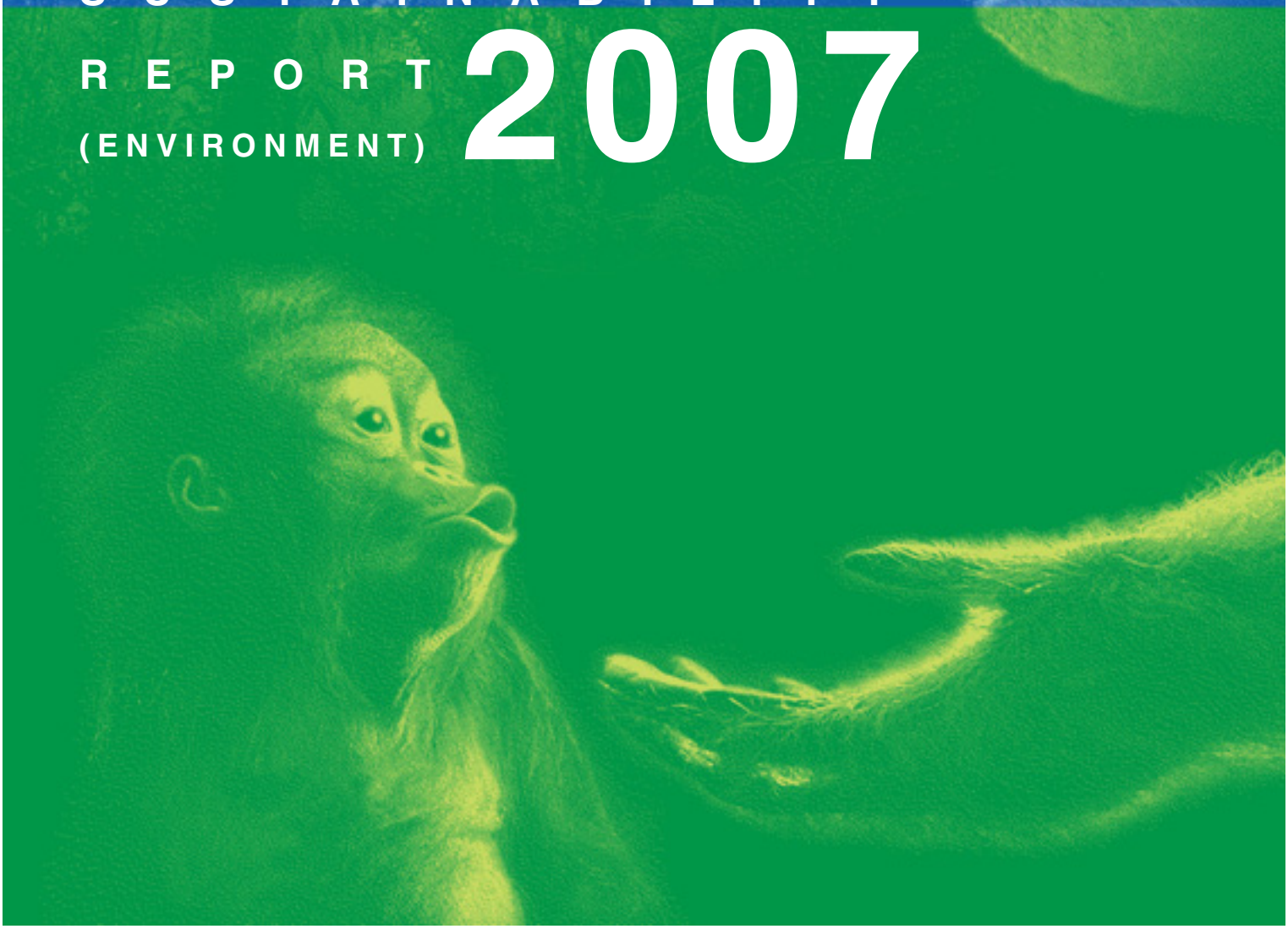
RICOH

RICOH GROUP SUSTAINABILITY REPORT (ENVIRONMENT) 2007



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 2006 to facilitate a better understanding of what we do and how we work.

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 Corporate Activities
- Harmony with the Environment
- Respect for People
- Harmony with Society

Economic

Sustainability Report (Economic)

- Management policy
- Management results
- Financial status

■ How to Obtain Ricoh's Corporate Information:

- **Sustainable environmental management**
  http://www.ricoh.com/environment/
- **Corporate social responsibility**
  http://www.ricoh.com/csr/
- **IR (for shareholders and investors)**
  http://www.ricoh.com/IR/
- **Social Contribution**
  http://www.ricoh.com/about/csr_environment/sc.html

■ Cover photograph: Orangutans
Orangutans are large anthropoids living only in the lush tropical forests of Malaysia and Indonesia. The word "orangutan" means "residents of the woods" in the Malay language. Due to the rapid depletion of their habitat by logging and the increase in the number of plantations, they are on the verge of extinction.

Editorial policy of the Ricoh Group Sustainability Report (Environment) 2007

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. It was compiled not only to report on the results of our activities, but also to introduce our environmental policies and to explain how we proceed with our projects. We have adopted a communication style that we hope will inspire our readers to engage in environmental conservation activities and to encourage other people to do so too, thus creating a ripple effect in our society.

● 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.

To fulfill its mission as a global citizen, the Ricoh Group will enhance its sustainable environmental management, contribute to the development of a sustainable society, and strive to become a corporation that is always growing.

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. The Ricoh Group strives 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 until recently easily supported the wide-ranging and ambitious activities of mankind. Recent activities, however, 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. Climate change has frequently caused damage all over the world, and it has been scientifically proven that climate change is related to the activities of human beings. We have already passed the discussion stage and we all need to make even more positive efforts to conserve our environment as swiftly as we can. Otherwise, we will lose the opportunity to resolve this critical situation. The Ricoh Group believes that striving for environmental conservation is its mission as a global citizen and it is our most important corporate social responsibility.

Sustainable environmental management in the Ricoh Group

The goal of environmental conservation is to achieve a sustainable society where environmental impact is limited to a level that the Earth can deal with. This cannot be achieved only by temporary activities: it requires continuous efforts. 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 simultaneous achievement of environmental conservation and profit generation, and all employees of the Ricoh Group have been engaged in activities to that end. According to our environmental accounting for fiscal 2006, costs of ¥18.3 billion resulted in substantial economic gains of ¥24.5 billion. According to our calculation, this brought about economic effects of ¥34.6 billion, and this includes risk aversion and improvement in the brand value.

Enhancing sustainable environmental management to become a corporation that is always growing

Although the global society has surely taken a step forward with environmental conservation, environmental problems remain serious and we cannot afford to waste any time in addressing them. If it is to survive, human society has to change rapidly into a sustainable society which causes less environmental impact. How then should companies evolve? It is necessary for companies to be clear about how society and the companies themselves should develop in the future and how they can contribute to desirable changes in society. Such companies will be able to foster competitiveness and develop economically as sustainable companies. The Ricoh Group will pursue both environmental conservation and profit generation at an even higher level and enhance its sustainable environmental management. Through these efforts, the Group intends to contribute to achieving a sustainable society and to become a corporation that continues growing.

Shiro Kondo
President and Chief Executive Officer
近藤史朗

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

The Ricoh Group describes its vision for an ideal society and global environment in the "Three Ps Balance." In its Extra-Long-Term Environmental Vision the Group also expresses its recognition that advanced nations need to reduce their environmental impact to one-eighth the fiscal 2000 levels by 2050. Based on this recognition, we have set mid- to long-term targets, and put into effect a specific environmental action plan accordingly. We have incorporated environmental viewpoints into every aspect of management and introduced activities conducted by all employees in all our divisions, including not only development and manufacturing, but also planning and sales divisions at both our domestic and overseas sites, aiming to make our environmental conservation efforts even more effective. In the future, we will contribute to reducing our environmental impact, not only in the business fields in which we are currently engaged, but also in society as a whole, by promoting the development of environmental technologies even more extensively. In this way, we will contribute to changing society for the better.

Enhancing Nature's ability to recuperate

To assist the global environment to recover from the damage that has been inflicted upon it, we must do much more than simply reducing the environmental impact caused by our business activities and society. It is vitally important that we support the ecosystem that provides us with clean air and water as well as fertile soil, and allow it to recuperate. The Ricoh Group believes that the final goal of corporate environmental conservation activities should be to recover a balanced ecosystem, which is essential for the continued existence of human society. Based upon this belief, we are striving to support the conservation and recovery of the ecosystem in partnership with NPOs and local communities, paying particular attention to the biological diversity of forest ecosystems.

Cooperating with our stakeholders

A sustainable society cannot be built by the efforts of the Ricoh Group alone. It is important to actively expand the network of environmental conservation to connect us with our stakeholders, including customers, suppliers, NPOs, administrative bodies, and local communities, in order to discuss the way we want society to develop, to put forward and exchange ideas, and cooperate with each other in encouraging reductions in environmental impact from our different standpoints. We believe it is also important to demonstrate examples of successful sustainable environmental management to society in cooperation with our stakeholders.

To our readers

The Ricoh Group has been announcing its ideas on sustainable environmental management and presenting information on the progress of its global sustainable environmental management in its series of Sustainability Reports. We want to discuss global environmental problems with many people throughout the world and we hope that this report will help many of you 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.

The results of environmental impact reduction and economic value creation in fiscal 2006 and changes in sustainable environmental management indicators showing the level of sustainable environmental management

Reducing Environmental Impact

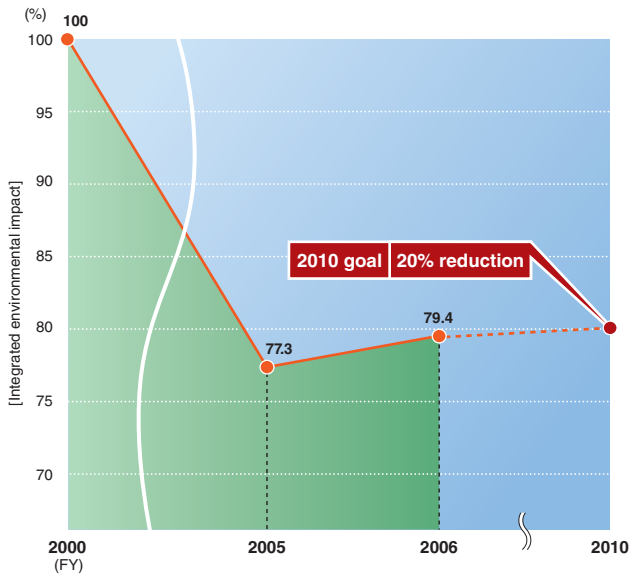
The Ricoh Group has targets to reduce the environmental impact (integrated environmental impact*) of our major business activities in advanced countries by 15% in fiscal 2007 and by 20% in fiscal 2010 over the levels in fiscal 2000. In fiscal 2005, we were able to reduce the environmental impact by 20% thanks mainly to reductions in the chemical substances contained in our products and development of energy-saving technologies for copiers. However, in fiscal 2006, the environmental impact increased by 2.7% over the previous year. The major reasons for this increase were the rise in resource use due to an increase in sales of imaging equipment and an increase in paper consumption by customers using our products. As we expect to expand our business scale by more than 8% annually, we need to make even greater efforts to reduce environmental impact to achieve our environmental impact reduction targets for fiscal 2007 and 2010. Specifically, we will proceed with medium and long-term measures for resource-recirculating, such as increasing sales of recycled copiers and putting more efforts into developing environmental technologies to reduce resource use and paper consumption.

* The Ricoh Group measures environmental impact with a unit called the integrated environmental impact. For details See page 53.

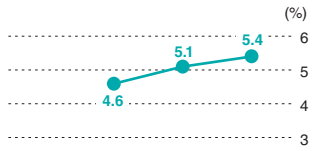
Business Results for Fiscal 2006

The Ricoh Group's consolidated sales in fiscal 2006 increased by 8.4% over the previous term to reach ¥2.0689 trillion, exceeding ¥2 trillion for the first time. In the office solutions sector, sales of color multifunctional copiers and laser printers increased. There was an increase in income in all business sectors and Group income increased for the 13th consecutive term. For the first time, sales outside Japan accounted for more than 50% of the Ricoh Group's total sales. Net income for the current term increased by 15.1% over the previous year to ¥111.7 billion, marking the highest profit for two consecutive terms. This was due mostly to the increase in sales of high value-added products and to continuous cost-trimming campaigns. It is also the first time that the Ricoh Group has earned more than ¥100 billion in net income in one term.

