System and environmental cost data obtained from the accounting system, and processing this into sustainable environmental management indicators.*

*See page 56.

Sustainable Environmental Management Information System

Environmental Impact Information System

Procurement

This system promotes green procurement in accordance with environmental action plans and information on laws and regulations. The system collects information on weight, component substances, and chemical substances in raw materials and parts by utilizing a network of suppliers. In fiscal 2005, this system was completed at the digital printer division of Tohoku Ricoh.

Design

This is a system to select the most suitable materials and parts from the viewpoint of environmental conservation and costs in order to promote environmentally-friendly design. This CAD system works in tandem with the procurement management system and the chemical substance management system.

Manufacturing

This system identifies the environmental impact caused by operations. It collects data on power consumption, the quantity of chemical substances used, CO_2 emissions, and waste discharged by all offices and sites, including production sites and non-production sites, such as Ricoh Head Office. In fiscal 2005, Ricoh Printing Systems completed the building of this system.

Transportation/Sales

This system collects data on power consumption as well as the amount of gasoline used and waste generated in order to reduce the environmental impact caused by logistics sites, transportation processes, and sales sites. The collected data are used to support the PDCA cycle of EMS at each site. In fiscal 2005, we undertook the establishment of the system between overseas logistics sites.

Use

This is a system to share data about environmental performances by product (power consumption, duplex copying productivity, recyclable design, etc.) and use such data for environmentally-friendly design and information disclosure in catalogs. This system compiles environmental impact information by product based on design data.

Maintenance/Services

This is a system to identify and analyze environmental impact caused by maintenance work on products. This system collects related information from the database of product maintenance records and the database of power and gasoline consumed in the maintenance sites.

Collection/Recycling

This system provides an information infrastructure to utilize plans that were prepared at the design stage for the reuse or recycling of collected products and to store detailed information on the resource recovery process.

Data to process information collected

• Number of units produced (by process) • Weight of products • Value of sales
• Allocation information (relations between divisions/facilities and products)

Environmental impact information

Integrated database

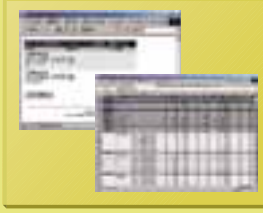
Environmental accounting informationn

Analysis of information

Processing of information

Information needed for promoting PDCA (Plan-Do-Check-Action)* is output.

*See page 49.



Identifying Eco Balance

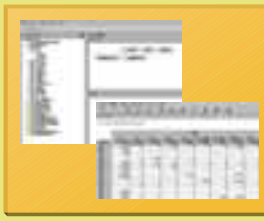
Using a sustainable environmental management information system, we collect extensive and diversified data covering all the operations of the Ricoh Group, allowing us to calculate the integrated environmental impact to determine the eco balance.

See page 53.

Preparing and Managing Environmental Action Plans

An action plan is drawn up based on the integrated environmental impact calculated by the sustainable environmental management information system. Reduction targets are also established in the plan. We identify problems and take actions to address them as soon as possible, by introducing automatic aggregation, continuously monitoring the results, and improving the precision of the data colleted in each process.

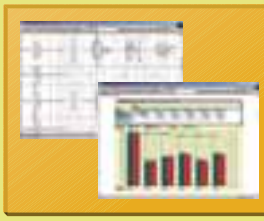
See page 15.



Sustainable Environmental Management Indicator

The cost effectiveness of our environmental improvement activities is calculated and used as an indicator to help promote sustainable environmental management.

See page 56.



Environmentally-Friendly Design

The sustainable environmental management information system is used together with our product lifecycle management tool to enable designers to incorporate environmental performance into product design in areas such as energy/resource conservation, the controlling of chemical substances, and LCA design.

See page 19.

Environmental Accounting System

Accounting System

A space to enter the environmental accounting code was added to the accounting system to determine the cost of environmental conservation. Using information compiled on a daily and hourly basis makes it possible to calculate the cost of environmental conservation.

Environmental expenses

Environmental capital investment

Aggregate Database of Environment Accounting

Data on the economic benefits of environmental conservation activities and the environmental conservation costs/economic benefits for each company in the Ricoh Group are input to the aggregate database of environmental accounting on a quarterly or biannual basis to calculate these figures every six months.

Eco Balance (Identifying Environmental Impact and Target Setting)

The Eco Balance data on environmental impact caused by overall business activities are utilized for establishing long-term targets and environmental action plans.

To effectively reduce the impact of processes with a larger environmental impact on a priority basis, the Ricoh Group identifies the environmental impact of overall business activities and per process using Eco Balance.[1] Eco Balance shows the numerical data of all environmental impact caused by business activities, such as effects on human health, resource depletion and effects on the ecosystem. These numerical data were obtained by applying the integrated analysis method[2] of the data collected by the Sustainable Environmental Management Information System.[3] Based on the evaluation of the "integrated environmental impact" that was identified by "the Eco Balance", "the Year 2010 Long-Term Environmental Goals"[4] and "the Environmental Action Plan"[5] are established.

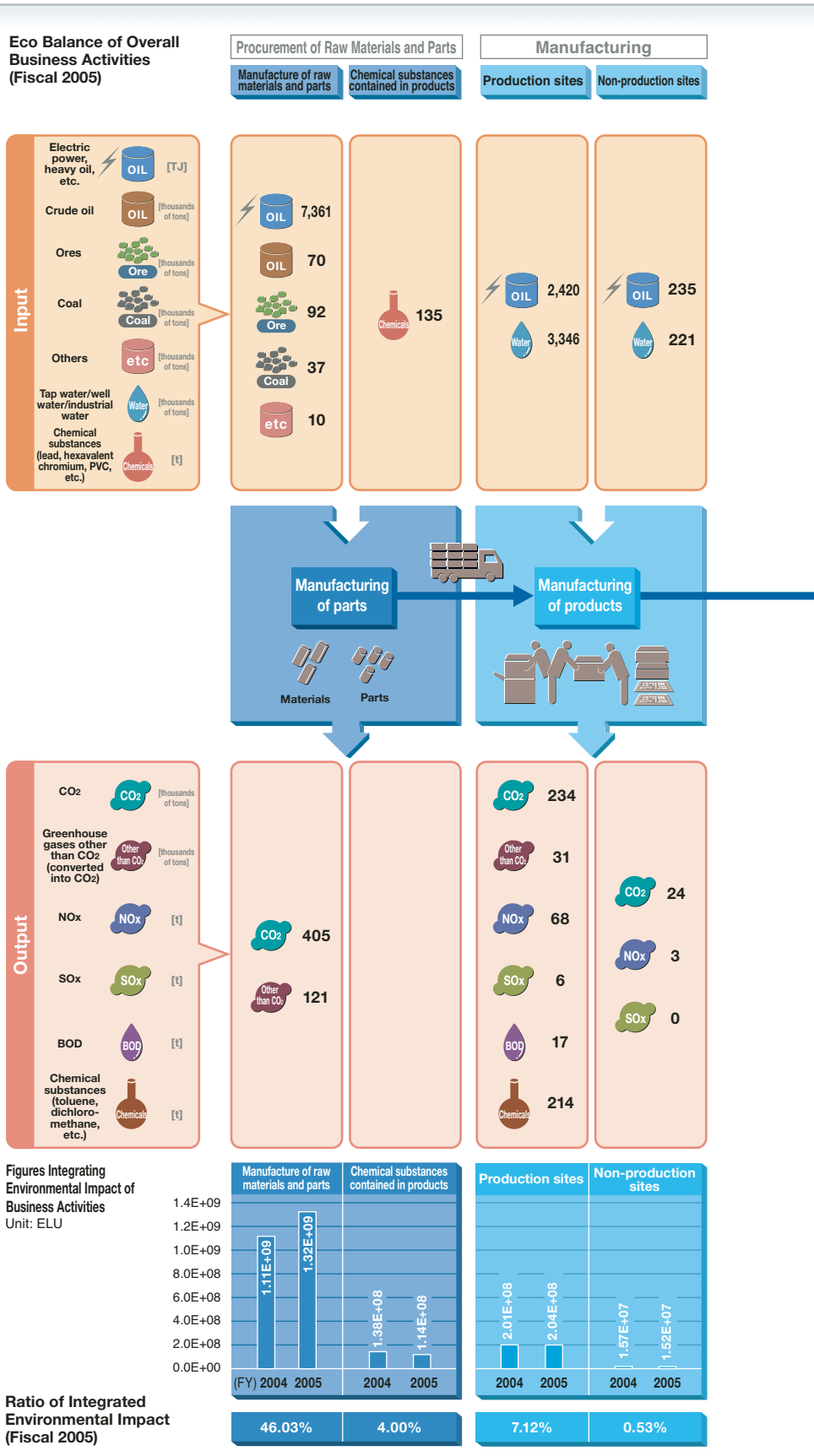
1. Eco Balance means the preparation of a list of input and output data on environmental impact to identify, quantitatively measure, and report environmental impact caused by companies; or such a list itself.
2. Environmental Priority Strategies for Product Design (EPS), developed by the Swedish Environmental Research Institute (IVL) to calculate LCA of products, is used in calculating the Eco Balance of business activities. Under EPS, damage caused by environmental impact on human health, the ecosystem, non-living resources, and biodiversity is converted into financial values using ELU (Environmental Load Unit) as unified indicators (CO_2=0.108 ELU/kg, NOx=2.13 ELU/kg, SOx=3.27 ELU/kg, BOD=0.002 ELU/kg, etc.).

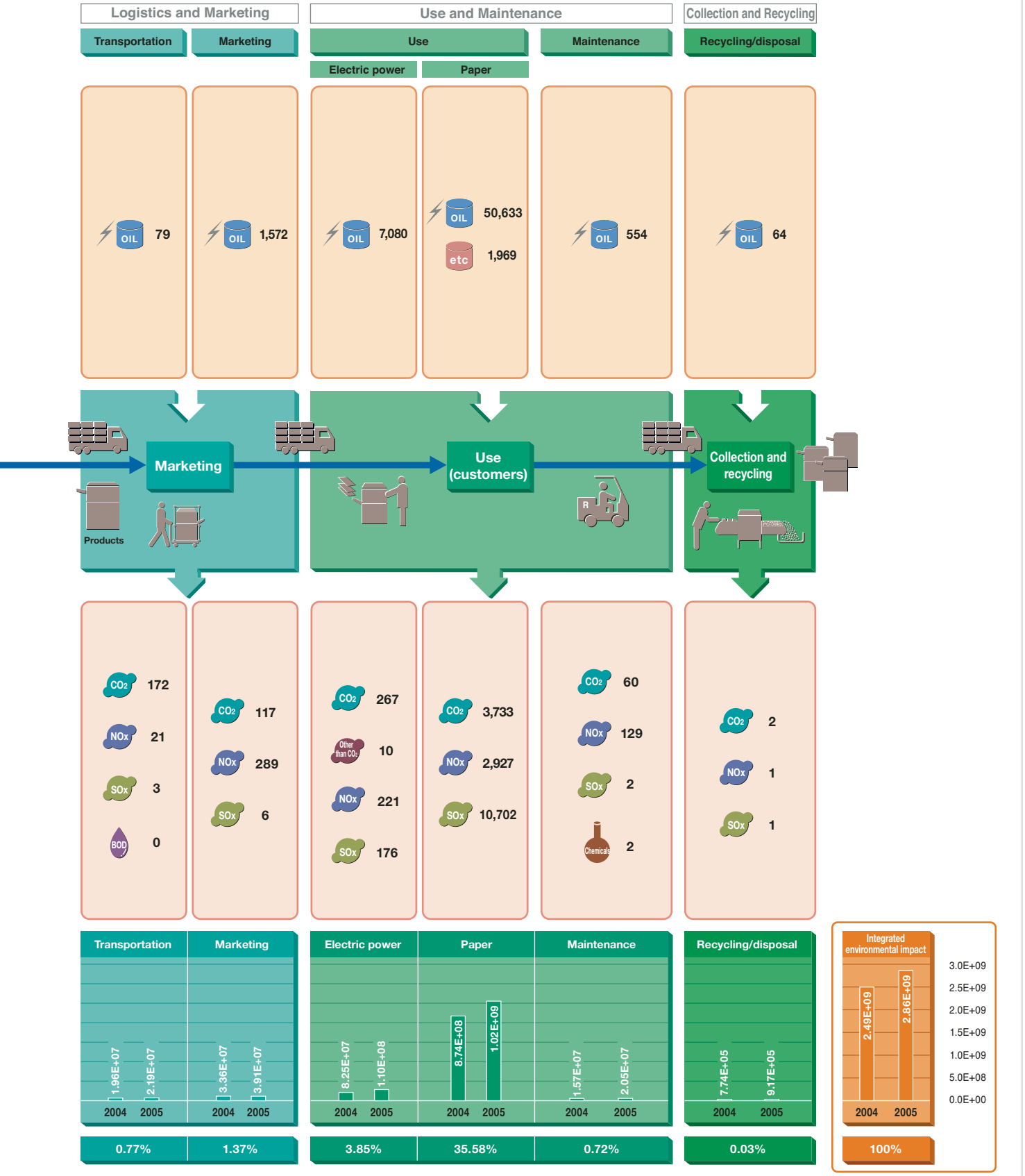
3. See page 51. 4. See page 15. 5. See page 17.

● Review of Fiscal 2005

As a result of the growth of our business activities, the integrated environmental impact produced by the entire Ricoh Group increased from that in the previous year. Major causes of this increase were (1) the investment of resources due to higher sales of color copiers and (2) greater electricity and paper consumption by customers. On the other hand, environmentally-sensitive substances contained in products (lead, hexavalent chromium, etc.) decreased further while an increase in the integrated environmental impact at production sites was controlled more effectively. As in the previous fiscal year, data related to products were collected in imaging system production business in Japan and overseas and the measuring instrument business.

* In response to that which was indicated in a third-party review by BVQI, evaluation results for fiscal 2004 have been modified. The figures for overseas sales and maintenance processes are estimates.





"E+n" means "× 10^n"
(Example) 1.45E+08 = 1.45 × 10^8

We aim to establish an environmental accounting system to evaluate sustainable environmental management and support managerial decision making.

Thanks to its environmental accounting system, which was disclosed for the first time in 1999, the Ricoh Group has built up a good reputation. However, it is necessary to further improve this environmental accounting system as a managerial decision-making tool. We will utilize the Segment Environmental Accounting and Business Sector Environmental Accounting as internal accounting tools as well as Corporate Environmental Accounting, to promote sustainable environmental management. We will further upgrade the system so that it can be used in mapping out environmental action plans, selecting measures, and confirming achievements.

Utilization of Environmental Accounting

Environmental accounting is used to determine measures to promote sustainable environmental management.
Reducing environmental impact using measures that will lead to the creation of benefits is crucial to promoting sustainable environmental management. The Ricoh Group uses environmental accounting to determine what measures should be taken for what processes and for what operations so that the maximum effect can be obtained. Therefore, we first identify those processes that have a high environmental impact in business operations, based on the Eco Balance*. We examine a number of improvement plans to reduce the identified environmental impact, in consideration of developments in society and laws/regulations and competition. Then, using segment environmental accounting, we assess the effectiveness of each possible approach and decide what methods should be adopted to gain the best results.

*See page 53.

INTERVIEW

Employee Interview | Environmental Accounting Useful in Decision Making in Sustainable Environmental Management

We will strive to link environmental accounting and the environmental action plan and use them as a tool to promote sustainable environmental management.

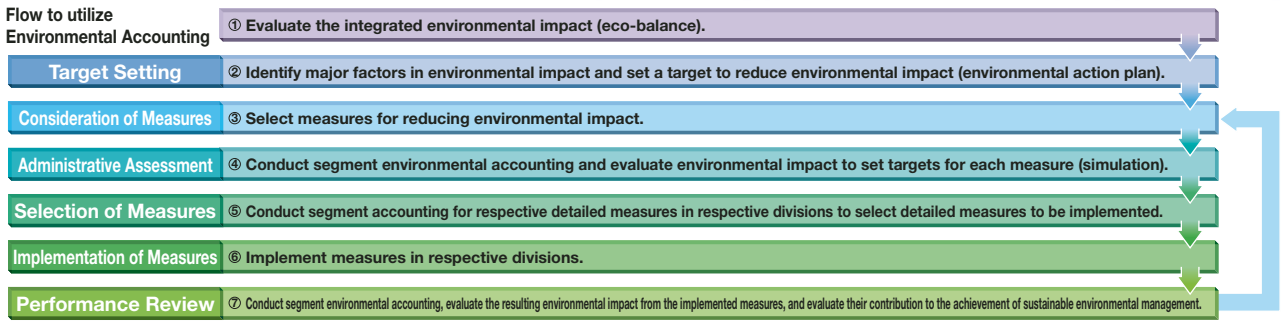
Keiichi Ikebe
Sustainable Environment Strategy Office, Corporate Environment Division

The tool will be used to understand how far the environmental action plan has been realized and to map out a new plan.