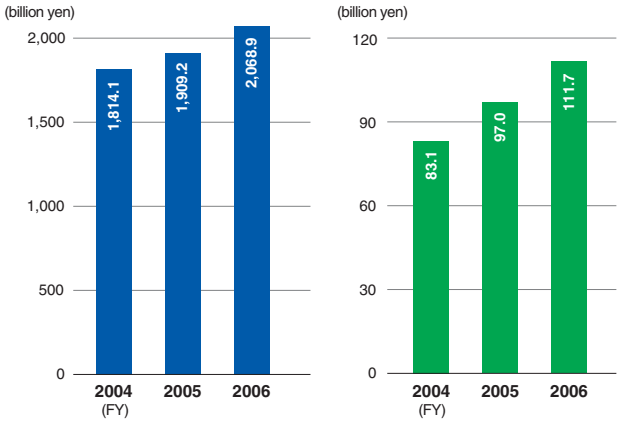
Changes in Integrated Environmental Impact



Sales and net income on sales



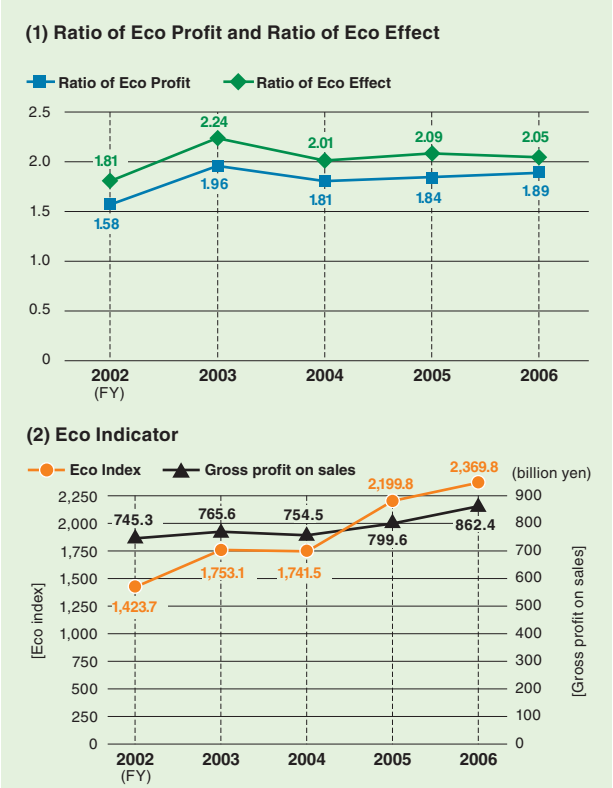
Net income



Review of Environmental Accounting

When we look at the trend for the whole Ricoh Group, we see an improvement in the Eco Index, the ratio between gross profit on sales and total environmental impact, while our business is expanding. This means that the Ricoh Group is able to reduce its environmental impact in proportion to the added-value of its business activities (see graph (2)). The Ratio of Eco Profit, an indicator of the cost-effectiveness of sustainable environmental management activities, and the Ratio of Eco Effect, an indicator that takes into account the social cost reduction values, remained unchanged over the figures for fiscal 2005. This was because the environmental cost and the increase in economic benefit have increased at the same rate, and this means that we have been able to maintain our cost-effectiveness (see graph (1)). When we look at the cost and economic benefit data in the corporate environmental accounting* for fiscal 2006, there is a substantial increase in upstream and downstream costs and in the sales value of recycled products, which means that the recycle-related businesses is growing. Substantial effects of savings on electric power and more efficient waste disposal campaigns dropped drastically from ¥580 million in fiscal 2005 to minus ¥160 million. This was caused by the increase in payments for utilities and waste disposal services due to business growth across the whole Group. Similarly, the effect on environmental conservation was that CO_2, NOx, and BOD figures increased as a result of our business growth. We will work on reducing environmental impact and enhancing efficiency from an energy-saving and resource conservation point of view, including improvements to our production processes. We will thus advance towards our goal of sustainable environmental management. See page 57.

Changes in the Ricoh Group's sustainable environmental management indicators



The Ricoh Group's Sustainable Environmental Management Indicators (fiscal 2006)

Sustainable environmental management indicators	Results in fiscal 2006	Calculation formula
REP: Ratio of Eco Profit	1.89	Total economic benefit (34.59)/Total environmental conservation cost (18.27)
REE: Ratio of Eco Effect	2.05	[Total economic benefit (34.59) + Social cost reduction values (0.16+2.66)]/ Total environmental conservation cost (18.27)
Eco Index	2,369.8	Gross profit on sales (¥862,400,000 thousand)/Total environmental impact (363,913)
RPS: Ratio of Profit to Social Cost	146.2	Gross profit on sales (862.4)/Total social cost (5.9)

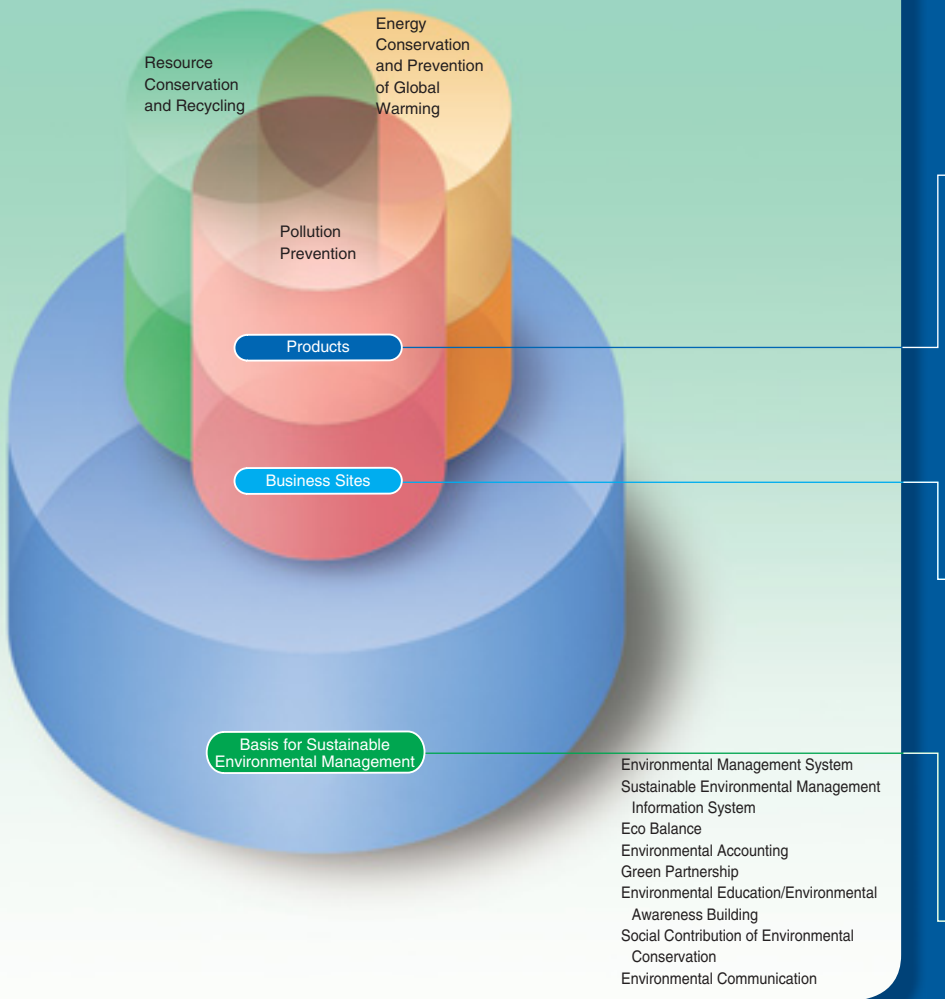
* Monetary units are indicated in billions of yen unless otherwise indicated.

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 2006 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**.



■ Major Awards and Recognition Ricoh Received in Fiscal 2006

Voted One of the 100 Most Environmentally Sustainable Companies in the World
Ricoh was voted one of the 100 most environmentally sustainable companies in the world for three years in a row as assessed by Canadian Corporate Knights Inc. based on analytical data presented by Innovest Strategic Value Advisors of the U.S.A.

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), which are provided by Dow Jones & Company (U.S.A.) and SAM Group (Switzerland), for five consecutive years and of the FTSE4 Good Global Index for four years in a row. The latter index is published by FTSE Group, a joint venture between The Financial Times (U.K.) and the London Stock Exchange.
* As of May 1, 2007

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.

<Reference pages>

Feature Article: Sustainable Environmental Management Network

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.

Actions regarding the Three Pillars of Products

TOPIC

INTERVIEW

Actions regarding the Three Pillars of Business Sites

TOPIC

INTERVIEW

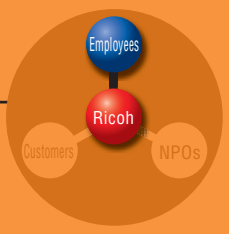
Basis for Sustainable Environmental Management

TOPIC

TOPIC "TOPIC" introduces activities of particular interest to readers and activities unique to the Ricoh Group.

INTERVIEW Interview articles help readers become more familiar with Ricoh's environmental activities through interviews with people who are actually involved in such activities.

Ricoh Global Eco Action



Day when employees of the Group thought about the environment and took action
About 28,000 people at 89 companies in 24 countries participated.

On the night of the summer solstice, Ricoh's advertising towers and signs usually lit up at night in various parts of the world were turned off. Ricoh Group employees and their families all over the world took a variety of actions for the benefit of the Earth.

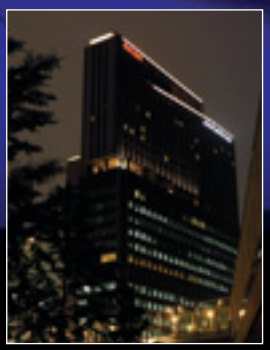
Poster in English encouraging participation in the environmental event

Actions encouraged by "Ricoh Global Eco Action"

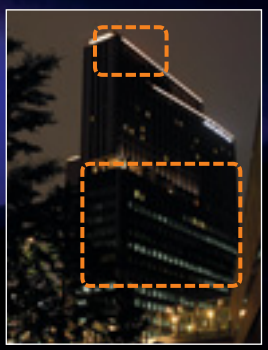
1. **Switch off lights and electric appliances whenever possible in the daytime to save energy.**
2. **Finish work on time and turn off lights before leaving the office.**
3. **Turn off lights in your house and talk about the environment with your family.**

- Turned off the lights at advertising towers and signs (encouraged turning off the lights at advertising towers and signs at business sites).
- In addition, individual subsidiaries and business sites took their own actions.

* These activities are in conjunction with the Japanese Ministry of the Environment's "CO_2 Reduction/ Lights-Down Campaign" and "Black Illumination 2006."



When indoor lights and neon signs are lit up



When indoor lights and neon signs are turned off

Background photo: PR activities conducted at the entrance to the first floor of Ricoh Head Office

Ricoh's advertising towers and signs usually lit up at night were turned off in various parts of the world on June 21, 2006.

Ricoh Global Eco Action was an environmental event designed by the Ricoh Group to enhance awareness of the environment and encourage all our employees to take action for the environment. Positive efforts were made to encourage Ricoh's employees to turn off the lights in their offices, finish work on time, and talk with their families about the environment on June 21, which is the summer solstice in Japan. Posters and the intranet were used to publicize participation in the event, which produced action on a large scale, with 28,000 employees at 89 companies in 24 countries participating. Lights at signs and advertising towers were turned off in Japan, China, the U.K., the Netherlands, Belgium, Spain, Hungary, Poland, and Canada. Ninety percent of the employees at our companies who had announced their intention to participate in the event to turn off lights in offices and switch off computers actually did so. In addition, 70% of the employees at our companies finished work by 7 p.m., and 80% talked about the environment with their families.

An exchange ticket (E-coin) for ice cream

Ice cream distributed to employees traveling to the office by means other than a car

Car sharing used to commute to work

Unique actions in different countries

CO_2 emissions reduced by about 4,470 kg in total

In addition to activities promoted by the Group as a whole, our subsidiaries in different countries took their own actions in response to employees' unique ideas. Shanghai Ricoh Facsimile Co., Ltd. (SRF) suspended operation of elevators in their office buildings from June 19 to 21. Also, about 400 computers were switched off during the lunch break, and all the employees finished work on time and were requested to refrain from using their cars for commuting on June 21. At Ricoh Electronics, Inc. in the U.S., 500 seedlings were donated by a supplier and distributed to employees, who were encouraged to plant them at home. At Ricoh Europe B.V. in the Netherlands, ice cream was offered to staff members who commuted by public transport, bicycle, or on foot, instead of by car. Ricoh China Co., Ltd. asked companies in its neighborhood to participate in its activities, aiming to expand the network of eco action. The reduction in CO_2 emissions as a result of all these activities was estimated at about 4,470kg. We will continue to expand our network of participants and make it an even larger-scale action event from next year.

Neon signs turned off in Shanghai

Sections that carried out excellent environmental activities were commended

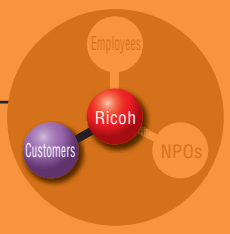
Lights were turned off during the lunch break in the office

Folding fans presented to participants in the event by lottery

Comments from participants

- I did not usually care that much. But after spending a whole day taking notice of it, I realized for the first time how often I had been leaving lights on.
- I went to buy some candles with my children and switched off the lights at eight at night. We even took a bath by candlelight. I told my children not to waste electricity.
- I usually give my children a ride to school. But on that day, I used a bicycle instead.
- The event gave us a good opportunity to think about the environment. I would like to continue to be engaged in small environmental conservation activities as much as possible.
- Although they might appear unexceptional, I think they are valuable activities that are worth continuing.

Ricoh Tree Dedication Programme

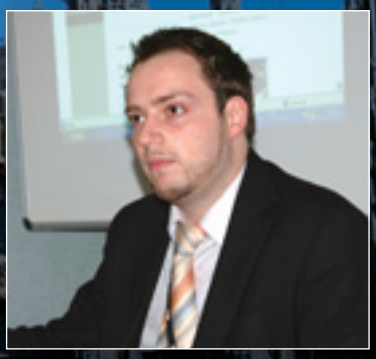


Ricoh's Sales Subsidiary in the U.K. Promotes Program to Allow Customers to Contribute to Creation of Sustainable Society by Using Ricoh Products

Ricoh UK Ltd., a sales subsidiary in the U.K., is promoting the Ricoh Tree Dedication Programme. Under this program, Ricoh plants trees in the customer's name in proportion to the number of copies made on the customer's Ricoh equipment and sends the customer an "e-certificate" and information on how the trees are doing via an online blog. Thus, Ricoh UK strives to offer new value to customers while preserving the environment through a scheme that allows customers to contribute to environmental conservation by using Ricoh products.

About 2,600 customers have participated in the program and over 40,000 trees have been planted.

The Ricoh Tree Dedication Programme started in January 2005. Customers are requested to make an entry for participation in the program for each Ricoh product used. Ricoh will plant a tree in the customer's name for every 100,000 copies made on the customer's Ricoh equipment. Since 2006, the company has been supporting its partner NPO, Seeds for Africa, in planting fruit trees in Kenya, Uganda, Tanzania, and Sierra Leone with local communities. Planted fruit trees offer not only food to local people but also fruit for sale, and they contribute to the prevention of global warming and the creation of a sustainable society. By December 2006, about 2,600 customers had made entries for 35,000 units of products, resulting in the planting of over 40,000 trees so far. This program has evoked favorable responses from and been highly appreciated by many of our customers. There are examples of a customer's high appreciation of this program leading to a business agreement for a Ricoh product.



Matthew Smithurst
Marketing Officer
Ricoh UK Ltd.

Background photo: Big Ben, London

Derbyshire County Council

Derbyshire has a population of about one million and is located in the central part of England. Derbyshire County Council (DCC) is one of the most pro-active county councils in the U.K. in initiatives and puts up clear ideas about environmental conservation. As a community leader, DCC has persuaded residents and companies to recognize the importance of environmental issues. In addition, DCC has contributed to the planting of 2,500 trees, which is the largest number of trees planted among our customers participating in the Ricoh Tree Dedication Programme.

A crystal shield was presented on March 15, 2007, in commemoration of the planting of 2,500 trees.

(From left)
Paul Curtis
Ricoh UK Ltd.
Ms. Alison Walbank
Mr. Steve Harrison
Ms. Maggie Bishop
Mr. John Bettison
Ms. Helen Bartle
Derbyshire County Council
Councillor Geoff Carlisle
Mr. Andrew Ayling
Derbyshire County Council
Matthew Smithurst
David Birch
Ricoh UK Ltd.
Ms. Michelle Smith
Derbyshire County Council

> We found the program an innovative idea for environmental preservation.

● Assuming leadership in the local community

When engaging itself in any activities, Derbyshire County Council (DCC) gives sufficient consideration to the influence it has on the economy and environment. In addition, it not only shifted the source of electricity used in the office to natural energy, but also implements a collection and recycling program for toner bottles; green purchasing of everything from buildings to pencils; and fair trade purchasing to check whether suppliers fulfill their corporate responsibilities through the supply chain. DCC also conducted a survey on CO_2 emissions by county councils and engages itself in activities to offset CO_2 emissions in cooperation with the Carbon Trust. DCC thus displays initiative as a community leader.

● Using the program for developing environmental awareness in the local community

Derbyshire County Council (DCC) purchased office automation equipment by tender in 2005, aiming at rationalisation of printing and environmental preservation. Appreciating the reduction in the number of printers through optimal placement, energy-saving efficiency, and so forth, DCC currently uses over 1,800 Ricoh products and entered all of them for the Ricoh Tree Dedication Programme. "When I was first told about this program, I thought it was an innovative idea for environmental preservation. It was an idea no one else had ever proposed, and we thought that we would be able to influence the local community as a whole by participating in the program. In addition to offering information on our website, we use it for developing environmental awareness among children in the local community by giving information about the program to schools." Numerous African primary schools are involved in the scheme and there is an obvious potential link with schools in Derbyshire.

London South Bank University

Over 2,000 students from over 120 countries study at London South Bank University (LSBU). The university has entered 150 Ricoh products currently in use for the Ricoh Tree Dedication Programme, contributing to the planting of about 240 trees.

Mr. Alan Lee (Left)
Document & Copyright Services Manager
Centre for Learning Support & Development
London South Bank University

Ian Moody (Right)
Ricoh UK Ltd.

> Participation in the Ricoh Tree Dedication Program has enabled LSBU to create new sustainable resources for future generations while carefully using the paper end products in the present.

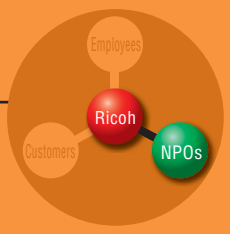
● Consideration for the environment Kaizen and all five Kyosei improves the quality and reliability of our Ricoh products

London South Bank University has just won an Innovation Award from the Carbon Trust, an independent company funded by the UK government to promote the reduction of carbon emissions, and practices the green purchasing of all equipment. We approach purchasing on the basis of the total lifecycle of a product, taking into account energy consumption, running costs, transportation and recycling. Environmental considerations account for around 10% of the factors affecting purchasing decisions. We believe that the reliability of products is important and consideration for the environment is an important element that improves the synergy of the Ricoh products.

● We appreciate the scheme behind the program and your activities in Africa

We have entered all the Ricoh products we use in the Ricoh Tree Dedication Programme. We decided to participate in the program because we appreciate the scheme to plant trees in proportion to the volume of resources and energy used, which allows us to reduce the environmental impact we cause. We also used the program for information purposes, mentioning it in our university magazine. We find it wonderful that we can contribute to the creation of a sustainable society by supporting your activities in Africa, a continent beset with many problems and suffering deficiencies in many essential fields. We expect that Ricoh UK will offer information on the performance of products that contribute to sustainability.

Ricoh Environmental NPO Meeting



We are encouraging partnerships between companies and NPOs and between different NPOs, with the aim of promoting even more effective activities to restore the global environment.

Harumitsu Mashiko
Corporate Environment Division, Ricoh

Mr. Yasushi Hibi
Conservation International

Mr. Eiichiro Noguchi
FoE Japan, an international environmental NGO

Mr. He Aijun
Asia Green-Culture Association

Mr. Katsunori Sasaki
FoE Japan, an international environmental NGO

Kazuyuki Kishi
Corporate Environment Division, Ricoh

Ms. Mikako Awano
WWF Japan

Ms. Keiko Suzue
Bird Life Asia

Ms. Risako Noguchi
C.W. Nicol Afan Woodland Trust

Mr. Noritaka Ichida
Bird Life Asia and Yanbaru Forest Trust

Conserving the ecosystem on a global scale cannot be achieved by corporate efforts alone.

The Ricoh Group believes that repairing the damage to the global environment is its corporate mission. Based on this belief, the Group has formed partnerships with NPOs to conserve the global forest ecosystem. Through these experiences, we have learned that partnerships between NPOs and companies are a really significant way of expanding the base of a sustainable society and have started a variety of activities to promote higher levels of cooperation and collaboration between companies and NPOs and between different NPOs. In this way, we aim to achieve more effective conservation of the ecosystem, something that cannot be achieved through the efforts of a single company.

We are faced with a mountain of problems concerning the global environment. NPOs should cooperate in taking strategic action.

Seven NPOs that are involved in the forest ecosystem conservation project in cooperation with Ricoh were invited to the Ricoh Environmental NPO Meeting on March 27, 2007. The meeting aimed to encourage information exchange among NPOs. At the meeting, it became clear that NPOs face many problems in common. At the same time, all participants had greater hopes that their activities would be even more effective if NPOs cooperated with each other in taking strategic action. The Ricoh Group will continue to hold such meetings to offer a platform for cooperation among NPOs and to offer concrete support for their activities.

Background photo: At the Ricoh Environmental NPO Meeting on March 27, 2007

Valuable opinions were voiced by participants at the Ricoh Environmental NPO Meeting.

Ms. Mikako Awano,
WWF Japan

Many companies plant trees simply for the sake of appearances, without any clear vision. Ricoh's forest conservation activities, however, are backed firmly by its basic attitude towards environmental problems and its awareness of the problems. The meeting offered us a good opportunity to realize again that for Ricoh, afforestation is a tool for those purposes.

Mr. Noritaka Ichida,
Bird Life Asia and Yanbaru Forest Trust

Ecosystem conservation activities always come up against a variety of problems of all shapes and sizes. Individual NPOs are carrying out their activities and overcoming these problems one by one. If NPOs and companies start having heart-to-heart talks with each other, they are sure to find more clues to solving these problems. I would like to thank Ricoh for offering us this opportunity and look forward to more profound discussions in the future.

Ms. Keiko Suzue,
Bird Life Asia

It is difficult to present the effects of ecosystem conservation within a short span of three to five years. So I would like companies to support us in the longer term. I hope NPOs can cooperate with each other to set indicators to evaluate conservation effects. I would like Ricoh to offer a platform to that end.

Mr. He Aijun,
Asia Green-Culture Association

Many international NPOs have their headquarters in Western countries, and there are only a few NPOs in Asia. Nevertheless, exchanges and cooperation among NPOs in Asia, where biological species and natural habitats are widespread, will result in highly effective activities.
For example, cooperation between Yunnan and Japan in the conservation of evergreen broad-leaved forests and World Heritage sites would be a great idea.

Ms. Risako Noguchi,
C.W. Nicol Afan Woodland Trust

We are faced with many global environment problems all over the world. How NPOs cooperate with each other and take strategic actions is really important for the recovery of the global environment. We of course appreciate Ricoh's support for individual projects. But even more, we are hoping for Ricoh's support for cooperative strategies between NPOs.

Mr. Eiichiro Noguchi,
FoE Japan, an international environmental NGO

I was surprised to know that the projects of different organizations face so many problems in common. I usually tend to think only about our own activities, but listening to people at the meeting, I could see our own activities from an objective point of view.

Mr. Yasushi Hibi,
Conservation International

The most significant task in the running of an NPO as an organization is establishing an independent economic foundation. In the future, we would like to seek partnerships that will lead to innovations in the NPO sector, even addressing issues relating to the organizational foundation including personnel costs, since people are the largest resources for NPOs.

Harumitsu Mashiko,
Corporate Environment Division, Ricoh

Indicators for assessing the effects of ecosystem conservation are extremely important for companies like Ricoh to continuously provide support, and we are willing to cooperate in establishing such indicators. We want to hold even more detailed discussions with you and intend to establish an ecosystem conservation network covering NPOs and companies.

Seeking the ideal way for NPOs and companies to cooperate beyond their different stances

On June 20, 2006, 109 environmental experts from NPOs, companies, and organizations participated in a symposium which was held in conjunction with the Environment Month. Activities carried out by Ricoh and NPOs were presented, and a panel discussion was conducted about how NPOs and companies can collaborate with each other. The conclusion of the discussion was: "We should stop thinking that companies are experts on economics and NPOs are experts on environmental activities, and get to know each other better. This will lead to generating ideas on how to cooperate more effectively." Some of the company participants said, "Our ideas about NPOs have changed. The goals of both parties can be achieved only when we expect more of NPOs and take them seriously." "It was a good chance to think about partnerships between NPOs and companies from a viewpoint I didn't have before. It was a refreshing surprise to see people from NPOs expressing their true feelings."

■ **1st Ricoh Global Environment Month Symposium "For Joint Creation of a Sustainable Society"**
June 20, 2006, "i-Salon" at Ricoh Head Office
Number of participants: 109 in total (59 from companies, 30 from NPOs, and 20 from Ricoh)
<Panelists>
Mr. Naoki Adachi: sustainability planner, Mr. Eiichiro Noguchi: FoE Japan,
Mr. Masaki Mashita: Nippon Keidanren Committee on Nature Conservation,
Mr. Hiroshi Iijima: Asaza Fund

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 Ps (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.

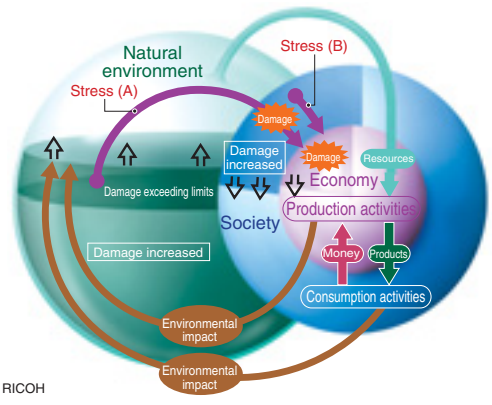
To Achieve the Ideal Society

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. Based on the Year 2050 Extra-Long-Term Environmental Vision[1] and as milestones on the path to attaining its long-term vision of the ideal sustainable society, the Ricoh Group has adopted the Year 2010 Long-Term Environmental Goals[2] and the Environmental Action Plan from 2005[3], 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 17. 2. See Page 18. 3. See Page 21.

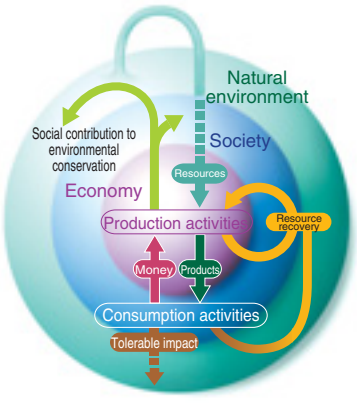
Three Ps Balance™: Representing the Relationship between the Global Environment and Society

■ 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.