The Ricoh Group has an extra-long-term environmental vision to reduce environmental impact generated by all businesses of the Group to one-eighth in terms of absolute value by 2050. We are striving to achieve this target by improving the level of sustainable environmental management. Improvements in the sustainable environmental management level mean that environmental impact is reduced while economic effects are enhanced as a result of promoting environmental conservation activities. So far, we have used environmental accounting as a tool to ascertain the consequential cost-effectiveness of activities, including those that save energy and promote recycling. When mapping out the environmental action plan, which was to start from fiscal 2005, we ran a simulation of the reduction in environmental impact and the creation of profit compared with the costs of each measure to be implemented. We are currently trying to determine the actual results. This will allow us to see even more clearly how far environmental conservation and profit creation are simultaneously realized, and we will be able to promote our activities.

To upgrade environmental accounting into a tool that can be used to promote sustainable environmental management for the entire business as well as at company level

The Ricoh Group is engaged in a variety of business categories. Processes that have a large environmental impact differ according to business category. For example, it is known that resources and energy used in manufacturing are large in the thermal business, including the production of thermal paper. Indicators that are appropriate when measuring sustainable environmental management differ among business categories. In the future, we will promote discussions on indicators that are appropriate to respective sectors other than the thermal business.



Corporate Environmental Accounting

This is a tool to inform the public of relevant information compiled in accordance with the Environmental Accounting Guidelines of Japan's Ministry of the Environment. The Ricoh Group takes the necessary portion from the Eco Balance data, and calculates the cost and effect (in quantity and monetary value) of its environmental conservation activities based on its own formulas and indicators. The calculated results are disclosed to the public after being verified by a third party organization. We will continue to improve the accuracy of the information to be disclosed and will make a positive effort to make it comparable to already standardized documents, such as financial statements.

Segment Environmental Accounting

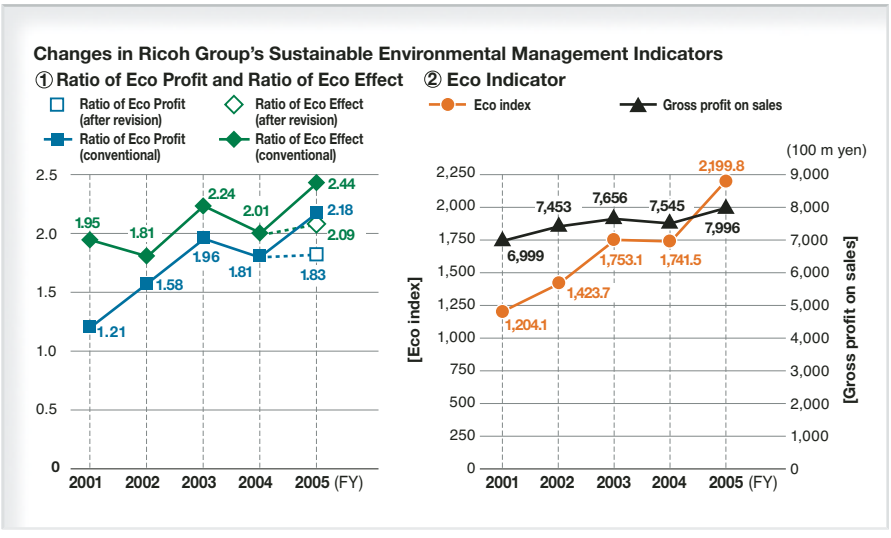
This is an internal environmental accounting tool to select an investment activity, or a project, related to environmental conservation from among all processes of operations, and to evaluate environmental effects for a certain period. The effect of investment on environmental conservation will be calculated based on the concept of "Return on Investment" (ROI). The calculation result is used internally for decision making in sustainable environmental management. Ricoh Group companies and divisions, such as its recycling business division, increasingly utilize segment environmental accounting for their operations.

Business Sector Environmental Accounting

The Ricoh Group engages in environmental activities in many business sectors. This is an indicator of how such environmental activities contribute to environmental management conditions in respective business sectors. Because the properties of operations differ by business sector, we have repeatedly discussed which indicator would be appropriate for a given sector.

Review of Corporate Environmental Accounting for Fiscal 2005

During the fiscal year, we reconsidered our method of calculating incidental effects because it became apparent that the conventional method could cause an overestimation. "Ratio of Eco Profit" and "Ratio of Eco Effect," indicators of the cost-effectiveness of sustainable environmental management activities, have been calculated using a new calculation method (see the dashed lines in graph ①). The results obtained under the conventional method improved from those for fiscal 2004 (see the solid lines in graph ①). We will basically use the new method in the future. The Eco Index, which indicates the level of sustainable environmental management for the entire business, considerably improved in fiscal 2005 from fiscal 2004 thanks to significant decreases in the final waste disposal amount and emissions of chemical substances subject to PRTR as well as an increase in gross profit on sales (see graph ②). Corporate environmental accounting data show that upstream and downstream costs decreased while administration costs increased. As for economic effects, those from sales of recycled products have grown significantly. On the other hand, environmental conservation effects could not offset increases in CO_2 and NOx, which reflected the growth of the business, although the Ricoh Group as a whole is striving to improve its manufacturing processes, aiming to save energy and resources. We, however, succeeded in reducing the final waste disposal amount and emissions of chemical substances subject to PRTR, which allowed us to reduce social costs significantly from fiscal 2004. Also, environmental impact of the Ricoh Group as a whole fell 16%. In the future, we will endeavor to reduce environmental impact to a further degree and promote efforts toward the realization of sustainable environmental management.



Ricoh Group's Sustainable Environmental Management Indicators (Fiscal 2005)

Sustainable environmental management indicators	Results in fiscal 2005	Calculation formula
REP : Ratio of Eco Profit	1.83*	Total economic benefit (29.27) /Total environmental conservation cost (15.98)
REE : Ratio of Eco Effect	2.09*	{Total economic benefit (29.27) + Amount of reduction in social costs (1.16+2.90)}/Total environmental conservation cost (15.98)
Eco Index	2,199.8	Gross profit on sales (¥799,600,000 thousand) /Total environmental impact (363,491)
RPS : Ratio of Profit to Social cost	150.6	Gross profit on sales (799.6) /Total social cost (5.31)

* Represents results after the revision to the method of calculating incidental effects

* Monetary units are indicated in billions of yen unless otherwise indicated.

Ricoh Group's Corporate Environmental Accounting in fiscal 2005

Environmental conservation costs are classified according to "Categories corresponding to business activities" defined in the "Environmental Accounting Guidelines 2005" of the Ministry of the Environment.

Costs refer to expenditure on environmental conservation activities (in a broad sense), and consist of environmental investments and environmental costs (in a narrow sense).

● Environmental investments
These investments correspond to "investments in fixed assets" in financial accounting. The amount of environmental investments is distributed as environmental costs over the service life of fixed assets in accordance with depreciation procedures.

● Environmental costs
These environmental costs correspond to the "period cost" in financial accounting. (Depreciation cost of environmental investments is included.)

Cost unit: ¥100 million (Exchange rate: $1 = ¥113.26 €1 = ¥137.86)

Item	Costs			Economic Benefits		
	Environmental Investments	Environmental Costs	Main Costs	Monetary Effects	Category	Item
Business area costs	7.2	23.3	Pollution prevention cost ····· ¥490 million Global environmental conservation cost ····· ¥770 million Resource circulation cost ····¥1,070 million	5.8	a	Energy savings and improved waste processing efficiency
				50.5	b	Contribution to value-added production
				11.3*	c	Avoidance of risk in restoring environments and avoidance of lawsuits
Upstream/ Downstream costs	0.1	59.9	Cost of collecting products, turning recycled materials into saleable products, and so forth	147.1	a	Sales of recycled products, etc.
				[25.3]	S	Reduction in society's waste disposal cost
Administration costs	0.6	45.7	Cost generated by the division in charge of environmental conservation; cost to establish and maintain an environmental management system	13.9	b	Effects of media coverage and environmental education
Research and development costs	2.3	23.1	Research and development costs for environmental impact reduction	54.3	a	Contribution to gross margin through environmental research and development
				[3.7]	S	Reduction in user's electricity expenses thanks to an improved energy saving function and product performance
Social activity costs	0.0	6.4	Costs of preparing environmental reports and advertisements	9.9	b	Publicity from environmental advertisements, etc.
Environmental remediation costs	0.3	1.5	Costs of restoring soil and environment-related reconciliation	—	—	None
Other costs	0.0	0.0	Other costs for environmental conservation			
Total	10.5	159.8		292.7	Sum of a: 207.1, b: 74.3, and c: 11.3.	
				29.0	Total S's	

a: Substantial effect
b: Expected effect
c: Incidental effect
S: Social effect (Customer benefits)

- **Environmental investment rate: 2.6%**
  [= environmental investment (10.5)/total investment (400.7)]
- **Environmental R&D cost rate: 2.1%.**
  [= Total environmental R&D cost (23.1) /Total R&D cost (1,103)]

* Represents results after the revision to the method of calculating incidental effects

Economic benefits refer to benefits that were obtained by environmental conservation activities and which contributed to the profits of the Ricoh Group in some form. Economic benefits are classified into four categories as follows:

● Substantial effect (a)
This means economic benefits that fall into either of the following two cases:

1) Cash or cash equivalent is received as a benefit. This corresponds to "realized gain" in financial accounting.
2) The amount of savings in such costs that would have occurred if environmental conservation activities had not been conducted. This amount is not recognized in financial accounting.

● Expected effect (b)
The expected amount of contribution in the case that expenditure on environmental conservation activities is assumed to have contributed to profits for the Ricoh Group. If environmental conservation costs are assumed to be costs that are indispensable for the Ricoh Group to conduct its operations, for example, it can be safely said that such cost contributed to profit in some form. In practice, the expected effect is computed by a certain formula for each item.

● Incidental effect (c)
Expenditure on environmental conservation activities can help avoid the occurrence of environmental impact. Therefore, it can be safely said that the expenditure contributed to the avoidance of such damage of environmental impact that would have taken place without the expenditure. In practice, the incidental effect is computed by multiplying the expected amount of damage by an occurrence coefficient and impact coefficient.

● Social effect (S)
Social effect means such effect that is generated by expenditure on environmental conservation activities not for the Ricoh Group but for society. In practice, social effect means the amount of reduction in the expense of electric power and waste disposition that is enabled through environmentally-friendly products for customers.

* For the computation formulas, see page on the right.

Effect on environmental conservation means the effect of activities to prevent and control the occurrence of environmental impact and to eliminate and remove such environmental impact. The Ricoh Group reports the amount of reduction in the emission of substances with serious environmental impact for the current year as compared with the previous year (=emissions in the previous year – emissions in the current year).

● Conversion Coefficient
This is a weighting coefficient that is used in identifying environmental impact by totaling and weighting various types of environmental impact expressed in different units (CO_2 = 1). Values of coefficients are based on the Swedish EPS method.

● Converted Quantity of Reduction/Converted Quantity of Impact
Converted quantity of reduction is obtained by multiplying environmental impact reduction by conversion coefficients and converted quantity of impact by multiplying total environmental impact by the coefficients. In other words, these values refer to the degree of seriousness of such environmental impact reduction and total environmental impact that are converted into figures in t-CO_2.

● Social Cost Reduction Values/Social Costs
Social cost reduction values represent financial figures obtained by converting the converted quantity of reduction into money and social costs by converting the converted value of impact into money. Computations are made using the factor of 108 Euro/t-CO_2 of EPS Ver2000.

This is the quantity of substances with environmental impact emitted by the Ricoh Group in the current fiscal year.

Effect on Environmental Conservation				Environmental Impact			
Environmental Impact Reduction (t)	Conversion Coefficient	Converted Quantity of Reduction	Social Cost Reduction Values	Total (t)	Conversion Coefficient	Converted Quantity of Impact	Social Costs
Environmental impact reduction at business sites							
CO_2 ..... –4,850.2	1.0	–4,850	–0.72	CO_2 304,049	1.0	304,049	44.41
NO_x ..... –1.3	19.7	–27	–0.00	NO_x 173	19.7	3,411	0.50
SO_x 0.6	30.3	19	0.00	SO_x 9	30.3	270	0.04
BOD 3.2	0.02	0.1	0.00	BOD 6	0.02	0	0.00
Final waste disposal amount 549.1	104.0	57,108	8.50	Final waste disposal amount 292	104.0	30,360	4.43
PRTR substance emissions ..... (Ricoh standards per substance)		25,438	3.79	PRTR substance emissions ..... (Ricoh standards per substance)		25,401	3.71
Environmental impact reduction through products CO_2 ..... 5,733.9 (t) NO_x ..... 4.7 (t) SO_x ..... 3.7 (t) Final waste disposal amount ··· 31,660 (t) Calculation for companies in Japan only							
		77,688	11.56			363,491	53.10

Data coverage
- **Companies: 90 Ricoh Group companies.** See page 74.
- **Period: From April 1, 2005 to March 31, 2006 (for costs and total environmental impact).**

* Social cost is calculated using the factor of 108 Euro/t-CO_2 (14,889 yen/t-CO_2).

* Environmental impact reduction represents the difference between figures in fiscal 2004 and fiscal 2005.

(1) Formula of Substantial Effect

Reduction in heat, light, and water cost	Heat, light, and water expenses in the previous year – heat, light, and water expense in the current year
Reduction in waste disposal cost	Waste disposal expenses in the previous year – waste disposal expenses in the current year
Sales value of valuable materials	Sales value of valuable materials sorted from waste
Sales of recycled products and parts	Sales of recycled products and parts
Subsidies	Environmental subsidies from the government, etc.
R&D profit contribution amount	Product gross margin × gross margin contribution rate calculated using environmentally-friendly points

(2) Formula of Expected Effects

Contribution to value-added production	(Production output – raw material costs) × business area cost/manufacturing costs
Effects on media coverage	Area of newspaper advertisement/newspaper page area × advertisement cost per page
Effects of environmental education	Number of people attending internal environmental education seminars × seminar fee for outside participants
Publicity from environmental advertisements	Number of visitors to environmental Web site × unit price of the sustainability report

(3) Formula of Incidental Effects

Amount of incidental effects	Standard amount × occurrence coefficient × impact coefficient
Items to be calculated	Areas of improvement to prevent pollution
Standard amount	Amount set aside for lawsuits, suspension of operations, and restoration
Coefficient	Occurrence coefficient and impact coefficient to be set according to occurrence frequency and affected extent

(4) Formula of Social Effects (customers' economic benefits from using products)

Total electric power	Electric power consumption of a product × number of products sold
Electric power cost reduction effect	(Total electric power for old models – total electric power for new models) × electric power unit cost
Waste disposal cost reduction effect	(Weight of collected products – weight of final waste) × outside disposal unit cost

We have organized green partnerships to continue to promote effective environmental conservation.

To promote effective environmental conservation, it is important to make an effort in reducing the environmental impact caused by "overall operations" through partnerships with suppliers and customers. For this purpose, it is necessary to establish, maintain, and improve partnerships that are beneficial to all parties. To contribute to the creation of a sustainable recycle-oriented society, we regard all parties involved in the operations of the Ricoh Group as green partners, and we, together with these green partners, are promoting effective environmental conservation.