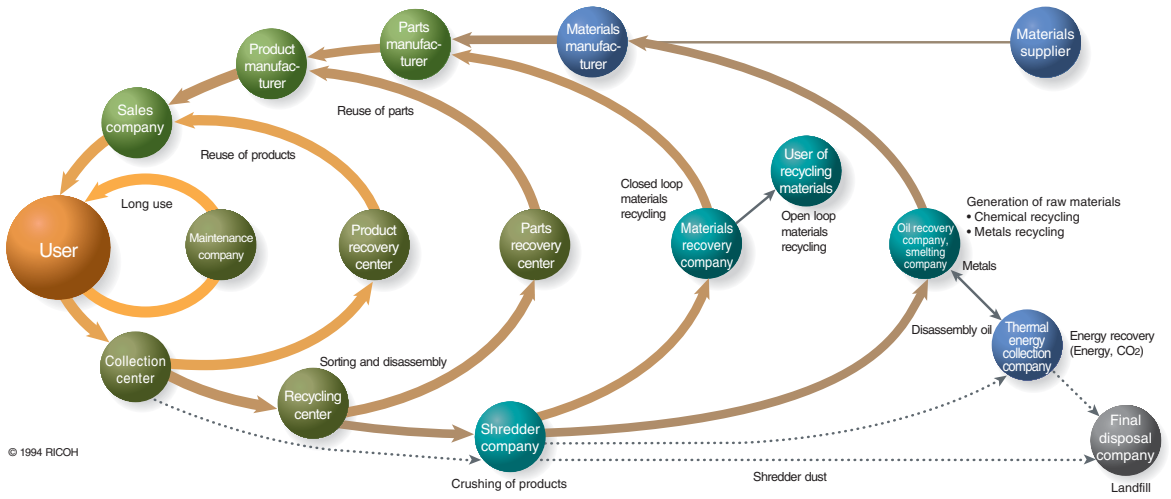
(4) More Economically Rational Recycling

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 of a Recycling-Based Society: The Comet Circle™



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

Advanced nations need to reduce their environmental impact to one-eighth the fiscal 2000 levels by 2050.
Based on this perception, the Ricoh Group has established an Action Plan and is promoting sustainable environmental management.

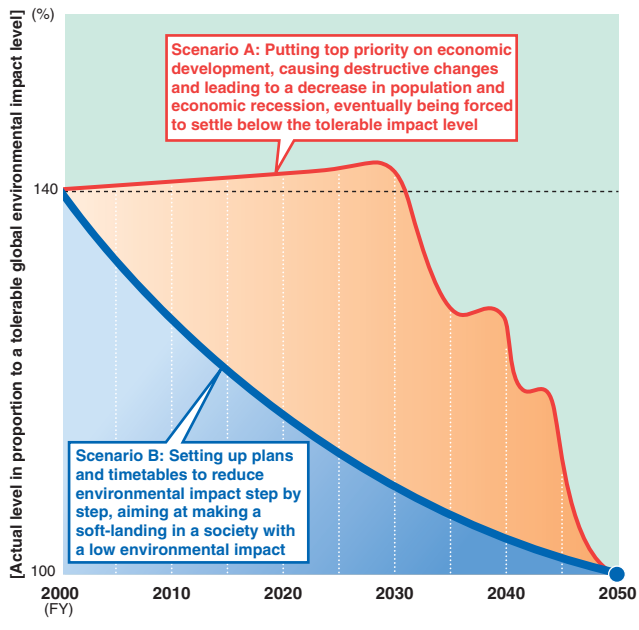
Importance of actions that are based on a long-term vision

To conserve the global environment and achieve a sustainable society, it is necessary to limit environmental impact created by human activities to a level that is within the Earth's self-recovery capabilities. To meet this requirement, we must first envision the ideal society and global environment; then we must create a long-term vision to realize our ideals and aggressively promote environmental conservation activities. Global environmental conservation is a challenge for which there is no second chance, and it is highly probable that we will never be able to build our vision if we act on short-term goals. With this perception in mind, in developing the Environmental Action Plan that was implemented in fiscal 2005, we gathered and analyzed a variety of information to allow us to envision human society in 2050 and assessed its impact on our businesses. We concluded that it was necessary to set up specific action plans under the Extra-Long-Term Environmental Vision, a perception that advanced nations need to reduce their environmental impact to one-eighth of the fiscal 2000 levels by 2050.

Social changes towards 2050 and how the Ricoh Group intends to cope with the changes

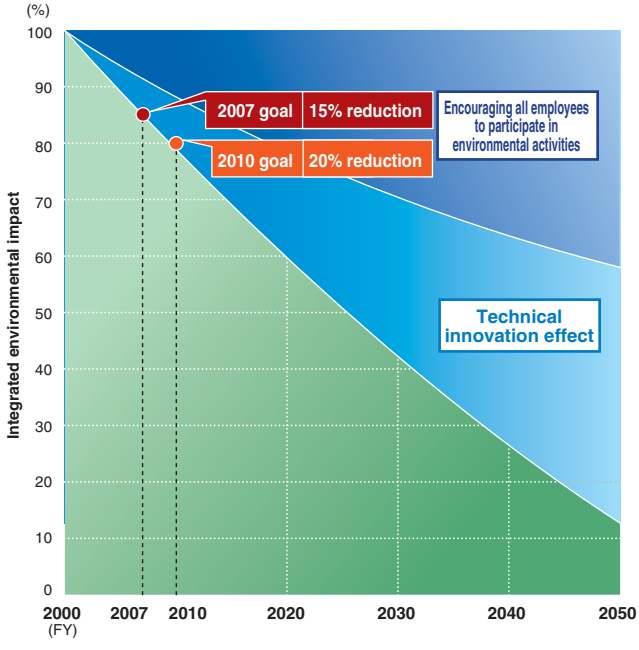
What will our society be like in 2050? The world's population will have reached nine billion. Mineral resources may have run out. Restrictions may be imposed on the use of land. On the other hand, energy sources may have shifted from oil to alternative energies in the hope of preventing global warming. These might lead to substantial changes in social and business models. To prepare for a new era in which we may no longer be able to use the abundant virgin materials and fossil fuels that we have used to date, the Ricoh Group is trying to develop environmental technologies that require fewer resources and new product materials that are alternatives to oil. Based on the perception of future social changes and the prospect of the impact such changes are likely to have on our businesses, we have set up an Environmental Action Plan depicting measures we should take today to prepare for the future. We believe that a quick response to a drastically changing society will strengthen our business competitiveness.

Two Scenarios for Reducing Global Environmental Impact



* Tolerable level = 100%

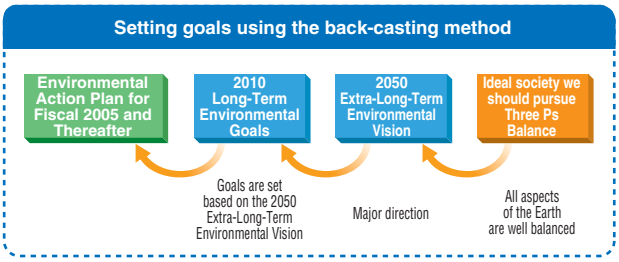
Integrated Environmental Impact Reduction Goals



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 Ps Balance as its final goals, the Ricoh Group created 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. *See Page 54.

How to Set Environmental Goals



Consideration in Preparing an Environmental Action Plan

OPINION

Opinions of the Intellectuals (1) **WWF Japan**

Ricoh Group's Extra-Long-Term Environmental Vision will serve as a reference to assess its consistency on sustainable environmental management.

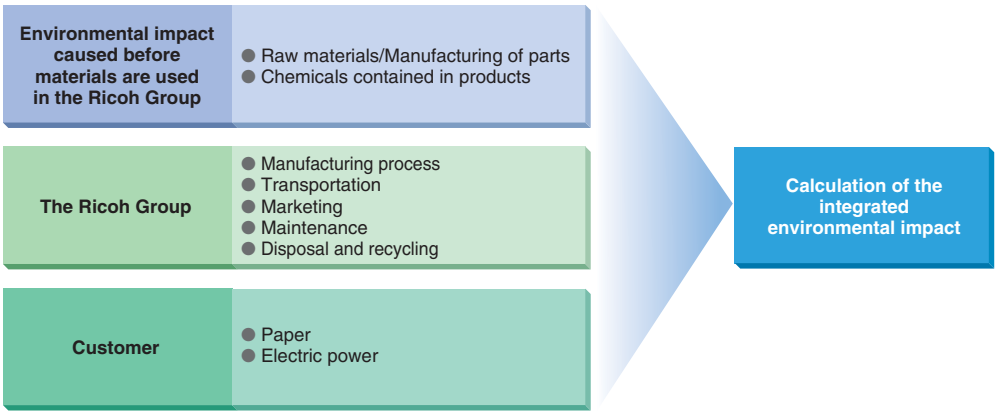
Ricoh Group's Extra-Long-Term Environmental Vision is highly accredited because of the measures it adopts: making predictions of the future global environment and setting up the appropriate long- and medium-term environmental conservation goals using the back-casting method. More than that, it looks at the whole life cycle and sees the environmental impact as a whole to make future predictions. This avoids a one-sided point-of-view, in which, for example, we succeed in reducing toxic chemicals while there is an increase in greenhouse gas emissions. Since the back-casting method creates lead time for the measures to bring in results, this means that it is possible to compile plans based on the concept of prevention. This can lead to the development of environmental technologies ahead of time. The Ricoh Group's Extra-Long-Term Environmental Vision is a long-term vision looking far ahead into the future, to the year 2050. We believe this vision will serve as a reference to assess the Ricoh Group's consistency in environmental management. We hope that the Ricoh Group will review its vision occasionally to take in new scientific findings through examination by outside experts and continue to make efforts to keep the vision consistent with the reality of the global environment.

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.

Reduction Areas of Environmental Impact (Eco Balance)



OPINION

Opinions of Intellectuals (2) | **AGS Promotion Office, The University of Tokyo** * AGS (Alliance for Global Sustainability)

For global sustainability, it is essential to achieve one's commitments based on a global vision.

The idea of starting sustainable environmental management from making future predictions on how our society will be and what kind of services will be required in such a society, and then establishing an action plan based on the back-casting method, is characterized by a system of self-management and goal achievement, and we highly value that idea. The Ricoh Group explains its specific environmental action plan as developing and selling further improved energy-saving machines and equipment, which is a valuable approach that is easy for the general public to understand. Although we are well aware that the Ricoh Group's direct influence is limited in our vast social system, we hope that Ricoh will keep on sending a convincing message for global sustainability that it is essential that each individual, business, and nation assumes their responsibilities based on a global vision.

We presume that the next challenge for the Ricoh Group will be to set a time frame for integrating the two paths: the path that leads to the goal of sustainable environmental management set by the back-casting method, and the other path currently taken by their businesses. Although the two paths may head in the same direction, it may require a great leap to reach higher ground. We believe that Ricoh will achieve their goal.

http://www.globalsustainability.jp/en/top.php

Achieving goals on the sustainable environmental management level and contributing to reducing the environmental impact of society as a whole

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 are three stages in the Ricoh Group's environmental conservation efforts. After the Passive Stage and the Proactive Stage, we are now working towards 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. Currently, the Ricoh Group is pursuing economic value while aggressively reducing the environmental impact of its business activities through activities conducted by all employees and the development of environmental technologies to realize sustainable environmental management. Further, in developing environmental technologies, we will not remain within the range of our current business sectors but aim at contributing to reducing the environmental impact of society as a whole.

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. Volunteer Leader Development Program	1. Strategic goal management system 2. Environmental accounting 3. Sustainable environmental management information system

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

OPINION

Opinions of Intellectuals (3) Dr. Kohmei Halada, Independent Administrative Institution National Institute for Materials Science (NIMS)

To be a global business leader, it is necessary to take into consideration more advanced strategies through long-term plans.

The Ricoh Group must be commended as a responsible member of the global community for adopting the back-casting method, which involves first predicting how the world should be in year 2050, and then setting long-term and shorter term targets towards the years 2010 and 2007, because this establishes a new style for coping proactively with global environmental problems including global warming and depletion of resources. This means that Ricoh itself is progressing from merely making the conventional passive commitment to "caring for the environment" and a relative commitment as a "front runner" to being a responsible social member with problem-solving capabilities. I hope that other companies will start adopting this method and set their targets from the same perspective. On the other hand, being a pioneer means that you face new problems, since new solutions always bring with them problems to be solved. In particular, although the forecast for 2050 sets a goal of reducing the environmental impact to one-eighth of what it is today, which seems basically adequate, this figure is the goal for the whole world and I wonder whether an advanced business leader like Ricoh should be satisfied with the global average. I would like to suggest that to be a global business leader, Ricoh ought to take into account more advanced predictions by making long-term plans and other measures.

Environmental Action Plan up to Fiscal 2007 and Fiscal 2006 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 23

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 25

- 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 28

- 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.

- 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 transportation processes outside of Japan.