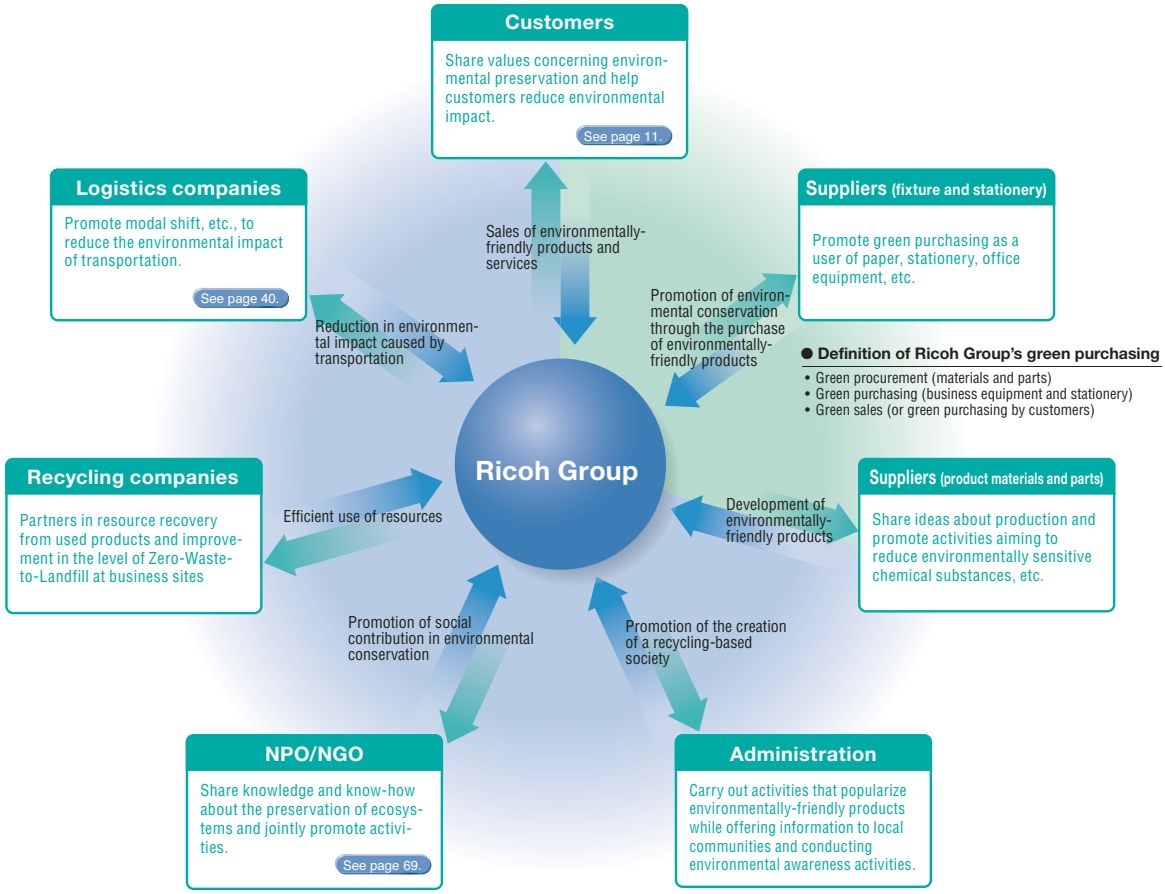
Supporting Administrative Organizations through the Construction of Parks

<Ricoh Asia Pacific Pte. Ltd. (Singapore)>

In October 2005, Tanjong Pagar Ricoh Park opened at the entrance of Tanjong Pagar Station on the Singapore subway line (MRT). The park was constructed jointly by Ricoh Asia Pacific Pte. Ltd. (RA), or Ricoh's Asia-Pacific Regional Sales Headquarters, and Singapore's National Park Bureau. In response to an appeal by the Singaporean government to plant trees in major parks in business districts and make them places where working people can relax, RA shouldered some of the construction costs as part of its environmental and social contribution. Bougainvilleas, heliconias, and so forth were planted in the park. Also in the park are 20 benches made from used and recycled Ricoh toner cartridges.

Opening ceremony of Ricoh Park

Ricoh Group's Green Partnerships



INTERVIEW

Supplier Interview | **Triple A Containers**

Achieved Zero-Waste-to-Landfill thanks to support from Ricoh Electronics
We will endeavor to spread the Zero-Waste-to-Landfill concept throughout the local community and to our suppliers

The California Plant of Ricoh Electronics, Inc. (REI), Ricoh's manufacturing subsidiary in the United States, supports suppliers' Zero-Waste-to-Landfill activities as part of its efforts to improve Ricoh's brand value through environmental preservation. We interviewed Triple A Containers, which supplies us with packing materials for our copiers and other products. The company has been awarded a proclamation from the mayor of Cerritos for achieving Zero-Waste-to-Landfill.

Waste separation center at a factory

Mr. Brad McCroskey (Left)
President & CEO of Triple A Containers, Inc.

Arthur G. Molina (Right)
Senior buyer in the Procurement Department of Ricoh Electronics, Inc., who supported Zero-Waste-to-Landfill at the company

5R activities and employee awareness through REI know-how

California is an environmentally advanced state, but the concept of Zero-Waste-to-Landfill has not yet spread to the general public. It was in March 2001, when REI achieved Zero-Waste-to-Landfill, that I became aware of the concept. However, it was only in April 2005 that I became acutely aware of the importance of Zero-Waste-to-Landfill and started to take full scale action. In addition to learning about the 5Rs* in promoting Zero-Waste-to-Landfill and methods of establishing processes from REI, I formulated environmental policies, founded a waste separation center, and selected recycling companies. We made a particularly special effort to create awareness among our employees. By fostering a deeper understanding of waste separation and waste separation methods, we can be more environmentally friendly not only in the office but also at home.

* The Ricoh Group strives to improve its level of Zero-Waste-to-Landfill based on the 5Rs (refuse, return, reduce, reuse, and recycle).

Zero-Waste-to-Landfill activities attract the attention of customers and the community

We strive for Zero-Waste-to-Landfill, regarding it as one of our corporate tasks [responsibilities], and it has been proven to be economically effective. In the five months since we achieved Zero-Waste-to-Landfill in August, our costs fell $60,000. Our efforts in this endeavor also resulted in improving the manners of our employees. Our activities have attracted the attention of customers and the administrative organizations of the city of Cerritos. In addition, we gave a presentation on Zero-Waste-to-Landfill in February to seven companies in Florida that are in our same industry. We intend to improve the level of such activities while introducing them into the local community as well as to our business partners.

Supporting Activities to Reduce CO_2 Generated by Suppliers

<Ricoh (Japan)>

Ricoh works on sustainable environmental management in close cooperation with suppliers, promoting green procurement and establishing EMS at suppliers. Since 2004, Ricoh has supported the establishment of chemical substance management systems at suppliers, and by the end of March 2006 it had completed certifying 728 suppliers (1,669 sites) worldwide.

In addition, Ricoh started supporting suppliers in their efforts to reduce CO_2 in 2005. Ricoh aims to reduce environmental impact generated by its business activities as a whole. Raw materials and part procurement processes in particular account for approximately half of the total environmental impact, and therefore, it is an urgent task to take active measures to reduce such impact in close cooperation with suppliers.

As the first step in reducing CO_2, Ricoh established and verified calculation standards to numerically express CO_2 emitted in part production processes at suppliers. At the second stage, a scheme to accumulate concrete reduction know-how about process improvement and share such know-how among different industries is being established. In fiscal 2006, Ricoh intends to prepare, develop, and offer a tool for its suppliers to calculate CO_2 independently, which can be used effectively in improvement activities.

In and after fiscal 2008, Ricoh will request supplier companies to set numerical targets for CO_2 reduction so that their sustainable environmental management can be moved a step forward as well as to further promote their activities.

We are conducting awareness-building activities for our employees so that they can perform duties as global citizens and promote their individual sustainable environmental management.

To make all-employee participatory sustainable environmental management really effective, not only is the commitment of senior management and the active efforts of all divisions essential, but so is the awareness building of employees. Although sustainable environmental management concerns corporate activities, these activities are the accumulation of the actions of individual employees. The Ricoh Group has about 76,000 employees throughout the world. The results of sustainable environmental management will widely differ depending on the awareness of individual employees. Therefore, we are conducting education and awareness building activities for our employees so that they may grow as "global citizens," "employees of the Ricoh Group," and "specialists in promoting sustainable environmental management."

Employee Education and Divisional Education

Improvement in Employee Awareness and Promotion of Sustainable Environmental Management through the Earth Connection Tour

<Ricoh Electronics, Inc. (United States)>

Ricoh Electronics, Inc. (REI), a manufacturing subsidiary in the United States, is conducting an "Earth Connection Tour," aiming to improve its staff's awareness of the necessity to harmonize business, people, and the earth and promote sustainable environmental management continuously. The tour offers opportunities to visit sites that conduct improvement activities that contribute to sustainable environmental management for mutual learning and the horizontal expansion of such activities. During the tour, those who proposed improvements to reduce cost and environmental impact caused by electricity, CO_2, paper, water, waste, etc., in respective fields present their achievements to managers, including presidents who visit the site, so that their activities can be directly evaluated. Managers who participated in the tour will promote the horizontal development of the examples in respective divisions. REI conducts the Earth Connection Tour six times a year. Outstanding cases will be automatically eligible for the Ricoh Group Sustainable Development Award,* the Ricoh Group's global awarding system. REI encourages staff and respective divisions to engage in environmental activities by appropriately appreciating those who have contributed to sustainable environmental management. *See page 62.

REI staff member presenting achievements

Implementation of the Ricoh Group Environmental Awareness Survey

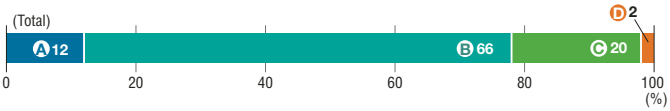
<Ricoh Group (Japan)>

The environmental awareness of each staff member is important to realize sustainable environmental management. The Ricoh Group defines high environmental awareness as knowledge of the environment and participation in environmental activities. The Ricoh Group conducts environmental awareness activities and education to foster staff who can spontaneously incorporate environmental viewpoints into their own business activities. In September 2005, the Group conducted an environmental awareness survey of Group staff in Japan, aiming to develop more effective measures. The conditions of each job type and division were analyzed, and the survey results will be reflected in future educational measures and the formation of curricula.

Survey Questions (excerpt)

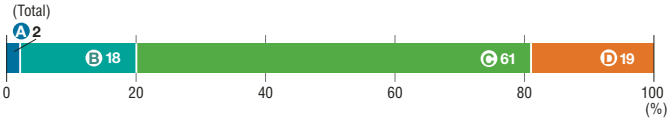
❶ How far do you understand the phrase sustainable environmental management? Give concrete examples.

Ⓐ I understand it sufficiently and can explain it to others.
Ⓑ I understand most of it but cannot explain it to others.
Ⓒ I know the phrase but do not understand it well.
Ⓓ I do not know what the phrase means.



❷ When you buy something for yourself or your family, how hard do you try to buy environmentally-friendly products?

Ⓐ I prefer to buy such products regardless of the price.
Ⓑ I prefer to buy such products if the price is only slightly higher.
Ⓒ I prefer to buy such products if the price is the same as that for ordinary products.
Ⓓ I do not consider environmental aspects.



Ricoh Group's Sustainable Environmental Management Conference

<Ricoh Group (Global)>

In February 2006, Ricoh Group's 12th Sustainable Environmental Management Conference was held at the Ohmori Office, Tokyo. The conference was held to promote all-employee participatory sustainable environmental management for the Ricoh Group as a global company, where the environmental action plan was introduced and updates on global warming were given. A commendation ceremony for the 4th Ricoh Sustainable Development Award was also held during the conference.

A scene from Sustainable Environmental Management Conference

European Environment Conference

<Ricoh Europe B.V. (Europe)>

Environmental conferences are also held in Europe to share action policies for the Group and legal information, including EU directives, as well as to run benchmarks on actual activity examples. In the European region, 61 people, including those in charge of the environment at sales companies and manufacturing subsidiaries, gathered together in Stresa, Italy, in May 2005 to give examples and exchange opinions on global warming and WEEE. At the last European Environment Conference, participants tried to offset the CO_2 generated as a result of the holding the conference through afforestation. Approximately 55 tons of CO_2 generated by transportation facilities used by participants, electricity used in the conference hall, etc., were offset by the planting of 275 trees, making the substantial emissions zero (carbon neutral).

Participants of the European Environment Conference

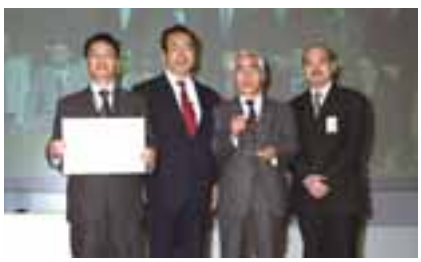
Environmental Awareness Building

Ricoh Group Sustainable Development Award

<Ricoh Group (Global)>

The Ricoh Group Sustainable Development Award has been presented since fiscal 2002. This award has two categories. One is the Award for Sustainable Environmental Management Improvement Activities, presented for routine all-employee participatory activities. The other is the Award for Sustainable Environmental Management Technology, presented in recognition of efforts to develop environmental technologies. These two awards are presented based on evaluations of activities from two perspectives: environmental conservation effects and generated economic profit. In fiscal 2005, the Award for Sustainable Environmental Management Improvement Activities was given in recognition of activities to promote the establishment of chemical substance management systems at suppliers. In addition, Ricoh Electronics, Inc., a manufacturing subsidiary in the United States, received a prize for special merit for its reuse of micro powder toner* while the Eco-Drive Campaign of Lanier (Schweiz) AG, a sales company in Switzerland, was commended as an excellent example. No party was given the Award for Sustainable Environmental Management Technology in this fiscal year.

*See page 43.



Representative of the procurement division being presented the Award for Sustainable Environmental Management Improvement with Mr. Sakurai, president of Ricoh (second from left)

European Environmental Award

<Ricoh Europe B.V. (Europe)>

Ricoh Europe B.V., the European Regional Sales Headquarters, grants European Environmental Awards to Ricoh Group sales companies in the European region that have engaged in excellent activities. In fiscal 2005, Lanier (Schweiz) AG, a sales company in Switzerland, received the grand prize for its Eco-Drive Campaign. Under the campaign, Lanier (Schweiz) AG aimed to reduce CO_2 emissions from its company cars. All winners of the European Environmental Awards are automatically eligible for a Ricoh Group Sustainable Development Award, a global commendation system of the Ricoh Group.

Specialized Education

Organization of Environment-Related Courses

<Ricoh Group (Japan)>

To develop personnel who can manufacture environmentally-friendly products or manage chemical substances properly as sustainable environmental management specialists, environment-related courses, such as LCA and recyclable design, are organized for employees at their workplaces.

Environment-related Courses (Number of Participants)

Name of course	Number of participants in fiscal 2005
Safety of Chemical Substances and Adaptation to Laws and Regulations (elementary class)	16
Safety of Chemical Substances and Adaptation to Laws and Regulations (senior class)	6
Life Cycle Assessment (LCA) (basic)	20
Life Cycle Assessment (LCA) (application)	6
Technologies for the Environment Impact Assessment of Products (machines, peripherals and supplies)	16
Environment-Related Laws and Regulations	92
Noise (basic)	20
Recyclable Design	22
Thermal Design for Office Equipment	17
Ricoh Group's Chemical Substance Management System (outline)	40
Total	255

We are making efforts to conserve global forest ecosystems and enhance our employees' global citizen awareness.

To conserve the global environment, it is important not only to reduce environmental impact, but also to maintain and enhance the self-recovery capability of the global environment. Ricoh is promoting forest ecosystem conservation projects at many places all over the world in partnership with environmental NPOs and local communities. Furthermore, manufacturing subsidiaries and sales companies in various regions in the world are committed to environmentally-friendly social contribution activities. In Japan, the Ricoh Group is implementing an Environmental Volunteer Leader Development Program* to enhance each employee's global citizen awareness and help employees take initiatives in local communities to conserve the global environment.

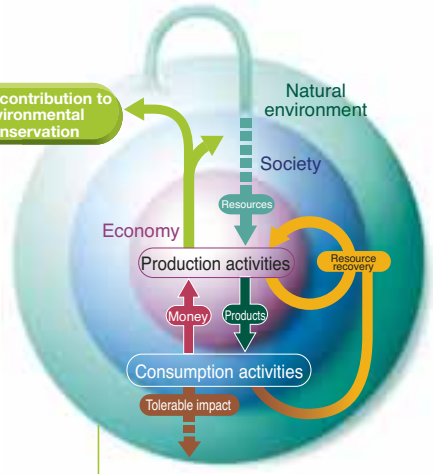
*See page 64.

Three Areas of Environmentally-friendly Social Contribution Activities

Ecosystem conservation activities
We work to conserve ecosystems at the global and community levels as a company and support organization engaged in such activities.