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 (regional sales headquarters outside of Japan; 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 2006 performance)

	For imaging equipment, a range of elemental technologies is being developed to reduce size and weight.
	Prototypes of large and transparent parts for imaging equipment made from plant-based plastic and toners using plant-based resin were produced and exhibited at Eco-Products 2006.
	Our copiers, multifunctional copiers, and printers all meet energy-saving goals.
	Quantity of reusable products used increased 3.2 times.
	Quantity of recycled plastic used amounted to 1,132 tons.
	Ten models of copiers, multifunctional copiers, and printers launched on the market in fiscal 2006 achieved Ricoh's standards for ozone, dust, and VOC, and meet the Blue Angel requirements 2007.
	Sales of recycled copiers increased 5.1 times.
	In addition to using 100% recycled paper, we have mixed a certain amount of recycled pulp into paper made mostly from virgin pulp. The amount of recycled pulp contained in the paper reached 61.3%, achieving the target.
	Total CO_2 emissions decreased 2.5%.
	Total CO_2 emissions increased 7.7%.
	• Ricoh and manufacturing subsidiaries in Japan: Total CO_2 emissions increased 3.3%. • Manufacturing subsidiaries outside of Japan: Total CO_2 emissions increased 14.2%.
	Changes in total CO_2 emissions: 15.6% reduction at sales subsidiaries in Japan*; 4.4% reduction at Ricoh Leasing; 4.4% reduction at Ricoh San-ai Service; and 8.7% reduction at Ricoh Logistic Systems. Each company's base year for comparison: 2004 for Ricoh Leasing and 2002 for other companies. *Figure for sales subsidiaries in Japan is the total for all sales subsidiaries in Japan plus Ricoh Technosystems.
	Generated waste increased 2.9%.
	Changes in generated waste: 18.8% reduction at sales subsidiaries in Japan*; 6.0% increase at Ricoh Leasing; 9.9% reduction at Ricoh San-ai Service; and 35.9% reduction at Ricoh Logistic Systems. Each company's base year for comparison: 2002 for Ricoh Logistic Systems and 2004 for other companies. *Figure for sales subsidiaries in Japan is the total all sales subsidiaries in Japan plus Ricoh Technosystems.
	Waste recycling rate improved to 94.6%–98.4%.
	Water consumption decreased 11.8%.
	Paper consumption decreased 4.2%.
	Use of chlorine organic solvents was completely discontinued in the consignment production of photoconductors at plants other than Ricoh's in March 2006. Project accomplished.
	Greenhouse gases other than CO_2 were reduced by 29.0%.
	Surface soil inspections were carried out at five locations where there was the possibility of soil pollution from land use in the past, but no pollution that needed dealing with was found.
	No pollution that needed dealing with was found, and all the measures were completed.
	In fiscal 2006, Ricoh's Integrated Environmental Management System acquired integrated certification by a third-party organization. This moved forward the merger between our businesses and environmental management system.
	We have established a system of managing chemical substances contained in products also at our sites outside Japan. We will perform an internal audit and will pursue stricter management.
	An information system that manages information on the environmental impact generated by resources input to our GELJET printers and measuring instruments businesses was established.
	An information system was also created to calculate the CO_2 emissions per delivery in Japan.
	Social contribution activities to preserve the ecosystem were expanded at home and abroad, and sales subsidiaries and plants in various places actively participated in the projects. • Regional headquarters and sales subsidiaries outside of Japan: 37 projects • Manufacturing subsidiaries outside of Japan: 25 projects • Manufacturing subsidiaries and production sites in Japan: 117 projects • Sales subsidiaries in Japan: 129 projects • Non-manufacturing subsidiaries in Japan (Ricoh Logistic Systems, Ricoh Leasing, and Ricoh San-ai Service): 19 projects

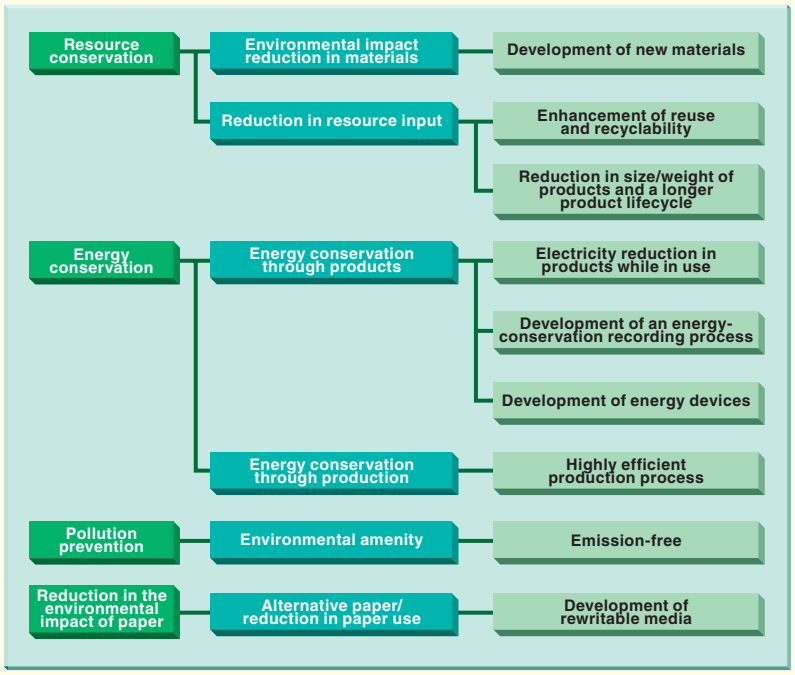
Promoting the development of environmental technologies and environmentally-friendly products based on the Extra-Long-Term Environmental Vision

● 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 54. 2. See page 55.

Focused Areas for Environmental Technologies



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. In addition, based on the Year 2050 Extra-Long-Term Environmental Vision, 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.

INTERVIEW

Employee Interview | **Development of plant-based toner**

We have developed a toner containing plant-based resin (about 40%)

Shinya Nakayama (Left) and **Akihiro Kotsugai** (Right)
Functional Materials Development Center, Imaging Engine Development Division

We have satisfied the quality levels and are attempting to put it into practical application, keeping costs low.

Ricoh has developed copier materials to replace petroleum-based resins, focusing on the development of product materials with less environmental burden. In 2005, we succeeded in putting plant-based plastic containing resin made from corn (more than 50%) into practical application. Ricoh is the first in the copier and printer industry to adopt this new material for use in copier and printer parts. Following that, noticing the fact that more than 80% of the components of the toner supplied to copiers and printers are petroleum-based resins, Ricoh began developing a plant-based toner. Having overcome various technical hurdles, we succeeded in developing a toner containing about 40% of plant-based elements by using a newly-developed polyester resin made from corn and other materials. The fixation temperature for this plant-based toner is the same as that for traditional energy-saving fixation type toner. This new toner satisfies similar high standards for heat resistance and picture quality as traditional toner. The remaining issue is cost, and compared with traditional products, the new toner is currently 20 to 30% more expensive. We are aiming to establish a mass production system within two years to achieve cost reductions and to put this plant-based toner into practical application. The amount of toner produced annually across the globe—including toner produced by Ricoh—has reached 185,000 tons*. If this amount of toner is replaced by plant-based toner, this is expected to reduce CO_2 emissions by approximately 120,000 tons.

*"Worldwide toner production in 2005" researched by Data Supply Inc.

Non-contact Rewritable Laser Technology

Ricoh has developed and put into practical use its own rewritable technology to write and erase characters and images on a sheet using the difference in temperature. To apply this technology, Ricoh is also developing a non-contact rewritable technology that can write and erase images from a distance using a laser beam, without making contact with the rewritable sheet. With this technology, for example, rewritable sheets used as address labels can be rewritten repeatedly while still attached to containers/boxes. This enables us to reuse containers/boxes with their labels as a unit. Since there is no need to use a printer to print the label and erase it, this saves the trouble of peeling off sheets whenever they need to be rewritten. We expect the use of rewritable sheets to expand significantly.

Disclosure of Information Using Environmental Labels

It is important not only to develop environmentally-friendly products through the use of environmental technologies and LCA-based design, but also to disclose information in an easy-to-understand manner. Ricoh is actively engaged in introducing environmental labels so that customers will understand that our products are environmentally-friendly. We are making efforts to gain Eco Mark approval in Japan and also Type I environmental label approval in other countries.

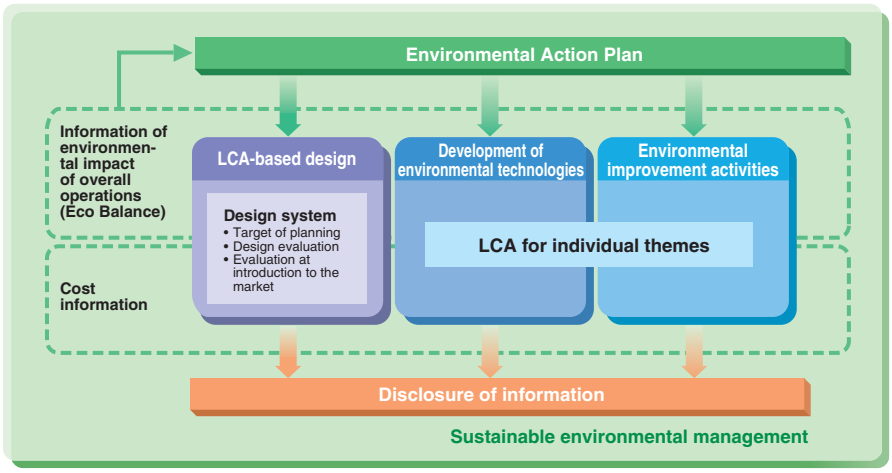
* For details on environmental labels, refer to our web site.
http://www.ricoh.com/environment/label/index.html

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 design. In addition, the Group is developing a CAD system and LCA calculation tool to facilitate the design process.

Position of LCA in Sustainable Environmental Management



TOPIC

Reducing Environmental Impact in the Production Process

As part of implementing LCA-based design, Ricoh is engaged in activities to reduce environmental impact in the production process. First, Ricoh has developed its own calculation tool to quantitatively grasp the environmental impact of the targeted production process. The environmental impact per part or per processing process is calculated automatically after inputting the types of raw materials, the type of production equipment and facilities, the energy consumption, and the operating time. This allows us to grasp in minute detail the level of environmental impact that occurs in a production process as a whole or in specific processes. Ricoh is using this calculation tool to actively reduce CO_2 emissions by improving its production processes. We use the figures calculated by the calculation tool to consider where we should put the emphasis in reducing CO_2 emissions effectively and to extract specific improvement themes. For example, it was found out that on the production line for fusing rollers, the drying process generates a large environmental impact. So we switched from a large drying furnace for 400 units to a small hot-air drying machine for each individual unit. This gave a reduction in CO_2 emissions of 16 tons a year. We conducted this kind of process improvement for multiple lines in parallel, shortened the cycle time (improved productivity), and carried out quality improvement activities. As a result, we succeeded in reducing CO_2 emissions generated in the parts production process by 690 tons a year. Ricoh's policy is to promote these activities at its suppliers and establish them as a method to manufacture products with less environmental burden while improving quality and productivity.

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 is further developing 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 2006

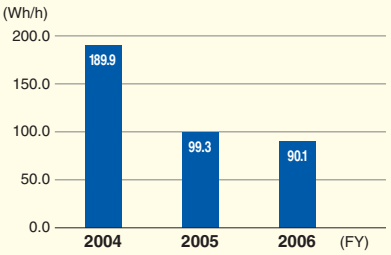
In the field of color multifunctional copiers, we have developed Color QSU technology using the induction heating (IH) fusing system and launched a new model, the imagio MP C3500 series[2], with a recovery time from energy-saving mode of less than 18 seconds[1], less than one-fourth of the previous model. In the field of multifunctional monochrome copiers, sales of copiers using QSU technology with a recovery time from energy-saving mode of less than 10 seconds are steadily increasing, thus reducing CO_2 by approximately 46,100 tons a year (see Graph ❹).

1. This applies only to models for Japan.
2. Printing speed of imagio MP C3500: color copies 35 pages/min. and monochrome copies 35 pages/min.

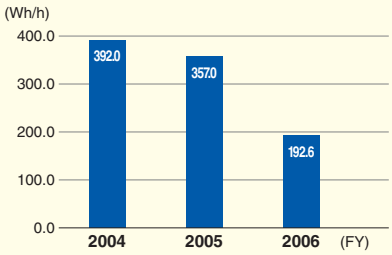
<Japan>

Changes in Energy Consumption

❶ Black-and-White Copiers and Multifunctional Copiers



❷ Color Copiers and Multifunctional Copiers

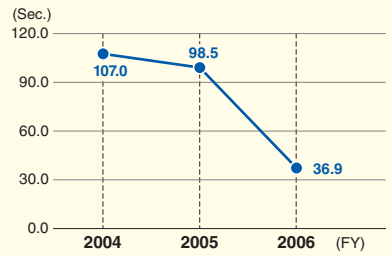


◎ Energy conservation values are calculated as follows:
∑(<Effective energy consumption efficiency (Wh/h)>[1] × the number of units marketed)/∑ the number of units marketed

1. Effective energy consumption efficiency is a figure measured for models with a 10-second recovery time from energy-saving mode in accordance with the Ministry of Economy, Trade and Industry's Law in Japan Concerning the Rational Use of Energy.
(Models with a recovery time of more than ten seconds were measured by electricity consumption in standby mode.)