Promoting employees' voluntary activities
We promote employees' participation in voluntary activities for environmental conservation in communities and encourage them to reduce environmental impact at home and the workplace.

Increasing environmental awareness
We encourage individuals and organizations to understand the current situation of the global environment, and increase their awareness of conservation so that they take actions.



Pursuing the Ideal Society (Three P's Balance™)

See page 13.

Forest Ecosystem Conservation Projects

<Ricoh (Global)>

On the earth, various life habitats exist and unique ecosystems are maintained in forests, grasslands, lakes and ponds, coral reefs, and oceans. If these ecosystems are damaged, the natural environment including water, air, climate, and soil that is indispensable for maintaining the life of human beings would be harmed. Ricoh places priority on forest ecosystems with rich biodiversity and has been promoting forest ecosystem conservation projects since fiscal 1999 in partnership with environmental NPOs and local communities. Unlike simple afforestation, the main aim of these activities is to protect the habitats of indigenous species and the life of residents, and in such activities, priority is given to creating a partnership with environmental NPOs and local residents. The projects are financed by the social contribution reserve that Ricoh established to continuously carry out social contribution activities. Provided that approval is gained at the general shareholders' meeting, 1% of Ricoh's annual profit after deducting annual dividends is allocated for the reserve (up to ¥0.2 billion).

Ricoh's Forest Ecosystem Conservation Projects

Start date	Country	Name/NPO	Activity
June 1999	Bangladesh	Restoration of satoyama (community forests)/ Bangladesh Poush	Education of children, development of afforestation activities, and raising saplings
February 2000	Sri Lanka	Conservation and restoration of forests at World Heritage Sites/ Field Ornithology Group of Sri Lanka	Preservation and expansion of forests where the Sri Lankan long-tailed fowl can live
March 2000	Philippines	Restoration of tropical rain forests*/Conservation International	Restoration of rich forests where the Philippine Eagle and other forest creatures can coexist with people
October 2000	Malaysia	Restoration of tropical forests and orangutan habitats*/WWF	Restoration of tropical forests and orangutan habitats*
November 2001	China	Restoration of temperate forests and giant panda habitats*/WWF	Conservation of habitats for endangered species, including 437 vertebrates, such as the giant panda, and 4,000 plants, to prevent their extinction
November 2001	Japan	Conservation of the Afan Forest in Kurohime, Nagano*/C.W. Nicol Afan Woodland Trust	Conservation of natural forests that have enough space and food for bears, dormice, and other animals to live and where people can feel close to nature
November 2001	Japan	Conservation of the Yanbaru Forest in Okinawa*/Yanbaru Forest Trust	Conservation of habitats of endangered species unique to the region, including Rallus okinawae
March 2002	Ghana	Restoration of tropical rain forests*/Conservation International	Preservation of forests through sustainable agriculture, specifically, raising cocoa in the shades of trees so that people can live with other living things
May 2004	Russia	Conservation of Taiga, the northern limit habitat of tigers*/ Friends of the Earth Japan (FoE Japan)	Conservation of rich forests where many wild animal species, including the Amur tiger, live harmoniously with people

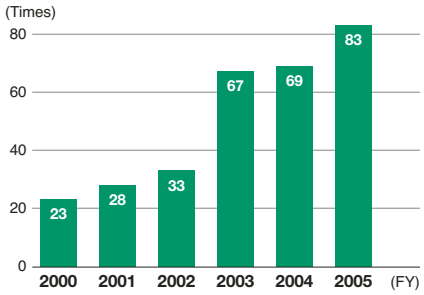
* Projects covered under the social contribution reserve system

Promotion of Environmental Volunteer Activities

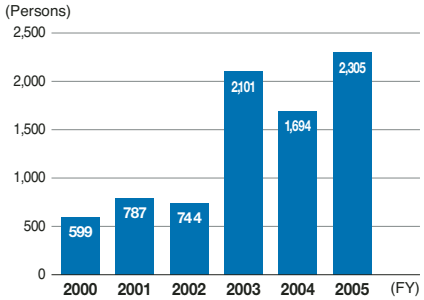
Environmental Volunteer Leader Development Program
<Ricoh Group (Japan)>

For the conservation of the global environment, it is important for each staff member to carry out activities spontaneously inside and outside the company, maintaining a sense of being a global citizen. Ricoh launched the Environmental Volunteer Leader Development Program in June 1999 as part of its staff training and expanded the program in fiscal 2001 to include staff members working at group companies as well as retired employees. By the end of fiscal 2005, 334 environmental volunteer leaders, including directors, had been fostered. The programs consist of Nature Seminar Elementary Courses, Nature Seminar Intermediary Courses, Forest Seminars, and Ricoh Company Meetings for Environmental Volunteer Leaders. Activities after the seminars are also followed up. After taking a Nature Seminar Elementary Course, each participant engages in volunteer activities involving his or her division or community.

Number of Activities Sponsored by Environmental Volunteer Leaders



Number of Participants in Activities Sponsored by Environmental Volunteer Leaders



Environmental Volunteer Activities

Children's Wind Festival by the Tsurumi River
On May 5, Yadoriki Shinboku Group, one of Ricoh's volunteer groups, opened a bamboo flute area at the Children's Wind Festival by the Tsurumi River, where children enjoyed making bamboo flutes.

Conservation Activities of Shishigaya Green Zone
On September 11, 16 people, including members of the Shishigaya Green Zone Conservation Group—another one of Ricoh's volunteer groups—and their families, carried out such conservation activities as weeding at Shishigaya Green Zone in Yokohama

Cleaning Up the Beach at Kamakura
On September 19, 130 Ricoh Group employees and their families cleaned Zaimokuza beach in Kamakura and enjoyed making sand sculptures.

Maintenance of Murase-no-Mori
On November 27, 5 Ricoh Group employees participated in maintenance activities at a bamboo forest in Murase-no-Mori in Yokohama, Kanagawa Prefecture. Along with local residents, they cut down bamboo and cleaned up the area.

Environmental Volunteer Leader Development Program

Ricoh's nature seminar elementary course (overnight training held three times a year)

Registered as a leader

Participants learn about the natural environment surrounding them and feel the importance of the ecosystem in the field as well as the basics of volunteer activities. On completion of the program, participants are certified as environmental volunteer leaders.

Follow-up Training
Ricoh Company Meeting for Environmental Volunteer Leaders (held twice a year on weekdays)

This meeting is designed for leaders to exchange information and develop skills. Examples of the volunteer activities that leaders take part in are introduced, and participants get the latest information from outside experts.

Advanced Training
Nature seminar intermediate course (overnight training held once a year)

Participants learn how to take more joy in continuing volunteer activities and gain the knowledge and skills required to give environmental training to other people.

Advanced Training
Ricoh forest seminar (Two-night seminar held once a year)

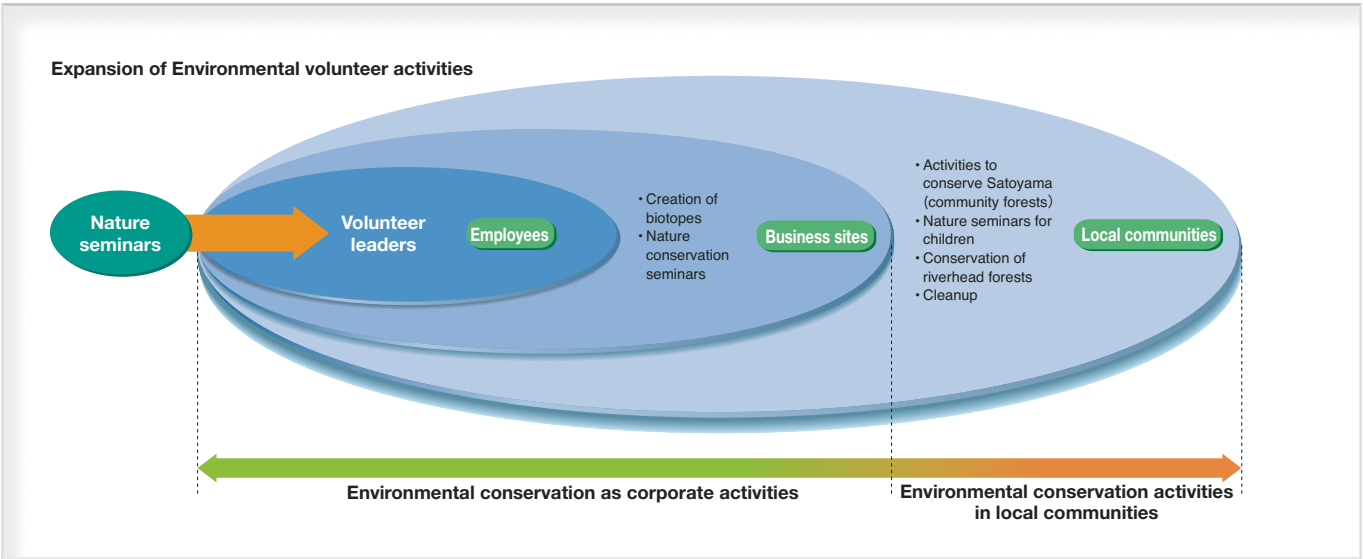
Participants learn about the composition and structure of forests that are often unnoticed as well as the mechanism of nature and how men deal with forests. Training takes place in the Afan Forest in Nagano Prefecture.

Environmental volunteer leaders take the initiative in environmental activities involving family, colleagues, and local people.

Expansion of Environmental Volunteer Activities

<Ricoh Group (Japan)>

Environmental volunteer leaders have expanded their activities significantly. Although at first they worked only with their families and friends, they now participate in more extensive activities involving local children and communities. In addition to production sites, sales companies across the country also promote voluntary activities.



Sample Activities in Japan

Arbor Day in Zao, Miyagi Prefecture

<Tohoku Ricoh Co., Ltd., Ricoh Tohoku Co., Ltd.>

On June 12, 37 employees participated in a tree-planting festival sponsored by the Society to Conserve the Beeches & Water of Zao, an NPO. It was the fourth time that Ricoh employees participated in the festival. A total of 160 people, including citizens, carefully planted 1,200 trees: 34 beeches, 35 Quercus crispula, and 30 Japanese alders were brought in by Ricoh employees and the rest were seedlings prepared by the sponsor.

"Forests on Mt. Fuji Created by the Green Fund-Raising Campaign" in Shizuoka Prefecture

<Ricoh Leasing Co., Ltd., Ricoh>

On September 3, employees of Ricoh Leasing Co., Ltd. and Ricoh joined volunteers in the "Forests on Mt. Fuji Created by the Green Fund-Raising Campaign" sponsored by the National Land Afforestation Promotion Organization. National forests at the foot of Mt. Fuji were seriously damaged by a typhoon in 1996. Work on the recovery of such forests started in 2000 under the "Mr. Fuji Afforestation Project by the Green Fund-Raising Campaign." Ricoh Leasing made donations through the preferential system for shareholders for social contributions, and the participation in the event was in relation to such donations.

Conservation of Satoyama Area of Mt. Satsuki in Ikeda City, Osaka Prefecture

<Ricoh Ikeda Plant, Ricoh Yashiro Plant>

Seven employees of the Ricoh Group, including members of Green Conductor—Ricoh's environmental volunteer group—participated in Satoyama (community forest) conservation activities on Mt. Satsuki on March 18. Along with local elementary school students and other residents, the seven employees worked on maintaining bamboo forests.

Map of Forest Conservation Activities by Sales Companies in Japan

Hokkaido
- Spring Arbor Day by Citizens in Sapporo (Hokkaido Ricoh)
- 56th Hokkaido Arbor Day in Ono (Hokkaido Ricoh)
- Arbor Day by Citizens in Muroran (Hokkaido Ricoh)

Aomori Prefecture
- Volunteer Activities by Prefectural Citizens for the Preservation of Greenery (Aomori Ricoh)
- Afforestation on Mt. Byobu, Dekishima, Kizukuri (Aomori Ricoh)

Akita Prefecture
- Social Gathering for Forest Volunteer Experience (Akita Ricoh)
- Cleanup of Kaze-no-Matsubara (Akita Ricoh)

Iwate Prefecture
- Appi Kogen Cleanup Campaign (Iwate Ricoh)
- Morioka Afforestation Festival by Citizens (Iwate Ricoh)

Yamagata Prefecture
- Arbor Day in Yamagata City (Yamagata Ricoh)
- Chokai-no-Mori's Festival of Thanks in Shonai (Yamagata Ricoh)

Miyagi Prefecture
- Arbor Day in Zao (Ricoh Tohoku)

Fukushima Prefecture
- Arbor Day in Koriyama (Fukushima Ricoh)

Niigata Prefecture
- Community Forest ACTION at the Foot of Mt. Gozu (Niigata Ricoh)
- Tree planting in Afan Forest (Niigata Ricoh and Nagano Ricoh)

Tochigi Prefecture
- Mashiko-no-Mori Arbor Day in Tochigi Prefecture (Tochigi Ricoh)

Ibaraki Prefecture
- Conservation activities for Okukuji Ikoi-no-Mori (Ibaraki Ricoh)

Saitama Prefecture
- Thicket conservation activities on Mt. Kannon (Ricoh Sales Co., Ltd.)
- Activities to conserve Ohya thicket in Higashimatsuyama-shi (Ricoh Sales Co., Ltd., Ricoh Technosystems)
- Higashimatsuyama-shi Forest for Citizens (Ricoh Sales Co., Ltd.)
- Activities to conserve Sayama Hills (Ricoh Sales Co., Ltd.)

Chiba Prefecture
- Conservation of Ricoh Chiba's Fureai-no Mori (Ricoh Sales Co., Ltd., RICOH Technosystems and NBS Ricoh)

Tokyo
- Activities to conserve forests in Minamidaira Hills Park (Ricoh Sales Co., Ltd.)
- Conservation of Shishigaya Green Zone (Ricoh Sales Co., Ltd.)

Kanagawa Prefecture
- Conservation of Yadorigi spring (Ricoh Sales Co., Ltd.)
- Maintenance of bamboo forest in Murase-no-Mori (Ricoh Sales Co., Ltd.)