Changes in Recovery Time from Energy-Saving Mode

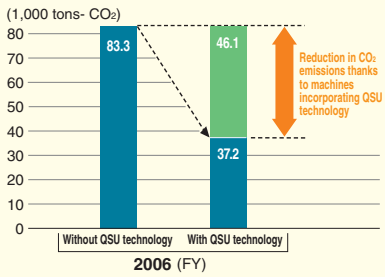
❸ Color Copiers and Multifunctional Copiers



◎ Recovery time was calculated as follows:
∑(<Recovery time from energy-saving mode (sec.)> × the number of units marketed)/∑ the number of units marketed

<Global>

❹ Reduction in CO_2 Emissions through the Use of QSU Technology



* Only the effects of QSU technology used in multifunctional black-and-white copiers were calculated.

* Graphs ❶ to ❸ were compiled 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 userfriendliness (shorter recovery time from energy-saving mode) and energy saving for color copiers.

Segment Environmental Accounting of Product Energy Conservation (Benefit on cost in color 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, parts, etc.	¥456.0 million	Sales contribution ¥496.9 million	Reduction in payment for consumed power supply ¥192.2 million	Reduction in CO_2 emissions 3,158.6 (t)

* 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 2006.

Developing Energy-Saving Products

Evolution of Energy-Saving Technology QSU

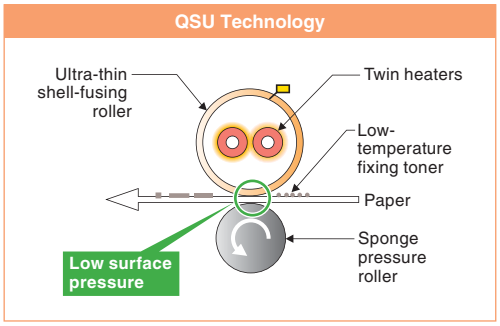
QSU (Quick Start-Up) is Ricoh's original energy-saving technology developed to achieve effective energy conservation for copiers. It enables quick recovery from energy-saving mode, allowing users to make copies whenever they need to. According to a customer survey, the longer it takes to recover from energy-saving mode, the less energy-saving mode is used. Ricoh has poured its efforts into developing QSU technology in a way that satisfies both user-friendliness and energy conservation so that our customers will use the energy-saving mode more often. In 2001, we launched the imagio Neo 350 series, the first multifunctional monochrome copiers equipped with QSU, and received the Minister of Economy, Trade and Industry Prize, the highest of the Energy-Saving Awards. Following that, we introduced HYBRID QSU, an integration of traditional QSU technology and capacitors (electric storage devices), to high-speed digital multifunctional copiers and have reinforced the lineup of QSU-equipped products ranging from low-speed monochrome copiers to high-speed copiers.[1] In fiscal 2006, Ricoh developed Color QSU technology, which adopts the IH[2] fusing system and achieved a reduction in recovery time from energy-saving mode for color copiers, which had been a difficult challenge.

1. Capacitors are incorporated only in the 100V machines marketed in Japan.
2. IH stands for "Induction Heating," a technology that heats metal instantly with the magnetic force generated by an electric current passing through a coil. This technology is also widely adopted in electric rice-cookers and stoves.

QSU Technology, HYBRID QSU Technology, and Color QSU Technology

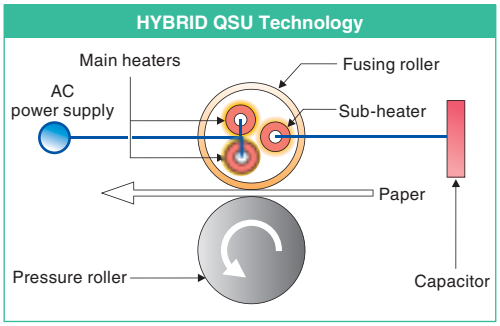
● QSU Technology

The fusing roller that fixes the toner on the paper was thinned as much as possible to shorten the temperature rise time. The temperature of the roller is effectively controlled by using twin heaters. Low-temperature fixing toner is also adopted.



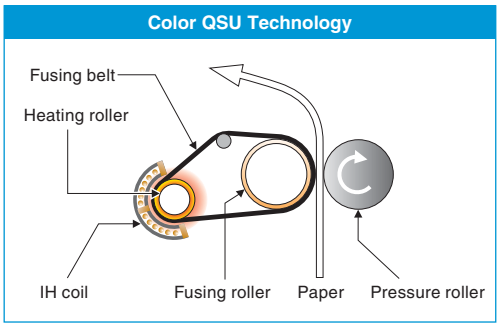
● HYBRID QSU Technology

This technology incorporates capacitors (electric storage devices) into QSU technology to store electricity during standby so that it can be used for restarting and printing. This technology is incorporated into high-speed copiers.



● Color QSU Technology

This technology adopts IH (Induction Heating) using a magnetic field to heat the fusing belt directly and quickly. This enables color copiers to both be user-friendly and highly energy efficient.



The imagio MP C1500 Receives an Energy-Saving Award

<Ricoh (Japan)>

On January 31, 2007, the imagio MP C1500 series received the Energy Conservation Center Chairman's Prize in the 17th Energy-Saving Awards that were held by the Energy Conservation Center, Japan. We were awarded the prize for developing low-cost business-oriented color copiers, for reducing the maximum electrical power consumption with our Gel Jet technology, and for achieving a fast 5-second recovery time from sleep mode. Previous to this, the imagio MP C1500 (model name outside Japan: Aficio MP C1500) also won the Silver Award in the EPIF 2006 Eco-Awards at the ECO Products International Fair 2006 held in Singapore in October 2006, which shows that this model was highly evaluated as an energy-saving machine both in Japan and abroad.

imagio MP C1500

Launch of Products with Color QSU Technology

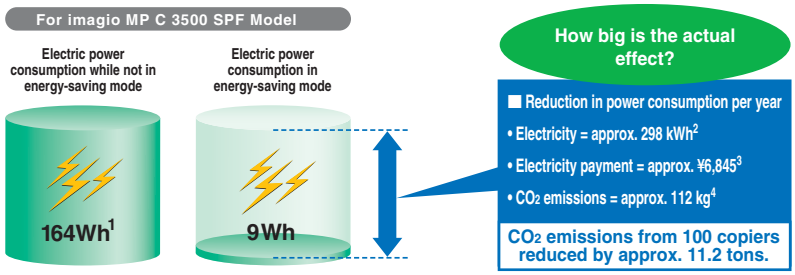
<Ricoh (Japan)>

The digital multifunctional color copier, imagio MP C3500 series, launched in May 2006 uses the new Color QSU technology. This new technology adopts the IH fusing system to warm up the fixation belt, shortening significantly the recovery time from energy-saving mode. Recovery time for imagio MP C3500 series was cut by 75% over the previous series to less than 18 seconds. Gross energy consumption was also cut back by approximately 50%* —a superb energy-saving performance.

* A reference figure to compare the performance of the new imagio MP C3500SP with the previous imagio Neo C355 Model 75 using the revised Energy Star TEC Measuring Procedure, which became effective in April 2007.

Positive Effects of the Energy-Saving Mode

Energy-Saving Mode in Multifunction Copiers significantly reduces CO_2 emissions and electricity payment.



1. Average electric power consumed by repeatedly making 30 consecutive copies once every hour before shifting to energy-saving mode eight times a day.
2. Calculation based on the assumption of eight working hours per day for 240 days per year.
3. Calculation based on 1kWh = ¥23.
4. Calculation based on CO_2 conversion coefficient = 0.378 kg/kWh (based on the Guidelines for accounting and reporting of greenhouse gas emissions from industrial commercial sectors (2003) by the Japanese Ministry of the Environment).

Indirect Energy-Saving through Reduced Paper Consumption

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

<Ricoh (Japan)>

In fiscal 2003, Ricoh developed the RECO-View RF Tag Sheet by combining RF tags with Ricoh's own rewritable technology, making the RECO-View RF 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. A sheet is capable of being rewritten approximately 1,000 times. Operators are thus able to visually confirm management information regarding the operation process written on RF tags. Because this helps prevent human error, RECO-View RF Tag Sheets are now being used by customers in various industries, including distribution and healthcare.

Printer for RF tag sheet

RECO-View RF tag sheet

INTERVIEW

Customer Interview | **Sagawa Express Co., Ltd.**

Mr. Yasuyuki Kurokawa
Assistant Manager, Sales Section,
Sales Division (in charge of sales planning),
Sagawa Express Co., Ltd.

With the RECO-View Sheet, we were able to reduce paper consumption by 500,000 sheets per year.

Significant cutbacks in paper and cost were the motivation for introducing the RECO-View Sheet.

We provide a service called "Sagawa-Yu-Mail" for our customers, in which we undertake to distribute booklets and brochures for our corporate clients. In the Tokyo Big Bay Distribution Center, we sort and distribute 200,000 to 300,000 Sagawa-Yu-Mail parcels every day. Parcels are sorted into approximately 5,000 boxes according to destination and a paper list of instructions is attached to each of these boxes. These paper lists used to be discarded when all the parcels had been sorted. By switching from paper to RECO-View sheets for the instructions, we were able to reduce paper consumption by about 500,000 sheets per year. At first, we were worried whether the instructions would still be clearly visible after repeated rewriting. However, the previous instructions are erased without a trace and we are having no trouble using the tag sheets. The characters are also printed very clearly and are easy to read, which enables faster and more accurate work. Sagawa Express is actively involved in environmental conservation activities including modal shift and reducing waste and CO_2 emissions. Converting a reduction in consumption of 500,000 sheets per year to CO_2 emissions gives a reduction in emissions of approximately 3 tons of CO_2. Moreover, we were able to cut back on the cost of purchasing, printing, and disposing of 500,000 sheets of paper. Significant cost benefits were the motivation behind introducing the RECO-View sheet.

Global Promotion of Use of Recycled Resources 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 such as recycled copiers and by establishing an efficient recycling system.

*See page 16.

● 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).

● Review of Fiscal 2006

Compared to fiscal 2003, the quantity of reusable parts used increased 3.2 times and sales of recycled copiers in Japan increased 5.1 times, which indicates that we are making steady progress towards our fiscal 2007 targets. The quantity of recycled plastics used per year amounted to 1,132 tons, surpassing our target value for fiscal 2007. Through these activities, Ricoh is increasing the use of recovered resources globally and the amount is increasing steadily every year (see Graph ❷). We are also actively engaged in collecting used copiers and toner cartridges, and the number of used products collected is also increasing steadily (see Table ❶).

● Future Activities

We will continue to effectively use recovered resources by increasing the production and sales of recycled copiers as well as the use of recycled parts and materials, and thus provide our customers with products with less environmental impact and with higher economic efficiency. For this purpose, it is important to improve the collection rate and collection quality of used products. Through these activities, Ricoh will move forward with the utilization of recovered resources.

Segment Environmental Accounting of the Product Recycling Business (Japan)

Costs		Effects			
		Economic benefits		Effect on environmental conservation	
Items	Costs	Items	Benefits		
Product recycling cost	¥654 million	Sales	¥9,215 million	Amount of resource recovery: 31,430 (t) Down 230 (t) from that in the previous year	Amount of final disposal: 186 (t)
Collection/resource recovery cost	¥2,771 million				
Total cost	¥3,425 million	Social effect	¥2,514 million		

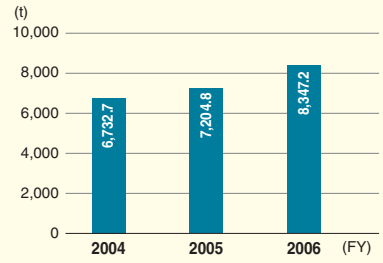
* Social effect refers to the cost of waste disposal that customers no longer have to pay.

<Global>

❶ Collection results and recycling rates for copiers and toner cartridges

	Amount of used products collected			Recycling rate
	Fiscal 2004	Fiscal 2005	Fiscal 2006	Fiscal 2006
Copiers	282,444 units	287,268 units	307,047 units	98.8%
Toner cartridges	671 (t)	1,388 (t)	1,023 (t)	98.7%

❷ Changes in amount of recovered resources used



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, 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 16.

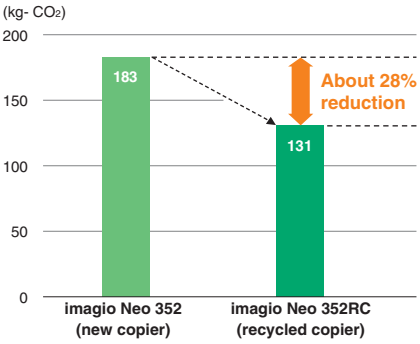
Sales of Recycled Copiers

<Ricoh (Japan)>

Since the launch of the recycled multifunctional digital copier, imagio MF6550RC, in December 2001, Ricoh has increased the number of models available. At present, a wide variety of recycled machines with a copying productivity ranging from 35 pages/min. to 75 pages/min. have become available. Recycled machines are based on used copiers collected from the market. Compared with new machines, the environmental impact of a recycled copier over the whole of its lifecycle from production to disposal is greatly reduced. More than 80% (mass ratio) of the parts used in the imagio Neo 352RC/452RC that we launched in fiscal 2006 are recycled parts, and the imagio Neo 352RC gives a 28% reduction in environmental impact over its whole lifecycle compared with newly-produced machines.

imagio Neo 452RC/352RC

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

Employee Interview | **Putting the Recycling Business in the Black**

Sales of recycled copiers in Japan have exceeded 10,000 units, and we succeeded in making the recycling business profitable.