Shizuoka Prefecture
- Chakkiri-kai voluntary activities (Shizuoka Ricoh)

Nagano Prefecture
- Activities to conserve Nagano Citizens' Forest (Nagano Ricoh)
- Tree planting in Afan Forest (Nagano Ricoh and Niigata Ricoh)

Toyama Prefecture
- Sixth Forest Festival in Toyama (Toyama Ricoh)

Ishikawa Prefecture
- Cleanup of trails on Mt. Hakusan (Ishikawa Ricoh)

Gifu Prefecture
- Society for the preservation of star magnolias in Ena (Gifu Ricoh)

Aichi Prefecture
- Sandy beach restoration project (Ricoh Chubu)
- Conservation of Suigen-no-Mori in Okugo, Mitake-cho (Ricoh Chubu)

Shiga Prefecture
- Conservation of Kinsho-ji Fureai-no-Mori (Shiga Ricoh)

Mie Prefecture
- Activities to conserve Matsuzaka Forest Park (Mie Ricoh)
- Cleanup of Gozaishodake and Fujiharadake (Mie Ricoh)
- Activities to conserve Nanbu Hills (Mie Ricoh)

Nara Prefecture
- Afforestation festival to nurture forests on Mt. Yata (Nara Ricoh)

Osaka
- Forest conservation activities on Mt. Satsuki (Ricoh Kansai)

Hyogo Prefecture
- Forest conservation activities in Eo-no-Mori (Hyogo Ricoh)

Tottori Prefecture
- Morikko Club (Tottori Ricoh)

Okayama Prefecture
- Conservation of Kurashiki Beautiful Forest (Okayama Ricoh)

Shimane Prefecture
- Big Japanese maple relief campaign (Shimane Ricoh)
- Activities to invite people to plant trees (Shimane Ricoh)

Hiroshima Prefecture
- Activities to conserve Gongenzan Ikoi-no-Mori (Ricoh Chugoku)

Yamaguchi Prefecture
- Afforestation at springs in cooperation with companies (Yamaguchi Ricoh)
- Campaign to protect and maintain planted trees (Yamaguchi Ricoh)

Tokushima Prefecture
- Conservation of forests owned by Kamiyama-cho (Shikoku Ricoh)

Kagawa Prefecture
- Activities to conserve forests in Kagawa Fureai-no-Mori (Shikoku Ricoh)

Ehime Prefecture
- Uwajima forest volunteer activities (Shikoku Ricoh)

Fukuoka Prefecture
- Conservation of NTT DoCoMo-no-Mori (Ricoh Kyushu)

Saga Prefecture
- Saga 22 Forest Nurturing Festival on the Basin (Saga Ricoh)

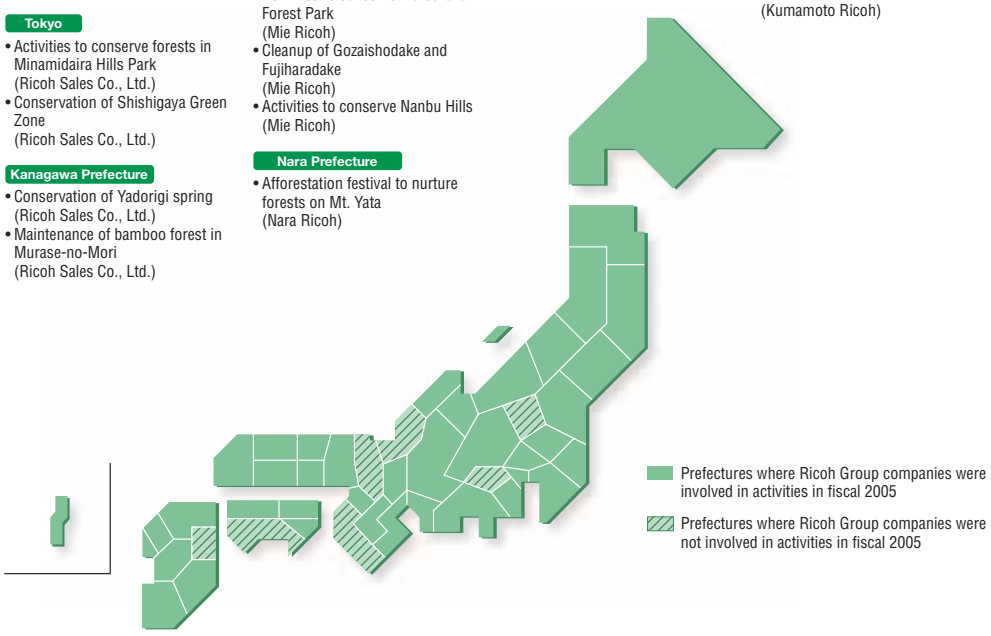
Nagasaki Prefecture
- Tree-planting activities on Mt. Fugendake (Nagasaki Ricoh)

Kumamoto Prefecture
- Tree planting to commemorate the 10th anniversary of the Kumamoto Environment Conference (Kumamoto Ricoh)

Miyazaki Prefecture
- Cleanup Campaign in Miike (Miyazaki Ricoh)

Kagoshima Prefecture
- Arbor Day in Sakurajima (Kagoshima Ricoh)
- Volunteer activities on Arbor Day at Fukiage Beach (Kagoshima Ricoh)

Okinawa Prefecture
- Green Growing Festival (Okinawa Ricoh)



Prefectures where Ricoh Group companies were involved in activities in fiscal 2005

Prefectures where Ricoh Group companies were not involved in activities in fiscal 2005

Sample Activities Outside Japan

Support for Forest Ecosystem Restoration in Africa

<Ricoh Nederland B.V. (Uganda)>

Ricoh Nederland B.V. (RNL), a sales company, has supported reforestation projects in Uganda since FY 2005. The projects, operated by the Uganda Wildlife Authority and the Face Foundation, have been implemented in Mount Eigon National Park, near the border with Kenya, and Kibale National Park, in the western part of Uganda. Ricoh Nederland calculates the amount of CO_2 generated by its business activities and supports a planting of trees that offset the CO_2 impact. In FY 2005, approximately 20,000 trees were planted on 875 hectares of land for the projects.

Tree Planting Activity for Ecological Restoration

<Ricoh New Zealand Ltd. (New Zealand)>

The Auckland office of Ricoh New Zealand Ltd. (RNZ), a sales company, takes part in the Motuihe Project, which aims to restore the ecosystem of Motuihe Island. In September 2005, 54 people, including staff and their families and friends, planted 530 young pohutukawa trees on the island. Pohutukawa trees are known as Christmas trees because they blossom red flowers at Christmas time. In the Motuihe Project, participants not only plant trees but also release rare native birds to restore the ecology of the native forests, beaches, and wetlands. Ricoh New Zealand will revisit the island in FY 2006 to continue helping with the restoration project.

Tree Planting Activity to Raise Public Awareness

<Ricoh Hungary Kft. (Hungary)>

Ricoh Hungary Kft. (RHU), a sales company, held a tree planting event in Rákos Stream Park in Budapest in November 2005. A discussion was held with the local government prior to the event, and the park with a small stream and bicycle path was chosen as the best location for the tree planting project to raise people's environmental awareness. The employees of Ricoh Hungary planted 36 young maple trees.

Participation in 2006 Tree-Planting Program for All People

<Ricoh Asia Industry (Shenzhen) Ltd. and Ricoh Elemex (Shenzhen) Co., Ltd. (China)>

The "2006 Tree-Planting Program for All People" was held on March 12, which is Tree-Planting Day in China, under the joint sponsorship of the Shenzhen City Government and Shenzhen Tree-Planting Foundation. About 6,000 trees were planted in Shenzhen Central Park by 4,000 people from 97 major companies in the Shenzhen area. A total of 290 people from Ricoh Asia Industry (Shenzhen) Ltd. and Ricoh Elemex's Fuyong Plant participated in the event and planted 256 trees. In recognition of its positive social contributions in the Shenzhen area and efforts for environmental preservation, Ricoh Asia Industry was allowed to participate in the commemorative planting of a tree as one of the companies representing participating companies along with the Shenzhen City government, which sponsored the event.

Supporting Forest Surveys for the Conservation of Biodiversity

<Ricoh France S.A.S. (France)>

Ricoh France S.A.S. (RFR), a sales company, supports ProNatura, an NPO engaged in forest surveys in many countries for the conservation of biodiversity. Ricoh France has supported scientific data collection in Gabon and Madagascar in Africa. In FY 2005, it also supported the development of a special hot-air balloon to study the rainforest canopy. A flying test was held in Grenoble in December 2005, and the new balloon is expected to be used in research in FY 2006.

Tree Planting Event for Reforestation in Thailand

<Ricoh Thailand Ltd. (Thailand)>

A total of 160 Ricoh Thailand Ltd. (RTH) staff took part in the Reforestation to Celebrate the King's Honor, which was held on June 11, 2005, in the Bor Thong District of Chonburi Province, the central region of Thailand. The event, which was organized by Nature Line Travel Co., Ltd., aimed to reforest and recover damaged forests in Thailand. About 2,000 trees were planted on approximately four acres of land in the district. After the planting, the participants visited Bang-La-Moong Home (an orphanage) in Pattaya to have lunch with children aged 5 to 18. The event provided a good opportunity to deepen the relationship between Ricoh staff and citizens.

2006 FOCUS 02

Global Ecosystem Conservation Promoted through Partnerships with NPOs

The restoration of the earth's recuperative powers is a mission for companies. The Ricoh Group is actively promoting the conservation of ecosystems through partnerships with NPOs.

Kazuyuki Kishi
Environmental Communication Office, Corporate Environment Division

Mr. Yasushi Hibi
Representative of the CI Japan Program

Our corporate activities are based on benefits offered by the global environment, including natural resources, but at the same time, such activities have damaged the global environment. The Ricoh Group is actively working toward the conservation of ecosystems from a global point of view in recognition of the fact that not only the reduction in environmental impact caused by corporate activities but also the repair of damage caused on the global environment is a corporate mission.

INTERVIEW

NPO Interview | Conservation International

Because all economic activities support ecosystems on the earth, companies, working with citizens, should make more positive efforts toward biodiversity.

Mr. Yasushi Hibi
Representative of the CI Japan Program

Profile

Established in 1987, **Conservation International** is headquartered in Washington, D.C., the United States. Approximately 900 members in 40 countries are engaged in ecological research and studies, conservation activities, cooperation with companies, and so forth, mainly in environmental hot spots that need urgent conservation measures for the sake of biodiversity.

Ricoh's support triggered the expansion of the project.

The project in the Republic of Ghana was really significant in that it is expected to lead to the expansion of conservation effects in the future. Ricoh was the only company that stood for the project at the time of its initiation. We believe that Ricoh approved of our activities because it had a good eye, which is unique to Ricoh.

As a result of the achievements brought about by the first phase, which had the support of Ricoh, we were able to obtain a large amount of financial aid from the United Nations. We are currently expanding the project into peripheral areas. In the future, we hope that the whole area will become prosperous and be supported by sustainable agricultural methods, with the preservation of virgin forests and the recovery of natural forests.

Q Why is Ricoh engaged in the conservation of ecosystems?

We believe that a company's social responsibility is to strive for not only the maintenance but also the positive recovery of the global environment.

Companies have contributed to the development of society by conducting business using natural resources generated by rich ecosystems and offering high-quality products and services. On the other hand, the activities of society, including mass production, mass consumption, and mass disposal, now far exceed the capacity of ecosystems. As a result, ecosystems are deteriorating, natural diversity is disappearing, and the aggravation of environments where we can live is rapidly progressing. As entities that carry out business activities supported by ecosystems, companies are required to not only strive to reduce environmental impact generated by business activities but also fulfill a social responsibility of maintaining and recovering ecosystems.

The Ricoh Group, which became aware of the significance of the impact corporate activities have on the global environment at an early stage, is promoting various efforts in all business fields and striving toward the conservation of ecosystems, aiming to limit environmental impact to within the capacity of the earth and realize a sustainable society.

Q What are the purposes of the activities and concrete standards used in selecting projects?

Ricoh keeps its eye on forest ecosystems, which are particularly abundant in biodiversity compared with many other kinds of ecosystems.

Ricoh has been engaged in the Forest Ecosystem Conservation Project since 1999, aiming at the conservation of ecosystems for the conservation of biodiversity. Our principle is to select activities that allow local residents to continuously use forest resources and promote such conservation with the participation and understanding of residents while conserving biodiversity.

Concrete standards for the selection of projects include the following:

◎ Places where biodiversity is observed and ecosystems are threatened with destruction
◎ Biodiversity that can be recovered through certain approaches
◎ Pilot activities (no achievements have been made yet) that can be supported by society
◎ Projects that realize both improvement in residents' qualify of life and the conservation of the natural environment

In addition, priority is given to areas with a natural environment that is valuable from a global point of view.

At present, nine projects* are being continuously promoted in eight countries around the world.

* For further details, See page 63.

Q What partnerships have you formed with environmental NPOs?

Partnerships with groups that are well informed of biodiversity and the conservation of ecosystems are essential for Ricoh to promote ecosystem conservation.

We have formed partnerships with groups that have approved of our ideas and now have a global base for activities. For example, in 2000 the "Tropical Rain Forest Restoration Project in the Philippines" was the first opportunity for us to collaborate with Conservation International (CI). With the addition of the "Tropical Rain Forest Restoration Project in Ghana," which started in 2002, our involvement has now doubled.

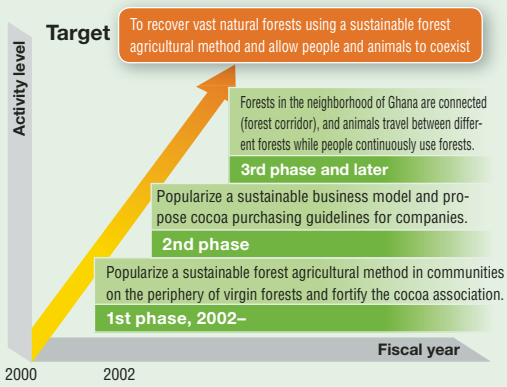
CI is an organization that has vast scientific knowledge about biodiversity and was established to solve environmental problems, placing priority on the relationship between ecosystems and people. Because the stance of CI in its activities coincides with the ideas of Ricoh, the trust between the two as partners has become increasingly deep-rooted, and projects are progressing without a hitch.

We believe that we are able to offer support to areas that have the most urgent need of preservation on the earth thanks to such organizations as CI.

The conservation of biodiversity is an issue that should be addressed by companies, NPOs, and the administration in close cooperation.

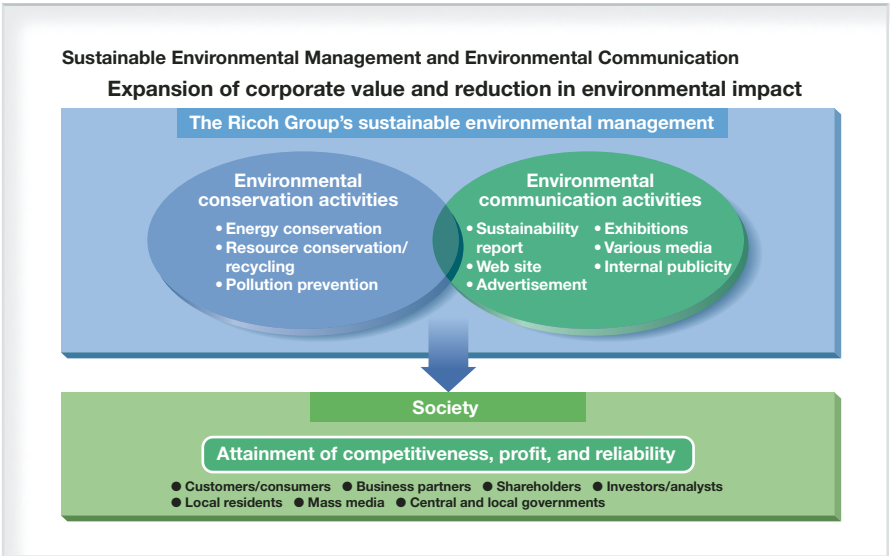
Ricoh is highly rated for its environmental management, through which it reduces environmental impact and simultaneously realizes corporate growth. I think Ricoh is making steady progress toward the conservation of biodiversity, which is a more positive activity for the benefit of the global environment, proving that the company is engaged in activities in all fields in a well-balanced manner. There are few companies in Japan that understand the relationship between the global environment and companies as Ricoh does. The activities of society are based upon the benefits of biodiversity. I believe that the conservation of biodiversity is one of the responsibilities that companies should fulfill as corporate citizens even if it is not directly related to business. The conservation of biodiversity cannot be realized by only NPOs or companies. CI intends to continue establishing good partnerships with prescient companies and carry out effective projects.

Steps to Achieve Targets in the Tropical Rain Forest Restoration Project in Ghana



Promoting Environmental Conservation Activities Through the Promotion of Communications in Good Faith

To be a going concern that is favorably rated by society, it is important to not only promote environmental conservation activities, but also to make an effort to inform as many people as possible of our philosophy and activities so that we may win public confidence. The active disclosure of information to internal and external stakeholders will contribute to the further activation of activities and the creation of a resource-recirculating society. With the firm belief that environmental communication and conservation activities are the two wheels of sustainable environmental management, the Ricoh Group is promoting the conservation activities communications in good faith.



Communication Activities

Environmental Web Site
<Ricoh Group (Global)>

Ricoh's environmental web site focuses on visibility, simplicity, and user-friendliness so that visitors can easily find the information they want, including the latest news and information on products covered by the Law Concerning the Promotion of the Procurement of Environmentally-Friendly Goods and Services by the State and Other Entities (Law on Promoting Green Purchasing). On the ECO TODAY web site for children, a section called the Tempel-Tuttle Story is set up. In it, forest ecosystem conservation activities are explained in an easy-to-understand way, using examples from Mexico, China, Malaysia, and Japan, and children can learn about environmental problems through quizzes and games. The ECO TODAY web site is also available in English and is linked to relevant organizations throughout the world.

http://www.ricoh.co.jp/ecology/ecotoday/index_e.html

Environmental Advertisements
<Ricoh (Global)>

Ricoh produces environmental advertisements to inform of its idea of sustainable environmental management based on actual company activities. In fiscal 2005, the gold prize in the magazine category of the 45th Advertisement Beneficial to Consumers Contest sponsored by the Japan Advertisers Association was awarded to Ricoh's environmental advertising trilogy—Cherry Blossoms, Maiko, and Snowscape—which had global warming as a motif. Advertisements are placed both in Japan and overseas.

(Cherry Blossoms)

(Maiko)

(Snowscape)

Exhibitions
<Ricoh Group (Japan)>

In December 2005, Ricoh participated in a general environmental exhibition titled Eco Products 2005 held at Tokyo Big Sight. Under the theme "Invigoration of Business through Sustainable Environmental Management," Ricoh introduced a high-speed digital multifunctional copier that is able to recover from energy-saving mode within 10 seconds, a copier partly made of plant-based plastic, and rewritable media that can be rewritten any number of times. Ricoh thus presented its state-of-the-art eco-technology and the efforts made by all of its employees to realize sustainable environmental management. In addition, Ricoh held events in which visitors were invited to participate, including an arts-and-craft section that used timber from a forest-thinning activity conducted as part of the company's volunteer activities. Thus, efforts were made to expand the circle of environmental conservation.

Ricoh booth

Issuance of Sustainability Reports (Environment)

<Ricoh Group (Global)>

The Ricoh Group's environmental report has been issued annually since its first publication in April 1998, which disclosed fiscal 1996 data. Starting with the year 2002 edition, published in July 2002 under the new name, "Sustainability Report," the Ricoh Group has presented the concepts and performance of its sustainable environmental management. Since the 2004 edition, we have been issuing in June three kinds of reports at the same time, namely, the Sustainability Report (Environment), Sustainability Report (Corporate Social Responsibility), and Annual Report. Sustainability Report (Environment) won the Excellence Award of the Environmental Communication Awards 2005. Ricoh's sustainability reports and annual report are available online at the web site address given below.*

* http://www.ricoh.com/brochure/

Issue Dates of Reports and Number of Copies Issued

		Date of Issue	No. of Copies	No. of Pages
Ricoh Group Environmental Report 1998	Japanese	Jan. 1999	26,200	30
	English	Jan. 1999	500	
Ricoh Group Environmental Report 1999	Japanese	Sept. 1999	51,300	32
	English	Sept. 1999	8,375	
Ricoh Group Environmental Report 2000	Japanese	Sept. 2000	45,950	60
	English	Dec. 2000	6,800	
Ricoh Group Sustainability Report 2001	Japanese	Sept. 2001	25,950	74
	English	Dec. 2001	7,000	
Ricoh Group Sustainability Report 2002	Japanese	Jul. 2002	21,315	84
	English	Sept. 2002	6,000	
Ricoh Group Sustainability Report (Environment) 2003	Japanese	Jun. 2003	21,770	84
	English	Sept. 2003	7,000	
Ricoh Group Sustainability Report (Environment) 2004	Japanese	Jun. 2004	18,790	84
	English	Sept. 2004	7,000	
Ricoh Group Sustainability Report (Environment) 2005	Japanese	Jun. 2005	17,695 (As of the end of April 2006)	84
	English	Sept. 2005	7,000	

Environmental Reports Issued by Business Sites

<Ricoh Group (Global)>

To enhance relationships with local communities, Ricoh Group business sites issue their own environmental reports as a means of communication with government offices, residents of neighboring areas, and family members of their employees. The Ricoh Group established the guidelines for the preparation of site reports on environmental conservation for its business sites in fiscal 2001. In fiscal 2005, Ricoh Hatano Plant, Ricoh Elemex Corporation, Saga Ricoh Co., Ltd., issued site reports for the first time. Ricoh Fukui Plant was given the Continued Excellence Award for the Site Report of the 9th Environmental Report Award. They also won the Excellence Award of the Environmental Communication Awards 2005.

Ricoh Recognized as the Best Environmental Communication Company by University Students

In December 2005, Ricoh was recognized as the best environmental communication company by students in the Faculty of Economy of Kobe University. The students are members of the Nikkei STOCK League* who, in drawing up a stock investment portfolio, select companies from an environmental communication point of view. The students evaluate companies in terms of website design, advertisement, and environmental conservation activities according to their own unique standards, and Ricoh was given a high score in many categories. As for Ricoh's website, easy and simple access from its home page to its environment page was appreciated, while the favorable and sympathetic impression of its advertisement in Nikkei Ecology was the reason behind the company receiving a good score in the advertisement category. The students selected environmental communication as a theme of investment because they thought it would be important to achieve mutual understanding through dialogs and communication as environmental activities were important as a matter of course, but unilateral messages from companies were no longer appreciated.

* Nikkei STOCK League
Sponsored by Nihon Keizai Shimbun, Inc., Nikkei STOCK League is a contest in which junior high, high school, and university students can learn about stocks. It aims to teach students about the real economy by learning about portfolios and how to select stocks according to their own investment themes.

Building Awareness in Children

Two U.S. High School Students Who Won the Ricoh Sustainable Development Award Visited Japan

<Ricoh Corporation (United States)>

Mr. Tyler Glen Lyon and Mr. Daniel Rees Winegar, two U.S. high school students who won first prize of the Ricoh Sustainable Development Award (RSDA), arrived in Japan on July 7, 2005. They were invited to Japan as part of the award. RSDA was newly created by Ricoh Corporation (RC) for Intel International Science & Engineering Fair (ISEF) to recognize students who achieve excellent results in environmental technology studies. The fair, now in its 56th year, is one of the world's largest science competitions for pre-college students, and Ricoh Corporation is a sponsor of the contest. In 2005, more than 10 million students from 45 nations participated in ISEF. The two students visited EXPO 2005 AICHI, JAPAN, on July 8 and 9. After seeing Kyoto and paying a courtesy call on Ms. Yuriko Koike, minister of the environment, they toured Ricoh Gotemba Plant and Ricoh Central Research Center on July 14. The students and Ricoh staff exchanged technologies and studies. Ricoh staff explained HYBRID-QSU, Ricoh's unique energy conservation technology, and the manufacturing process of digital hybrid copiers and laser printers while the two students gave a presentation on their project, the Peltier Effect: Eliminating the Use of Freon in Automobile Air-Conditioning Systems.

Supporting the Development of Environmental Conservation Activities at Elementary and Junior High Schools

<Ricoh (Japan)>

Ricoh served as sponsor for the School Eco Awards organized by the Sankei Shimbun Photo News Center. To promote environmental conservation activities at elementary and junior high schools throughout the country, the awards give recognition to schools showing achievements in their environmentally-friendly reports. The second round of awards was given in February 2006. Ricoh became a sponsor as an endorsement of the idea behind the awards, which addresses the importance of exposing children to environmental issues and making them understand that their participation helps save the global environment.

Targeted Period

Targeted Period

This report describes the sustainable environmental management activities of the Ricoh Group in fiscal 2005 (April 1, 2005 to March 31, 2006).

Environmental impact and environmental acounting data: fiscal 2005 data
Descriptions in articles and chronological tables: fiscal 2005 data (in principle)

The environmental impact and environmental accounting data are taken from the Ricoh Group's major business sites in five (5) regions Japan, the Americas, Europe, China, and the Asia-Pacific region and as such, may differ from Ricoh Group data presented elsewhere in this report, e.g., in the organization profile. The name Ricoh refers to "Ricoh Co., Ltd," and not the "Ricoh Group" as a whole.

● Important Organizational Changes Made During the Report Period

The maintenance service divisions of the 31 sales companies in Japan were integrated into Ricoh Technosystems Co., Ltd., Ricoh's wholly owned subsidiary, on October 1, 2005.

Ricoh Technology Center opened in Ebina City, Kanagawa Prefecture, in August 2005.

Aoyama Head Office and sales-related offices in the Ginza area were integrated in November 2005, and a new head office opened in Ginza, Chuo-ku, Tokyo.

● Fines concerning the Environment (Ricoh Group)

	FY 2003	FY 2004	FY 2005
Number of cases	0	0	0
Amount	0	0	0

● Past and Future Reports

The Ricoh Group has published annual environmental reports every year since 1997, which covered fiscal 1996. The 2006 Report in Japanese was issued in June 2006. The 2007 Report in Japanese will be issued in June 2007.

Head Office

Ricoh Technology Center

Scope of This Report/Major Product Lines

Scope of Collection of Environmental Impact and Environmental Accounting Data

Environmental impact and environmental accounting data are collected from Ricoh's production and non-production sites and Ricoh Group companies that have established their own sustainable management systems.

Japan

- **Ricoh production sites:**
  Atsugi Plant, Hatano Plant, Numazu Plant, Gotemba Plant, Fukui Plant, Ikeda Plant, Yashiro Plant
- **Ricoh nonproduction sites:**
  Head Office, Aoyama Head Office (until November), Ohmori Office, Ohmori Office No. 2, Ginza Office, Ricoh System Center, Shin-Yokohama Office, Ricoh Service Parts Center, Research and Development Center, Software Research Center, Toda Technical Center, Applied Electronics Laboratory, Technology Center
- **Ricoh Group major manufacturing subsidiaries:**
  Tohoku Ricoh Co., Ltd.; Hasama Ricoh, Inc.; Ricoh Unitechno Co., Ltd.; Ricoh Optical Industries Co., Ltd.; Ricoh Keiki Co., Ltd.; Ricoh Microelectronics Co., Ltd.; Ricoh Elemex Corporation; Ricoh Printing Systems, Ltd.[1]
- **Ricoh Group major nonmanufacturing subsidiaries:**
  Ricoh Logistics System Co., Ltd.; Ricoh Technosystems Co., Ltd.; 6 sales administration companies; 35 sales companies; NBS Ricoh Co., Ltd.; Part Component System Co., Ltd.[2]; Ricoh Leasing Co., Ltd., Ricoh San-ai Service Co., Ltd.[3]

The Americas

- **Manufacturing company:**
  Ricoh Electronics, Inc. (U.S.A.)
- **Nonmanufacturing companies:**
  Ricoh Corporation (U.S.A.) and 2 sales companies

Europe

- **Manufacturing companies:**
  Ricoh UK Products Ltd. (U.K.)
  Ricoh Industrie France S.A.S. (France)
- **Nonmanufacturing companies:**
  Ricoh Europe B.V. (the Netherlands) and 28 sales companies in the region

China

- **Manufacturing companies:**
  Ricoh Asia Industry (Shenzhen) Ltd. (China)
  Shanghai Ricoh Facsimile Co., Ltd. (China)[3]
  Shanghai Ricoh Digital Equipment Co., Ltd. (China)[1]

Asia-Pacific Region

- **Nonmanufacturing company:**
  Ricoh Asia Pacific Pte. Ltd. (Singapore)

1. Only environmental impact data are given in the Business Site Data. See page 77.
2. Environmental accounting data only
3. Environmental impact data only

Imaging solutions

- **Digital imaging equipment:**
  Digital copiers, color copiers, printers, facsimiles, related supplies and maintenance services, others
- **Other imaging equipment:**
  Analog copiers, diazo copiers, related supplies and maintenance services, thermal paper, others

Network system solutions

Personal computers, servers, network devices, networking software, applications, services and support, others

Network Input/Output (I/O) systems

- **Printing systems:**
  Multifunctional printers (MFPs), laser printers, related supplies and maintenance services, related software, others
- **Other I/O systems:**
  Optical-disk products, systems, scanners, others

Other businesses

Optical devices, measuring instruments, semiconductors, others

Ricoh Co., Ltd. was established in Japan on February 6, 1936. The Ricoh Group consists of Ricoh Co., Ltd., 298 subsidiaries, and 20 affiliates*. The Ricoh Group engages in activities on a global scale that include the development, production, marketing, after-sales services, and recycling of office equipment including copiers and printers in five regions around the world (Japan, the Americas, Europe, China, and the Asia-Pacific region). The Group has more than 76,000 employees.

* The definition of a subsidiary/affiliate follows the U.S. Generally Accepted Accounting Principles (U.S. GAAP), which differ slightly from the definition given in Japan's GAAP.

Ricoh Head Office
Ricoh Bldg., 8-13-1, Ginza, Chuo-ku,
Tokyo 104-8222, Japan
Main number: +81-3-6278-2111
http://www.ricoh.com/

Ricoh Group Brands

The Ricoh Group markets products under its own brand name "RICOH" as well as the following.

Brand logos

RICOH

savin®

nashuatec

Rex-Rotary

Gestetner

LANIER

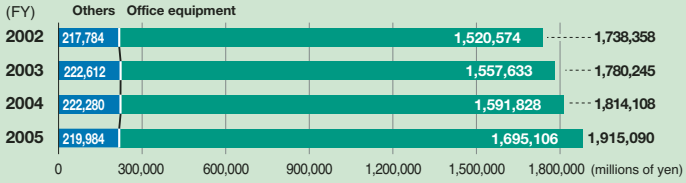
Market Evaluation Results and Economic Performance

In 2005, Ricoh held the largest share of the black-and-white copier market and the second largest share of the color copier market in Japan. In the same year, the Ricoh Group held the second largest share of the black-and-white copier market in the Untied States[1] and the largest share of the color copier market. In the office-use black-and-white copier market in Europe[2], the Group held the largest share for the ninth year in a row. In fiscal 2005, Ricoh's consolidated sales and profits both increased[3].

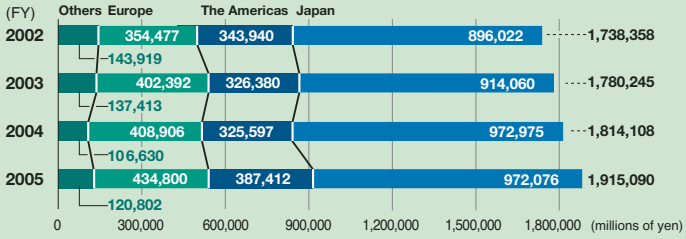
1. Total number of products marketed under the Ricoh, Savin, Gestetner, and Lanier brand names (excluding the segment for up to 10 ppm copiers)
2. Including products marketed under the Ricoh, Gestetner, Nashuatec, Rex-Rotary, and Lanier brand names as well as OEM products (excluding the segment for personal copiers)
3. For details, see the IR section of Ricoh's website. (http://www.ricoh.com/IR/)

Source: Gartner Dataquest, March 2006, GJ06172 (Data for Japan and the United States)
Infosource S.A. (Data for Europe)

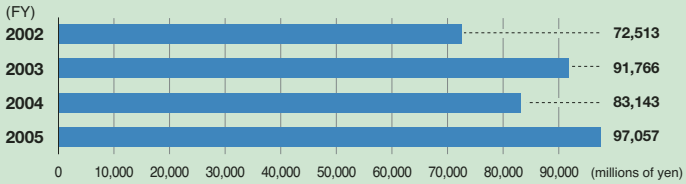
The Ricoh Group's Sales Classified by Business



The Ricoh Group's Sales Classified by Region



The Ricoh Group's Net Income



The Number of the Ricoh Group's Employees

* Figures are from the Ricoh Group's securities report and, accordingly, may differ from those of the environmental impact data due to a difference in the scope of data collection.

Corporate Philosophy/General Principles on the Environment/Management Philosophy/ Principles of the Environmental Reporting

Corporate Philosophy

The Ricoh Group's corporate philosophy "The Spirit of Three Loves" was established by its founder, Kiyoshi Ichimura. He explained the philosophy as follows: Everyone at least loves himself/herself. As time passes, however, this feeling of love grows and expands to include all people, plants, and animals in the world. This philosophy drives the Ricoh Group toward better sustainable environmental management.

—The Spirit of Three Loves—
Love your neighbor
Love your country
Love your work

Management Philosophy

Ricoh's management philosophy was formally introduced in 1986 based on the corporate philosophy of "The Spirit of Three Loves" in order to establish and nurture the corporate culture and system to ensure survival in a time filled with increasing change, information-oriented societies, diverse values, and more intense competition.

Our Purpose To constantly create new value for the world at the interface of people and information

Our Goal To be a good global corporate citizen with reliability and appeal

Our Principles
- To think as an entrepreneur
- To put ourselves in the other person's place
- To find personal value in our work

General Principles on the Environment

Ricoh introduced the Ricoh General Principles on the Environment, which are based on its management philosophy, in 1992 and revised them in 1998 and in 2004. These principles show Ricoh's commitment to sustainable environmental management and are widely disclosed to the public through various media, including Web sites. Based on these principles, Ricoh Group companies have independently established and managed their own rules regarding the environment according to their business type.

Basic Policy

As a global citizen, the Ricoh Group is obligation-conscious of environmental conservation. In addition, we strive to honor our environmental responsibilities and concentrate group-wide efforts in environmental conservation activities, implementation of which we believe to be as significant as our business operations.