Kenji Kojima
General Manager
Recycle Business Center
MFP Business Group

We overcame many difficulties to put the recycling business on track.

The number of used Ricoh products collected in Japan reaches more than 200,000 units a year. Since the early 1990s, Ricoh has positioned "resource conservation and recycling" as one of the pillars of its environmental conservation activities and made great efforts in pursuing them. At present, we recycle more than 99.5% of collected used copiers, laser printers, etc. In order to continuously and actively promote recycling, it is necessary to create economic value from recycling. Thus, Ricoh has been engaged in recycling copiers by collecting used machines from the market and putting them back on the market again. Products collected in this way have less environmental impact and produce greater economic value when they are recycled in a form as close to the original products as possible, rather than when they are recycled as resources and energy. However, we had to deal with various problems before we could get our recycling business on track. Production plans for recycled products depend on the amount and quality of used machines collected from the market. We developed a simulation tool to forecast the amount collected from the market, and this enabled us to make an exact forecast on a monthly basis. In addition, in order to ensure that the used products remain in good condition, we established a method of transportation that prevents breakage and damage. We also faced the problem that recycled copiers are the previous generation's products and are thus functionally inferior to the current machines. To deal with this, we upgraded the used machines by adding the latest functions and security settings so that they satisfy the needs of the market, and thus improved their commercial value.

Environmental impact is reduced and the same after-sales service as for a new machine is provided.

More than 80% (mass ratio) of the parts used in recycled machines are recycled parts. Compared with new ones, recycled machines give around a 28% reduction in environmental impact over their whole lifecycle and around a 78% reduction in the manufacturing time*. In addition, we guarantee the quality and provide the same after-sales service as for a new machine. Use of recycled machines that are both environmentally-friendly and high quality has spread rapidly among public bodies, local governments, and companies promoting green procurement. In fiscal 2006, sales of recycled copiers exceeded 10,000 units and we achieved a profit for the first time since we commenced the recycling business in 1998. This is unquestionably the result of our sustainable environmental management efforts to achieve environmental conservation while generating a profit.

* Comparison data between the imagio Neo 352RC and the imagio Neo 352 (previous machine)

Used PET Bottles as Resource-recirculating Eco Packaging

<Ricoh (Japan)>

The Ricoh Group adopts resource-recirculating eco packaging for its large copiers by reusing empty PET bottles as cushioning material in delivering the imagio MP1350. For a copier that weighs 300 kg, 134 empty 500-ml PET bottles are 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, its reuse will lead to a reduction in packaging materials. CO_2 emissions will be reduced by around 10 tons over four years compared with the use of traditional cushioning materials. This packaging received the Large-sized Equipment Packaging Category Award in the Japan Packaging Contest 2006 held under the sponsorship of the Japan Packaging Institute on October 6, 2006. The packaging was evaluated as "…responding to the needs of the age and society—an excellent packaging in terms of life culture."

134 empty PET bottles are used as cushioning material at the bottom and on the sides of the packaging

INTERVIEW

Employee Interview | **Reusing the Aluminum Tubes from Photosensitive Drums**

We developed the technology to reuse expensive aluminum parts for the effective use of resources and reduced costs.

Frank Drew (Left)
Technical Engineer, OPC Engineering Division

Martin Ball (Right)
Technical Engineer, OPC Engineering Division

The key was the development of a low-cost technology to strip off the photoconductor.

Photosensitive drums are used at the heart of copiers and printers and they incorporate aluminum tubes coated with a photoconductor. If we can separate the expensive aluminum tubes from the collected photosensitive drums and reuse them, we can use resources effectively and reduce costs. At Ricoh UK Products Ltd., which has positioned recycling as one of its business pillars, we started trying to find ways of reusing the aluminum tubes following the establishment of a system for collecting used products including photosensitive drums from all over Europe and recycling them. In the photosensitive drums collected from customers, only the photoconductor coating is damaged. In order to reuse the aluminum tubes, it was necessary to develop a technology to strip off the photoconductor coating at low cost.

Simultaneous resource conservation and cost reduction were achieved.

In 2006, we developed stripping liquid for the photoconductor to enable the aluminum tubes to be reused at low cost. After establishing a line for stripping the photoconductor from the photosensitive drums and recoating the aluminum tubes with photoconductor, 10% of the total production was covered by reused aluminum tubes last year. This lead to a reduction in the manufacturing costs of photosensitive drums. In the future, we will increase the reuse ratio by increasing the number of photosensitive drums collected and endeavor to develop low-cost and highly-efficient stripping liquid.

Disclosure of Information on Product Recycling in Response to the WEEE Directive

<Ricoh Europe B.V. (Europe)>

Electronic equipment, including copiers, contain parts such as printed circuit boards, cells, and chemical substances that require attention and special treatment during disassembly and recycling. Ricoh Europe, the European Regional Sales Headquarters, established a product information disclosure system for recyclers in August 2006 and disclosed information on approximately 300 models, including copiers, printers, and digital cameras, on its web site. The company also provides information on the use of chemical substances and appropriate treatment methods, and information that specifies the location of parts to assist recyclers with recycling. This is in response to the WEEE Directive*, and Ricoh has fully complied with the directive to disclose information on production recycling ahead of other companies in the industry.

* EU Directive on Waste Electrical and Electronic Equipment (WEEE)
Product recycling information
http://www.ricoh-europe.com/environment_/weee_rohs/index.xhtml

We offer products that are kind to the environment and people by reducing and strictly managing environmentally-sensitive substances.

● Concept

Aiming to reduce the impact on the global environment and enhance end-user comfort and safety levels, the Ricoh Group is tackling important issues by establishing a strict management system for environmentally-sensitive substances contained in its products, reducing ozone, dust, and volatile organic compounds (VOCs)[1] emitted when products are used, and ensuring that its supplies are safe. Environmentally-sensitive substances contained in products will affect the environment when the products come to the end of their lifecycle and are improperly disposed of. An ecobalance[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 55.

● 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[1]	Ricoh Standards (mg/h)[2]	
		Color	Monochrome
Ozone	10	3.0	1.5
Dust	10	4.0	4.0
TVOC	10	18	10

1. Figures indicate the number of product series, including copiers, multifunctional copiers, and printers, launched in fiscal 2006 that achieve these standards.
2. Ricoh standards also meet the Blue Angel requirements, and were revised in 2007 in response to revisions to the Blue Angel requirements.

● Review of Fiscal 2006

In July 2006, Ricoh completed the establishment of a management system for environmentally-sensitive substances contained in its products at our sites outside of Japan. Ricoh also conducted an internal audit and selected important issues to raise the level of the management system, and has been making efforts to improve it. Concerning emissions of environmentally-sensitive substances generated by products, Ricoh was quick to satisfy the Blue Angel requirements that came into force in January 2007, and a range of products, including copiers, multifunctional copiers, printers, and 10 model series, launched in fiscal 2006 have attained Ricoh standards for ozone, dust, and VOC (see table ❶).

● Future Activities

In anticipation of tighter laws and regulations in the future, we will upgrade our chemical substance management system that encompasses the entire supply chain of the Ricoh Group. We will also continue our efforts to further reduce environmentally-sensitive substances in products and will maintain Ricoh standards for all future products.

Controlling the 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. Since then, it has regularly reviewed the standards to incorporate the latest regulations and scientific knowledge and has controlled chemical substances accordingly. In addition, all the divisions engaged in production (the design, procurement, and manufacturing divisions) have jointly worked to improve the chemical substance control system. 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 the management system for chemical substances contained in products within Japan. As for the system outside of Japan, the building of the system was completed in 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 has been engaged in reducing environmentally-sensitive substances and enhancing its management system for a long time, and has been sequentially launching products complying with the RoHS Directive since fiscal 2004. In principle, the products launched in fiscal 2006 comply with the RoHS Directive.

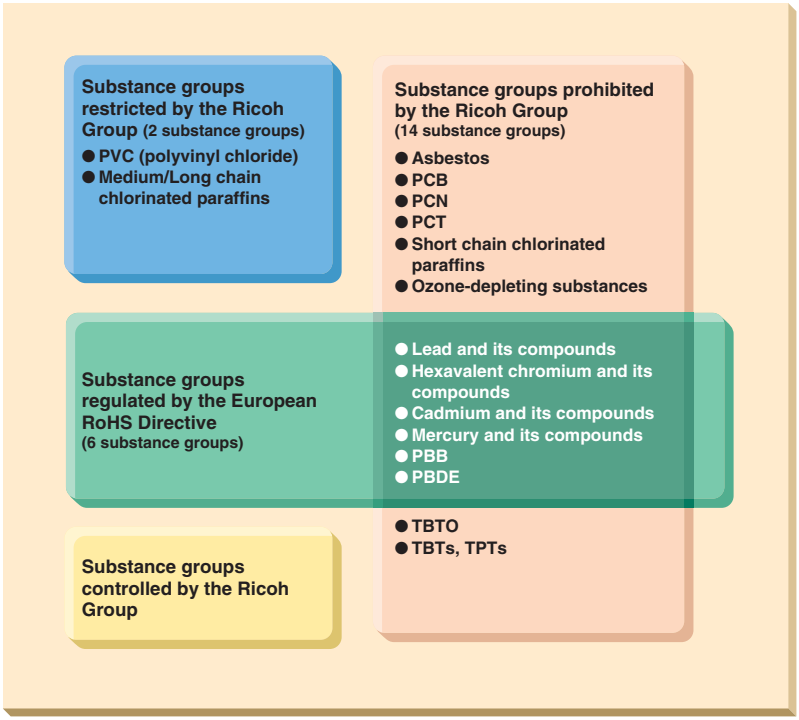
REACH

This is a new EU regulatory framework for Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). It requires the registration and management of all chemical substances used in business in accordance with their conditions of use to ensure safe assessment of chemical substances. It came into force on June 1, 2007, and regulations will be gradually enforced from June 1, 2008.

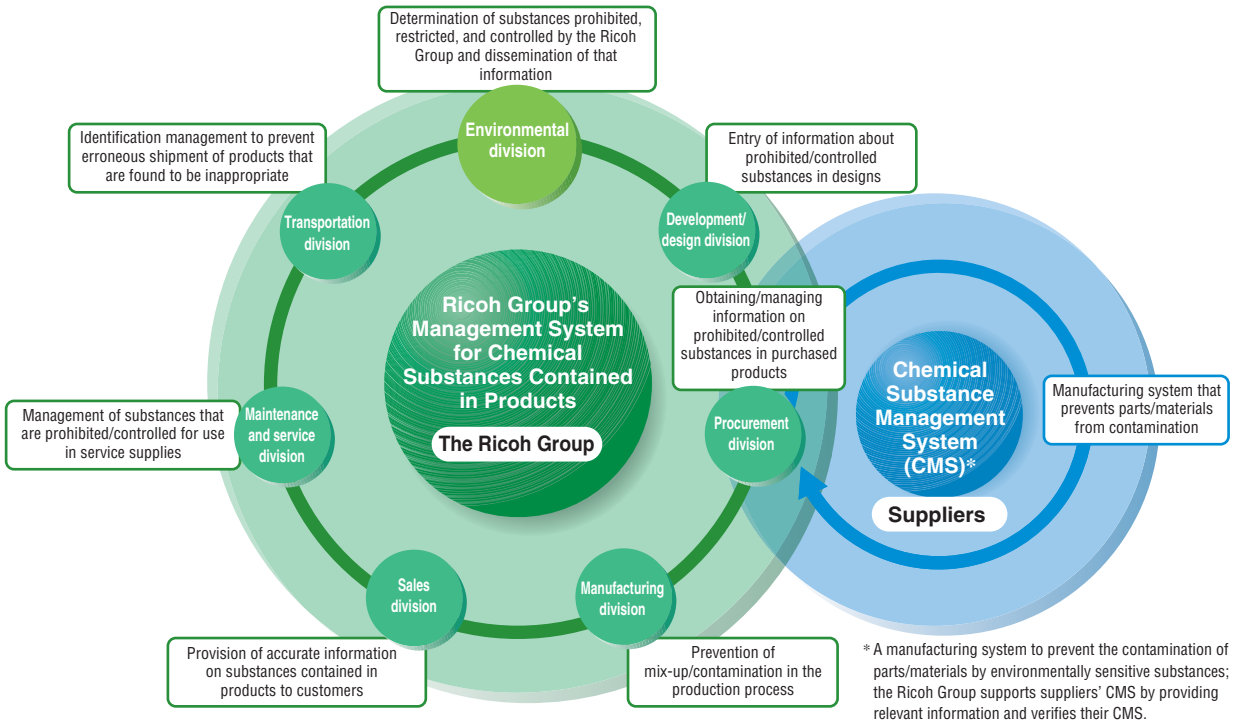
RoHS Directive

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 has been in effect since July 1, 2006.

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



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.