Action Guideline

1. Complying with domestic and international regulations as a matter of course, we dutifully fulfill our responsibilities, setting goals toward minimizing the environmental effects of business practice in keeping up with broader social expectations. In achieving these goals, we endeavor to create economic values.
2. We take steps to develop and promote technology that will enable us to reduce environmental effects, and proactively utilize such innovations.
3. In all our business activities, we strive for awareness of environmental impact, thereby involving all Ricoh employees in implementing continuous improvements to prevent pollution, use energy and natural resources more efficiently.
4. To provide our products and services, we spare no effort to reduce environmental effects in all stages of product lifecycle, from procurement, manufacturing, sale, and logistics, to usage, recycling, and disposal.
5. We at Ricoh wish each employee to be attentive to a broader range of social issues and mindful of enhancing environmental awareness through proactive learning processes, designed to commit the employee to environmental conservation activities according to his or her responsibility.
6. Coordinating closely with every country and region, we contribute to wider society, for whom we actively disclose information, participate, and assist in environmental conservation activities.

Established in Feb.1992 and revised in Oct. 2004

Principles of the Environmental Reporting

In fiscal 2001, Ricoh established principles of environmental reporting, which comprise requisites for providing information useful to stakeholders when they make their decisions on sustainable environmental management. The environmental reporting is based on corporate accounting principles as no official principles or terminology have been developed for sustainable reporting.

1. The environmental reporting must contain true statements about companies' state of sustainable environmental management[1].
2. The environmental reporting must fairly represent the results of all the sustainable environmental management activities[2].
3. The environmental reporting must clearly represent the facts necessary for stakeholders not to misjudge the environmental impact of companies[3 and 4].
4. The environmental reporting must continuously reflect the principles and procedures of basic data processing and representation methods every fiscal year and may not change those principles, procedures, and representation methods without good reason[5].

Notes:
1. "Companies" refer to the Ricoh Group as a whole, Group companies, and/or their business sites, depending on the coverage and level of the report.
2. The avoidance of disclosing negative information shall not be regarded as a fair representation of all information.
3. The state of companies' environmental risk management shall be included in the information stakeholders use in decision making.
4. Significant subsequent events shall be described in the report. Subsequent events refer to events that occur during the period from the day after the reporting period ends to the date the report is completed. Such events may influence the state of companies' sustainable environmental management from the next fiscal year onward.

   Examples of significant subsequent events are as follows:
   a) Critical damage caused by environmental pollutants and similar causes
   b) The announcement and implementation of large environment-related investment projects
   c) The assignment and transfer of significant environment-oriented business transactions
   d) Significant, controversial environment-related cases that arose or were solved
   e) The announcement of significant development in environment-oriented technologies

   Subsequent events disclosed as notes are useful as supplemental information to determine the state of companies for future sustainable environmental management.
5. Ongoing applications may be cancelled only if there is good reason and it has been determined that environmental reporting would be more rational if it followed procedure or if there were changes in representation. "Good reason" includes significant changes in company management policies, business reorganization, drastic technological innovation, and amendments in and the abolition of relevant laws, regulations, and standards.

Business Site Data

	Site (Resource Conservation and Recycling) See page 41				
	Waste recovery rate (%)	Total waste amount produced (t)[1]	Total waste discharge amount (t)[2]	Final waste disposal amount (t)	Water consumption (1,000 tons)
Ricoh's Business Sites					
Atsugi Plant—Office equipment and other products 1005 Shimo-Ogino, Atsugi, Kanagawa 243-0298, Japan	100	973	973	0.0	133
Hatano Plant—Printed circuit boards and electronic components 423 Hirasawa, Hadano, Kanagawa 257-8586, Japan	100	154	154	0.0	12
Numazu Plant—Supplies 16-1 Honta-machi, Numazu, Shizuoka 410-8505, Japan	100	13,727	9,550	0.0	1,834
Gotemba Plant—Copiers, fax machines, and data processing systems 1-10 Komakado, Gotemba, Shizuoka 412-0038, Japan	100	2,192	2,192	0.0	78
Fukui Plant—Supplies 64-1 Ohmi, Sakai-cho, Sakai, Fukui 919-0547, Japan	100	2,232	2,232	0.0	187
Ikeda Plant—Electronic devices and office equipment 13-1 Himemuro-cho, Ikeda, Osaka 563-8501, Japan	100	96	96	0.0	110
Yashiro Plant—Electronic devices 30-1 Saho, Kato, Hyogo 673-1447, Japan	100	473	473	0.0	155
Non-production sites	99.1	2,239	2,239	21.2	221
Total	99.9	22,086	17,909	21.2	2,731
The Ricoh Group's Manufacturing Subsidiaries in Japan					
Tohoku Ricoh Co., Ltd.—Office equipment and parts for copiers 3-1 Shinmeido, Nakanomyo, Shibata-machi, Shibata-gun, Miyagi 989-1695, Japan	100	1,491	1,491	0.0	151
Hasama Ricoh, Inc.—Parts for copiers and data processing equipment 86 Aza-Kitasanden, Sanuma, Hasama-cho, Tome, Miyagi 987-0511, Japan	100	2,322	2,322	0.0	11
Ricoh Unitechno Co., Ltd.—Fax machines, copiers, and microfilm equipment 713 Tsurugasone, Yashio, Saitama 340-0802, Japan	100	424	424	0.0	16
Ricoh Optical Industries Co., Ltd.—Photographic equipment 10-109 Ohata, Hanamaki, Iwate 025-0303, Japan	100	853	853	0.0	57
Ricoh Keiki Co., Ltd.—Parts for copiers and data processing equipment 3144-1 Aza-Ipponguri, Shimoizumi, Kuboizumi-machi, Saga 849-0903, Japan	100	219	219	0.0	3
Ricoh Microelectronics Co., Ltd.—Printed circuit boards 10-3 Kitamura, Tottori, Tottori 680-0911, Japan	100	569	569	0.0	19
Ricoh Elemex Corporation—Office equipment, clocks, watches, and educational equipment 2-14-29 Uchiyama, Chikusa-ku, Nagoya, Aichi 464-0075, Japan **Ena Plant, Okazaki Plant**	100	900	900	0.0	96
Ricoh Printing Systems Ltd.[4]—Office equipment 2-15-1 Konan, Minato-ku, Tokyo 108-6021, Japan	99.8	2,289	2,289	4.3	179
Total	100	9,067	9,067	4.3	531
The Ricoh Group's Manufacturing Subsidiaries outside Japan					
Ricoh Electronics, Inc. (REI) — Office equipment and supplies One Ricoh Square, 1100 Valencia Avenue, Tustin, CA 92780, U.S.A.	100	8,142	8,142	0.4[5]	181
Ricoh UK Products Ltd. (RPL) — Office equipment and supplies Priorslee, Telford, Shropshire TF2 9NS, U.K	100	1,649	1,649	0.0	24
Ricoh Industrie France S.A.S. (RIF) — Office equipment and supplies 144, Route de Rouffach 68920, Wettolsheim, France	100	8,362	8,362	0.0	66
Ricoh Asia Industry S.Z. Ltd. (RAI) — Copiers Color TV Industrial Zone, Futian District, Shenzhen, P.R. China	100	1,185	1,185	0.0	177
Shanghai Ricoh Facsimile Co., Ltd. (SRF) — Office equipment No. 885, Jingang Road, Jinqiao Export Processing Zone, Pudong New Area, Shanghai, People's Republic of China	100	490	490	0.0	33
Shanghai Ricoh Digital Equipment Co., Ltd. (SRD) — Office equipment No.887 Jingang Road, Jinqiao Export Processing Zone, Pudong New Area, Shanghai, People's Republic of China	100	556	556	0.0	7
Total	100	20,385	20,385	0.4	487

1. **Total waste generation**: the amount of waste generated.
When waste is generated after waste reduction processing during manufacturing, the total waste generation amount means the amount of waste at the point of generation. When waste is processed after manufacturing at a facility in a business site, the total waste generation amount means the amount of waste prior to waste processing.
2. **Total waste discharge**: the amount of waste discharged outside business sites. This includes residual waste after the intermediate processing of waste at business sites.
3. **The Ricoh Group's target substances for reduction**: PRTR substances designated by four Electric & Electronic Industries Associations in Japan between fiscal 1998 and 2000. The figures are indicators multiplied by the environmental impact potential.

Sites (Preventing Global Warming) See page 35.		Sites (Pollution Prevention) See page 45.				
Energy consumption		Emissions into air (NOx) (t)	Emissions into air (SOx) (t)	Water discharge (BOD) (t)	'Ricoh target substances for reduction' used[3] (t)	'Ricoh target substances for reduction' discharged[3] (t)
($t\text{-}CO_2$)	(TJ)					
13,735	153.9	1.832	0.023	0.000	206.2	3.1
1,268	12.7	0.037	0.000	0.000	178.6	0.0
34,799	544.7	17.444	0.000	3.182	11,394.0	1,569.9
3,542	39.8	0.684	0.008	0.100	0.0	0.0
21,468	357.6	8.182	0.004	0.710	7,426.9	491.1
7,456	83.1	1.028	0.000	0.000	51.4	19.4
30,570	336.5	4.028	0.000	0.000	553.4	292.6
23,474	226.7	2.644	0.133	0.001	2.7	0.0
136,312	1,755.0	35.879	0.168	3.993	19,813.2	2,376.1
10,225	116.0	2.896	2.045	0.000	343.9	48.8
1,980	21.7	0.318	0.233	0.042	23.9	20.3
1,295	14.3	0.098	0.000	0.026	13.4	13.4
9,131	101.6	1.894	1.070	0.249	43.9	3.4
945	9.1	0.000	0.000	0.000	20.4	0.6
3,351	34.0	0.293	2.090	0.127	174.1	3.0
7,329	77.9	0.442	0.084	0.000	299.6	59.9
8,225	88.4	1.222	2.762	0.071	113.4	113.4
42,480	462.9	7.163	8.284	0.515	1,032.5	262.9
48,666	482.7	11.864	0.000	1.833	718.8	14.1
8,609	99.5	1.547	0.000	0.000	245.6	0.0
10,833	311.2	8.095	0.000	0.000	3.8	0.4
16,790	82.5	0.456	0.428	0.000	76.7	0.0
2,003	10.8	0.000	0.000	0.000	0.0	0.0
1,977	9.5	0.000	0.000	0.000	0.0	0.0
88,879	996.1	21.962	0.428	1.833	1,044.9	14.5

4. The data for Ricoh Printing Systems is the aggregate data of Katsuta, Taga, and Yamagata Plants (Ricoh Printing Technologies).

5. REI removed the facility it used to detach selenium alloy from selenium drums. Because REI did not have an infrastructure to recycle selenium sludge in the United States, the company buried the sludge in such a way as to completely prevent leakage.

The Ricoh Group's Environmental Conservation Activities

■ 1976–March 2005

	The Ricoh Group's Major Activities
1976	Establishes Environmental Promotion Section
1990 December	Sets up Environmental Administration Office
1992 February	Establishes Ricoh General Principles on the Environment
March	FT5570 copier awarded the BAM (initial version)
1993 March	Ricoh achieves total elimination of ozone-depleting substances (specific chlorofluorocarbons (CFCs), specific types of halon, carbon tetrachloride, etc.).
May	Announces the recycled product design basic policy and implements recyclable design level 1
May	Launches materials labeling on plastic parts
December	The Ricoh Group achieves total elimination of ozone-depleting substances (specific chlorofluorocarbons (CFCs), specific types of halon, carbon tetrachloride, etc.).
1994 August	Completes the Comet Circle concept
November	Implements labeling of materials and grade on plastic parts
1995 February	Holds First Ricoh Company Environment Conference
October	Announces International Energy Star certified products
December	Ricoh Gotemba Plant acquires ISO 14001 certification (the first certification given by a Japanese certification organization).
1996 July	Ricoh UK Products acquires BS 7750/ISO 14001 certification.
1997 March	Sets management of 79 types of chemical substances
1998 April	Ricoh establishes the Recycling Division.
May	Issues the *Ricoh Group Green Procurement Guidelines*
October	Ricoh Fukui Plant achieves a 100% resource recovery rate (Zero-Waste-to-Landfill).
1999 January	Issues the *Ricoh Group Environmental Report 1998*
September	Ricoh announces results of its first environmental accounting.
2000 January	Ricoh acquires Eco-Mark certification for 28 copier models.
February	Ricoh's digital multifunctional copier, the imagio MF6550, acquires Type III Environmental Impact Disclosure from BVQI (Sweden).
March	Holds the 1st Global Recycling Conference
2001 July	Ricoh announces its participation in e-mission 55.
December	imagio MF6550RC, an environmentally-friendly digital copier, is marketed for rental use.
2002 January	The first Ricoh Green Procurement Meeting is held.
March	The Ricoh Group's main production sites in the world achieve a 100% resource recovery rate (Zero-Waste-to-Landfill).
April	Ricoh announces its participation in the UN Global Compact.
September	Ricoh system acquires Type III Eco-Label certification from the Japan Environmental Management Association for Industry (JEMAI).
November	The Noise Testing Center of Ricoh Omori Plant acquires ISO/IEC17025 certification from the NIST (the U.S.A).
December	The Ricoh Group implements the first commendation of the Ricoh Sustainable Development Award.
2003 January	Ricoh establishes the Corporate Social Responsibility (CSR) Division.
June	Ricoh establishes environmental regulations for paper products.
2004 January	Ricoh implements Ricoh Group Code of Conduct and Ricoh Group CSR Charter.
October	Ricoh Ohmori Office's VOC testing laboratory is certified by BAM in Germany, the first time such certification is given to a manufacturer in the world.

	Society's Recognition of the Ricoh Group's Major Activities
1993 May	Ricoh UK Products' copier photosensitive drum recycling technology receives the Queen's Award in the U.K.
September	Ricoh UK Products' power consumption reduction activities receive Business Energy Awards Grand Prize.
1994 May	Ricoh UK Products' copier photoconductor drum recycling technology receives the European Better Environment Award for Industry.
1995 March	Ricoh receives the Minister of International Trade and Industry Prize in resource-recovery development projects for its efforts in environmentally-friendly product assessment and recyclable designs.
1997 March	Ricoh Corporation (the U.S.A.) wins Energy Star Copier Prize.
1998 December	Ricoh ranks number one in the Second Corporate Environmental Management Level Survey by the *Nihon Keizai Shimbun* newspaper.
1999 November	Ricoh wins the IEA Demand-Side Management Award of Excellence in the recently created Copier of the Future Division for its energy-saving technology.
2000 March	Ricoh Corporation receives three awards from the Energy Star Program: 1) 2000 Energy Star Excellence in Consumer Education Award, 2) Labeling Partners of the Year Award, and 3) Office Equipment Partner of the Year Award (for the fifth consecutive year, the Energy Star Award).
June	Ricoh wins Grand Prize in the 10th Corporate Contribution to Society Awards organized by the Asahi Shimbun Foundation.
December	Ricoh ranks first for the third year in a row in the 4th Corporate Environmental Management Level Survey organized by the *Nihon Keizai Shimbun* newspaper.
2001 July	Ricoh receives the highest eco-rating of AAA in the photographic and office equipment categories from Innovest Strategic Value Advisors, a U.S.A. investment research company, and ranked first among nominees.
December	In a survey conducted by the Financial Times, a U.K. business newspaper, Ricoh is chosen by global CEOs as the world's seventh most respected company in the "most environmentally-friendly" category.
2002 May	Ricoh ranks first in the world in environmental and social/cultural aspects for office equipment and home appliances in the corporate responsibility rating conducted by oecom research AG (Germany) .
2003 April	Ricoh receives the Grand Prize in the 12th Global Environment Awards.
May	Ricoh wins the 2003 WEC Gold Medal.
November	Ricoh receives the Minister for Economy, Trade and Industry Award in the 6th Green Purchasing Awards.
2004 February	imagio Neo 752/602 series receives the Energy Conservation Center Chairman's Prize in the 14th Energy-Saving Awards.
December	Ricoh ranks first in the 8th Corporate Environment Management Level Survey organized by the *Nihon Keizai Shimbun* newspaper (for the 4th time).
2005 January	Ricoh is selected as one of the Global 100 Most Sustainable Corporations in the World at the World Economic Forum (the Davos Meeting).

	Worldwide Trends
1971	Environment Agency setup in Japan
	Ramsar Convention adopted
1977	United Nations Conference on Desertification held
	UNEP Conference held
1987	Montreal Protocol adopted
1990	London meeting (set phaseout of CFCs and HCFCs)
1991	Recovered Resource Use Promotion Law enacted
1992	UN Conference on Environment and Development (Earth Summit) held
1993	Energy Saving Law revised
1995	The First Conference of Parties to the United Nations Framework Convention on Climate Change (COP1) held
	Law for Promotion of Sorted Collection and Recycling of Containers and Packaging enforced
	International Energy Star Program started
1996	ISO Environmental Auditing Standards of Environmental Management System established
	International Energy Star Award launched by EPA
1997	COP3 (Kyoto Conference) held Kyoto Protocol adopted
1998	Eco Partnership Tokyo Conference held
	Law concerning the Promotion of Measures to Cope with Global Warming enacted
1999	Revised Energy Saving Law enforced
	PRTR Law enacted
2000	Law Concerning the Promotion of the Procurement of Eco-Friendly Goods and Services by the State and Other Entities promulgated
	Basic Law for Establishing a Recycling-Based Society enacted
	Waste Management and Public Cleansing Law revised
	Law for the Promotion of Utilization of Recyclable Resources enacted
	Law Concerning the Promotion of the Procurement of Eco-Friendly Goods and Services by the State and Other Entities enacted
2001	Ministry of the Environment (Japan) established
	The first Conference on the Creation of Wa no Kuni held
	Law for Recycling of Specified Kinds of Home Appliances enacted
	Law Concerning the Promotion of the Procurement of Eco-Friendly Goods and Services by the State and Other Entities enforced in full scale
2002	The World Summit on Sustainable Development (Johannesburg Summit) held
2003	The EU Directive on Waste Electrical and Electronic Equipment (WEEE) comes into effect.
	The EU Directive on the Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS) comes into effect.
2004	Tenth Session of the Conference of the Parties (COP 10) to the UN Framework Convention on Climate Change
2005	The Kyoto Protocol goes into force (February 16).

* For details, see Ricoh's web site. (http://www.ricoh.com/environment/global/index.html)

■ Fiscal 2005 (from April 2005 to March 2006)

	The Ricoh Group's Activities
2005 May	Ricoh presents the Ricoh Sustainable Development Award at a science contest at the International Science & Engineering Fair (ISEF), which is held for high school students all over the world.
May	The 18th Ricoh Nature Seminar Elementary Course is held. The number of environmental volunteer leaders totals 296.
May	The Environmental Conference in Europe is held with no CO_2 emissions (carbon neutral).
June	Ecoleaf labeling for the imagio Neo 350RC/450RC recycled copier is made public. It is the first time in the copier and printer industries that Ecoleaf labeling for reconditioned copiers is made public.
June	An exhibition at Ecolife Fair 2005 is set up.
July	The cogeneration system at Ricoh Fukui Plant is completed.
July	Ricoh RS Products Division is given the Eco Rail Mark.
July	The fourth Ricoh parent-child nature school is held.
August	Ricoh acquires China's Type I Environmental Label for the first time.
August	The 17th Ricoh Company Meeting for Environmental Volunteer Leaders is held.
September	The fourth Ricoh Forest Seminar is held. The number of Ricoh forest conservation leaders totals 46.
October	The 19th Ricoh Nature Seminar Elementary Course is held. The number of Ricoh environmental volunteer leaders totals 316.
November	The 20th Ricoh Nature Seminar Elementary Course is held. The number of Ricoh environmental volunteer leaders totals 334.
December	Plant-based plastic is used in part of the housing for the imagio Neo 602ec/752ec, a high-speed multifunctional digital copier, which is the first time a plant-based plastic is used in the copier and printer industries.
December	The Ricoh Group participates in Eco Products 2005.
December	The 18th Ricoh Company Meeting for Environmental Volunteer Leaders is held.
2006 January	The Tokushima Branch of Shikoku Ricoh is certified as a Tokushima 3R Business Site.
January	The 12th Ricoh Group's Sustainability Environmental Conference is held.
January	The Tokyo Office of Ricoh Elemex is certified as an Eco Clean Business Site by Shinagawa Ward.
February	Tohoku Ricoh starts resource-recirculating eco-packing, using used PET bottles as cushioning material.
February	The 5th Ricoh Group Green Procurement Meeting is held.
February	The imagio MP C1500 series, which realizes a significant reduction in electricity consumption using GELJET technology, is introduced.
March	The Ricoh Group in Japan establishes the Management System for Chemical Substances Contained in Products.

	Society's Recognition of the Ricoh Group's Activities
2005 May	The Ricoh Group's 2004 sustainability reports (Environmental Report, Corporate Social Responsibility Report, and Annual Report) are given Continued Excellence Award for CSR Report and Sustainability Report Excellence Award at the 8th Environmental Report Award.
May	Ricoh Fukui Plant's 2004 Environmental Report is given a Continued Excellence Award for the Site Report at the 8th Environmental Report Award.
June	Ricoh's energy-saving fixation technology by capacitor is given the Technology Award at the 2004 Commendation by the Nihon Gazo Gakkai.
June	Ricoh's Fukui Plant receives the Excellent Sustainable Management Award of the Third Japan Sustainable Management Award.
July	Ricoh is given the world's highest rating for corporate social responsibility in oekom research AG of Germany Environmental Ranking in the category of IT industry.
August	Tochigi Ricoh is commended as a 2005 Road Conservation Group by the Kanto Regional Development Bureau of the Ministry of Land, Infrastructure and Transport.
September	Ricoh Printing Technologies' Yamagata Plant is presented with the Chairman's Award of Japan Greenery Research and Development Center at the 2005 Commendation for Excellent Factories in Greenery Development.
October	Ricoh receives the 2005 Director-General Prize for resource-recirculating technologies and systems form the Industrial Science and Technology and the Environment Bureau of the Ministry of Economy, Trade and Industry for its used toner container recovery project.
October	Sanai Logistics Co., Ltd. (Kansai) is awarded as an 2005 Excellent Automobile Transportation Company.
November	Ricoh's environmental advertisements are given the gold prize in the magazine category of the 45th Advertisement Beneficial to Consumers Contest.
December	A high-speed multifunctional copier equipped with HYBRID QSU energy-saving fixation technology wins fourth prize in the Innovators Category of the Low Carbon Leaders Awards.
December	Ricoh receives the Excellence Award in the Corporate Performance Category at the 1st Environmental Efficiency Award 2005.
December	Ricoh receives the Best E-com Award from students of Kobe University as the most excellent company in environmental communication.
2006 January	Ricoh's Numazu Plant receives the PRTR Excellence Award at the PRTR Awards 2005.
January	Ricoh Group Sustainability Report 2005 receives the Environmental Report Excellent Award in the Environmental Report Category and the Environmental Reporting Meister Award at the 9th Environmental Communication Awards.
January	Ricoh Fukui Plant's 2005 Environmental Report is awarded the Environmental Report Excellence Award at the 9th Environmental Communication Awards.
February	The Kyushu Branch of Ricoh Technosystems is presented with the Excellent Waste Reduction and Resource Recovery Company Award 2005.
February	Tohoku Ricoh is awarded the Tohoku Economy and Industry Bureau Director-General Prize 2005 as part of Energy-Conservation Month in the Tohoku area.

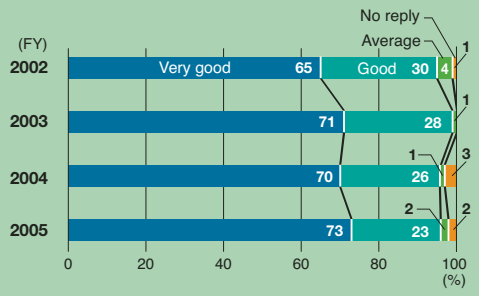
Responses to the Questionnaire for Ricoh Group Sustainability Report 2005

We appreciate customers responding to our questionnaire. We will use your valuable opinion to improve our activities and future reports.

Responses to Our Questionnaire

A total of 17,695 copies of the Japanese version report were distributed and 180 readers answered the questionnaire as of the end of April 2006. The main responses are as follows.

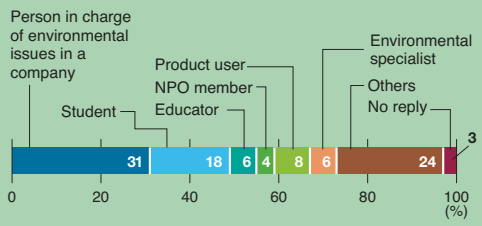
❶ How would you rank the Ricoh Group's environmental conservation activities that are described in the report?



❷ Which section(s) of the report were you most interested in?

1st	Environmental Accounting
1st	Improving Our Products (in general)
3rd	Improvements Made at Business Sites (in general)
4th	Working Toward the World's Best Sustainable Environmental Management
4th	Eco Balance (Identifying Environmental Impact and Target Setting)
6th	FOCUS
7th	Basis for Sustainable Environment Management
8th	Environmental Action Plan

❸ In what capacity did you read this report?



Some of the opinions from the Ricoh Group Sustainability Report 2005 and Improvements in the 2006 Report

○ I thought it would be better if we could obtain information on certain characteristics of the Ricoh Group, particularly something effective.

▶ "Environmental Management in Action" appears as a new feature article at the beginning of the report. Three characteristic examples are shown in the section. See page 7.

○ I want to know what efforts have been made in relation to chemical substances and toward environmental improvement in SCM, which are essential in manufacturing, as new regulations are introduced or existing regulations are upgraded.

▶ The report includes a feature article on the establishment of a management system for chemical substances contained in products to cope with regulations, including European RoHs Directives, globally. See page 33.

○ I would like to know the current business conditions surrounding the selling of reconditioned copiers. How does Ricoh intend to increase the number of such machines sold?

▶ An explanation of the selling of reconditioned copiers is given along with the opinion of customers. See page 28.
Also, "Green Sales in the United States" and "Recycled Machine Business in the Americas" appear as feature articles. See pages 11 and 29.

○ I would like to see [Ricoh's] efforts toward the paperless handling of work at the office introduced.

▶ The report carries a feature article called "Developing 'Live Offices.'" See page 7.

○ Ricoh's efforts toward environmental conservation are varied, but it seems that priority is not given to the preservation of animals living in such environments. I would like to see the company's efforts in the conservation of biodiversity introduced.

▶ We have had the representative of an environmental NPO that has formed partnerships with Ricoh talk about its efforts toward the conservation of ecosystems that are being carried out in partnership with the Ricoh Group. See page 69.

○ We were able to understand Ricoh's efforts to achieve targets set in the Kyoto Protocol.

Index by Term

Third Party Review

The Ricoh Group receives a third-party review of its environmental performance data and collection/aggregation system (Sustainable Environmental Management Information System). The related information is provided to stakeholders in the sustainability report (Environment). Furthermore, the results of this review are used to improve and advance sustainable environmental management. In fiscal 2004, the concept of system verification was introduced. System verification checks for consistency between data and whether the system effectively functions to collect/aggregate highly reliable data. The Ricoh Group continues to promote sustainable environmental management by using third-party reviews more effectively.

Ricoh Group Sustainability Report

29th May 2006

Independent Verification Report
To: Ricoh Co., Ltd.
Chairman of the Board,
President and Chief Executive Officer
Masamitsu Sakurai

BVQI Japan Co., Ltd
General Manager
Daniel Oliva

Objective of Verification

To verify the reliability and consistency of data selected by Ricoh Co., Ltd. (Ricoh) for inclusion in the Ricoh Group Sustainability Report (the Report) 2006, issued under the responsibility of Ricoh's management.

Scope of Work

BVQI visited seven sites, listed below, and verified data from each site applicable to Ricoh's production and non-production activities for the reporting period April, 2005 to March, 2006.

Head Office, Corporate Environment Division	Administration
Ricoh Gotemba Plant	Manufacture of office equipment
Ricoh Optical Industries, Co. Ltd.	Manufacture of electronic devices
Ricoh Kansai Co., Ltd.	Product sales
Ricoh Asia Pacific Pte. Ltd.	Product sales
Ricoh Hong Kong Ltd.	Product sales
Ricoh Industrie France S.A.S.	Manufacture of supplies

Verification Methodology

BVQI has conducted verification activities at:

Head Office

1. The reliability of data collection and aggregation systems and the adequacy of the operation.
2. The accuracy and consistency of data collected for the fiscal year 2005 (2005/4-2006/3) and the reliability of data transposition from sites to the Head office.

Sites

1. The effectiveness of data measurement and monitoring within the environmental management system.
2. The quality of data and the effectiveness of internal verification.
3. The reliability and adequacy of data collection and aggregation methods and the method of data reporting to the Head Office.

Opinions

BVQI reports as follows:

1. The data collection and compilation system is reliable and systems are operated adequately at all sites whereupon BVQI conducted verification activities as per the scope of work.
2. All the data included in the report that have been subject to independent verification are reliable and an accurate reflection of data collected at site level and collated at Head Office.

Reference View

BVQI has reported many findings and opinions through the data verification process at the head office and site level. BVQI has concluded the following :

1. Good Points

- The Eco Balance scheme advocated by Ricoh is an excellent method that quantitatively identifies the organization's overall environmental impact, using objective criteria. The scope under the coverage of the Eco Balance scheme is to further expand over time.
- Data from each sales company is reported to Head Office after being compiled at Marketing Group level. The protocol for the approach used in the Marketing Group is clear, ensuring that the collection and compilation of data is consistent and reliable.
- When a site needs to revise previously reported environmental data, the process works well in that the revision history approved by the relevant site is recorded on database and Head Office is always able to identify such revisions.
- It is commendable that whilst production is increasing, a target reduction in total greenhouse gas emissions is set. This is supported by definite measures for the systematic reduction of total emissions.

2. Follow-up on Issues from Sustainability Report 2005

- The reporting system has improved with the inclusion of the amount of by-product CF_4 recorded against greenhouse gas emissions. Moreover, the globally recognized calculation method and conversion coefficient are applied, and the transparency and reliability of such disclosed figures are thus improved.
- Consumption tax information was erroneously included in calculation of the data for environmental accounting at a number of the sites this year, the same as for last year.

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3. Opportunities for Improvement

- In cases where significant variation is identified in data that is entered into the reporting system compared with the previous period (month or year), it would be preferable to establish a process that highlights this to the relevant staff, recording the cause of variation wherever possible.
- Classification and compilation criteria for environmental accounting are recognized differently across various sites. It is necessary to carry out such accounting operations in a consistent and equal at every site, conforming to a single set of criteria.
- The scope covered by Eco Balance scheme does in principle cover materials from their raw state to disposal of the used product, addressing specific consumption issues available in public. The reported figures are considered to be highly transparent and reliable. However, a part of specific consumptions, which are only after the importing of raw materials, is disclosed. As a result, the scheme is not able to align the scope of the considered data (a part of specific consumption). The reliability of data would be improved by updating and realigning the scope of the compiled data hereafter at the stage when the specific consumption reflected the pre-importing stage is available.

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Please send all comments and inquires regarding this report to:

● The Americas

Ricoh Corporation
Corporate Quality Assurance Environmental Management Division
19 Chapin Road BLDG. C Pine Brook, NJ 07058, U.S.A.
Phone: +1-973-808-7645 Facsimile: +1-973-882-3959
E-mail: environmentinfo@ricoh-usa.com
http://www.ricoh-usa.com

● Europe, Africa, and the Middle East

Ricoh Europe B.V.
Prof. W. H. Keesomlaan 1, 1183 DJ, Amstelveen, The Netherlands
Phone: +31-20-5474111 Facsimile: +31-20-5474329
E-mail: emo@ricoh-europe.com
http://www.ricoh-europe.com

● Asia and Oceania

Ricoh Asia Pacific Pte. Ltd.
Regional Environmental Management Group
#15-01/02 The Heeren, 260 Orchard Road, Singapore 238855
Phone :+65-6830-5888 Facsimile: +65-6830-5830
E-mail: webmaster@rapp.ricoh.com
http://www.ricoh.com.sg/

● China

Ricoh China Co., Ltd.
17F., Huamin Empire Plaza, No. 728 Yan An Xi Road, Shanghai, China P.C 200050
Phone: +86-21-5238-0222 Facsimile: +86-21-5238-2070
E-mail: contact@rcn.ricoh.com
http://www.ricoh.com.cn/

● Japan

Ricoh Co., Ltd.
Corporate Environment Division
Ricoh Bldg., 8-13-1 Ginza, Chuo-ku, Tokyo 104-8222, Japan
Phone: +81-3-6278-5209 Facsimile: +81-3-3543-9347
E-mail: envinfo@ricoh.co.jp
http://www.ricoh.com/environment/index.html

● Ricoh Group Sustainability Report (Environment) has been independently verified by Bureau Veritas Quality International (BVQI) to ensure the reliability of the data gathering used in preparing the report.

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