Green Procurement Activities in Partnership with Suppliers

The Ricoh Group promotes green procurement activities that place emphasis on partnership with suppliers. Green procurement refers to the procurement of raw materials, parts, and products with less environmental impact that are manufactured in plants that are advanced in environmental conservation. The purpose of green procurement is to reduce the environmental impact over the whole lifecycle of Ricoh products and to reduce the costs to the Ricoh Group and its suppliers by using resources and energy effectively. Moreover, by building these activities, we aim to contribute to global environmental protection and reinforce management practices of the Ricoh Group and its suppliers. Environmental conservation activities at suppliers are implemented in three areas: resource conservation and recycling, pollution prevention, and energy conservation and prevention of global warming. To support these activities, suppliers are requested to establish environmental management systems (EMS) and chemical management systems (CMS). In fiscal 2008, we will request our suppliers to set numerical targets for CO_2 reduction and support those activities.

History of Green Procurement

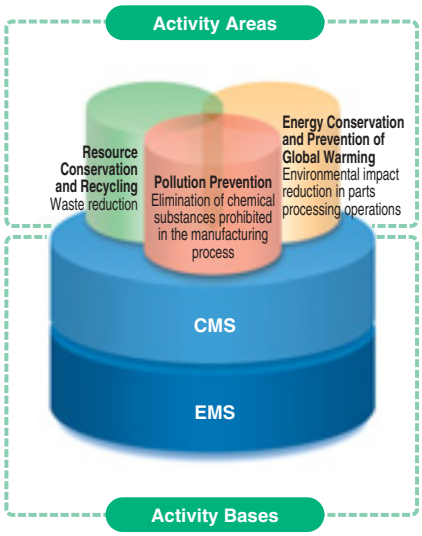
	Activities
1998	Started supporting the establishment of environmental management systems (EMS) at suppliers
2001	Started a survey on environmental impact information (survey on chemical substances contained in products)
2002	Commenced Ricoh Group's efforts toward the total elimination of environmentally-sensitive substances/Established Ricoh Group's green procurement policy
2003	Completed environmental management systems (EMS) at 1,089 suppliers throughout the world
2004	Issued Chemical management system guidelines for suppliers
2005	Commenced educational activities for CO_2 reduction at suppliers
2006	Completed chemical management systems (CMS) at 734 suppliers (1,700 sites) throughout the world
2007	Started supporting the establishment of chemical management systems (CMS) at second-tier suppliers and subsequent tier suppliers
2008	Establish CO_2 reduction targets for parts (scheduled)

Training CMS Examiners at Suppliers

<Ricoh Group (Global)>

To ensure that products do not contain environmentally-sensitive substances, it is necessary to monitor the upstream manufacturing process at every step. Targeting employees at our first-tier suppliers, the Ricoh Group trains and certifies CMS examiners. Specifically, those who complete the Ricoh Group's ISO14001 internal auditor training (qualified persons are exempt) and CMS examiner training will be recognized as CMS examiners. In addition to internal audits of their own companies, recognized examiners will conduct audits at second-tier and subsequent tier suppliers that deal with important processes involving environmentally-sensitive substances and work to establish chemical management systems. As of the end of March 2007, the number of CMS examiners at our suppliers was 629.

Suppliers' Activity Areas and Bases



INTERVIEW

Supplier Interview | **MIWA Tech Co., Ltd. Activities to Establish Chemical Management**

We have finished Ricoh's CMS examiner training and are working to establish chemical management systems at our suppliers.

Mr. Takashi Yatsuka
(Left)
Manager
O.A. Parts Division

Mr. Itsuo Ishii
(Right)
Managing Director
O.A. Parts Division

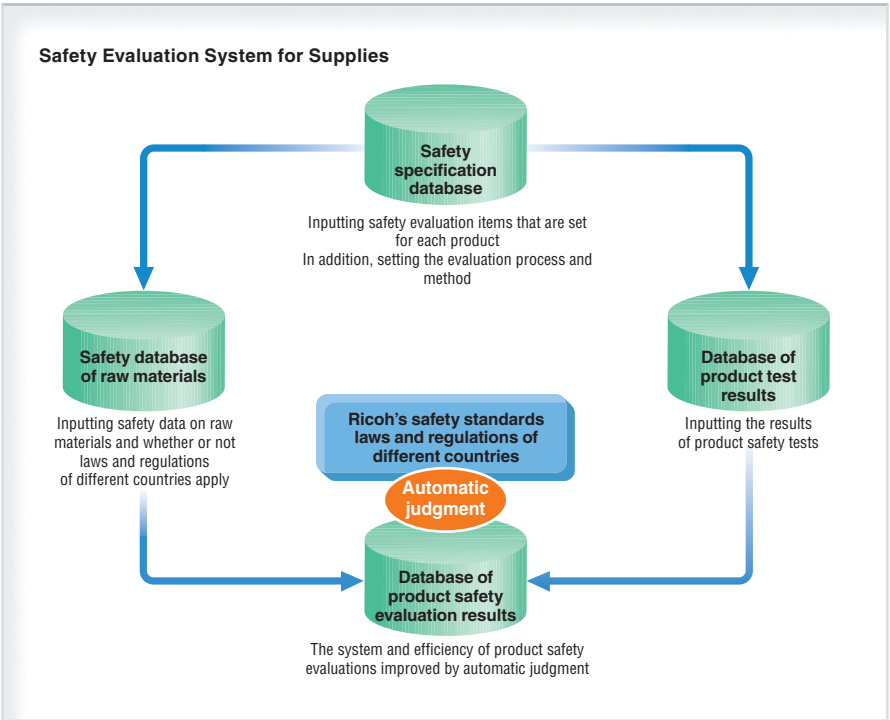
We faced a challenge in establishing chemical management systems at our suppliers.

At present, six employees are recognized as Ricoh's CMS examiners. Since our company is a trading company dealing with a variety of parts, including rubber belts and rollers, the necessary condition for CMS certification is to establish chemical management systems at nine companies (13 sites) that are our first-tier suppliers.
In November 2005, I and one other employee finished Ricoh's CMS examiner training, and we then conducted inspections at our suppliers and assisted them in establishing their own chemical management systems. Because we were short-staffed, we held study meetings on CMS in the company and allocated the inspection work to other employees.

Chemical Substance Control of Supplies

<Ricoh Group (Global)>

Various chemical substances are used in supplies, including toner and developer. Based on the belief that "product safety is a basic condition for customer satisfaction," the Ricoh Group ensures the safety of its supplies through the appropriate chemical substance control. We use an information system called RECSIS[1] to evaluate safety. Depending on the type of product, we set items for which safety should be confirmed, create MSDS[2], evaluate new chemical substances, check on the method of disposal, consult the relevant laws and regulations, and prepare safety specification data for products. In fiscal 2006, we upgraded the system. The new system can make automatic safety judgments by referring to the laws and regulations of different countries and Ricoh standards for the chemical substances contained in supplies. From fiscal 2007, we will use this system's database of raw materials to satisfy the REACH Regulation (registration, Evaluation, Authorization and restriction of Chemicals)[3].



1. Ricoh Environmental & Chemical Safety Information System
2. Material Safety Data Sheet

3. See page 32.

Systems by Supplier's Examiners

However, the examination level varied widely between those of us who actually participated in Ricoh's training and other employees, eventually we had to conduct the inspection again, and it took a lot of extra time and effort to finish establishing the chemical management systems. After a review of the situation, four more employees participated in Ricoh's training in August 2006. Then, in September 2006, our company was able to acquire CMS certification from Ricoh.

We aim to become a trading company with a low environmental impact.

Ricoh's CMS examination attaches importance not only to the written examination but also to the site audit. Ricoh's CMS examiner training provides a comprehensible explanation of points on how to audit sites that we cannot learn just by reading the CMS guidelines, and therefore it was very helpful. Since we are a trading company, all we can do is to ask our suppliers to put into place a specific structure to manage chemical substances, which can be very stressful. If we understand clearly the structure of chemical substance control, we can provide smooth on-site support. We are grateful that Ricoh encouraged us to keep up our efforts to establish environmental management and chemical management systems and consequently we now have specialists on chemical substances within the company. We will continue to make active efforts to deliver only products with low environmental impact.

Reduction in Environmentally-Sensitive Substances Generated While in Use

<Ricoh (Japan)>

Ricoh establishes its own standards on chemical emissions* generated by products while in use and endeavors to reduce them. Chemical substances emitted by products like copiers and printers are measured at the emission-measuring testing laboratory located within the company. Ricoh is certificated as an official testing laboratory by Germany's BAM (Bundesanstalt für Materialforschung und -prüfung; Federal Institute for Materials Research and Testing), and measurement data from Ricoh's testing laboratory will be recognized in registering for the Blue Angel, a German environmental label.

* Chemical emissions are chemical substances emitted by products and include ozone, dust, and volatile organic compounds (VOCs).

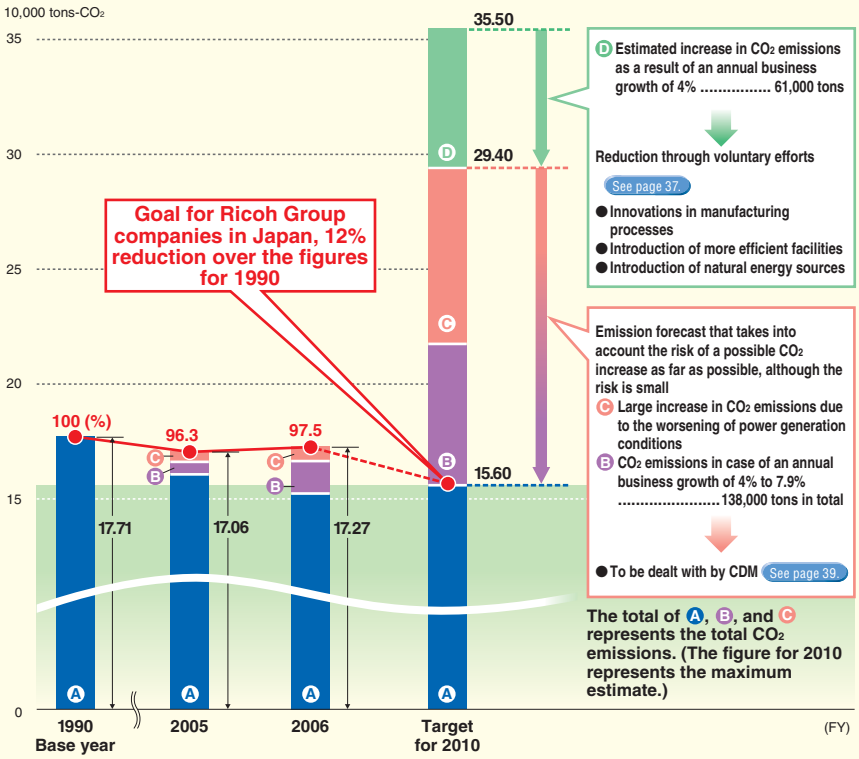
We have set higher goals than those set out in the Kyoto Protocol to help prevent global warming. We will reduce total CO_2 emissions by 12% by the end of fiscal 2010.

● 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. In addition, the Group is making preparations for the Clean Development Mechanism (CDM)[2] as a scheme to prepare as far as possible for a rapid expansion of business through M&As and, although unlikely, increased CO_2 emissions due to the worsening of CO_2 emissions conversion coefficients. Efforts will also 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 39.

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



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	¥520.8 million	Reduction in lighting and heating expenses	¥337.0 million	CO_2 emissions	11,581.5 (t)

● 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 of 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 2006

CO_2 emissions at production sites increased 3.3% at home and 14.2% abroad over fiscal 2000 levels (see graphs ❶ and ❹). This was because the increased energy consumption caused by the larger production of consumables supplied in Japan and the larger production of products and parts in China more than offset the amount of energy saved by efforts to reduce CO_2 emissions mainly through innovation in manufacturing processes. CO_2 emissions at non-production sites in Japan decreased approximately 4.1% over the previous fiscal year's levels (see graph ❷). While Ricoh aims to reduce total emissions by 12% over the figures in fiscal 1990, it achieved a 2.5% reduction in fiscal 2006. However, this represents a 13.9% reduction in real terms, because Ricoh will introduce CDM to cope with any increase in CO_2 emissions caused by business growth of over 4% per year and changes in CO_2 emissions conversion coefficients. As for greenhouse gases other than CO_2, the semiconductor business division achieved a 29.0% reduction and the entire Ricoh Group a 16.3% reduction over fiscal 2000 levels (see graph ❺).

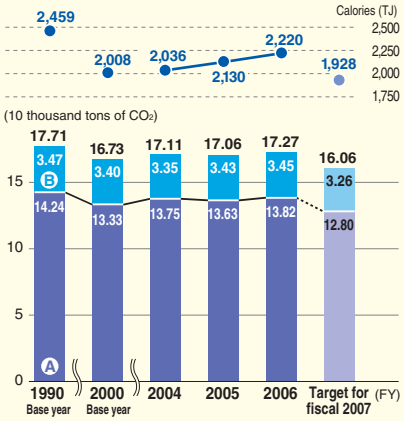
● Future Activities

In promoting activities to expand its business in fiscal 2007 and thereafter, Ricoh will strive to innovate production processes to reduce energy consumption in manufacturing, as part of its efforts to continue reducing CO_2 emissions at production sites. Particular emphasis will be placed on the supply sector and the parts business in China, which have shown marked growth. Positive efforts will be made also to introduce high-efficiency facilities and new energy sources to make investment more effective and operations more efficient. In distribution, detailed data will be collected and analyzed so that effective efforts can be made to reduce costs and CO_2 emissions at the same time.

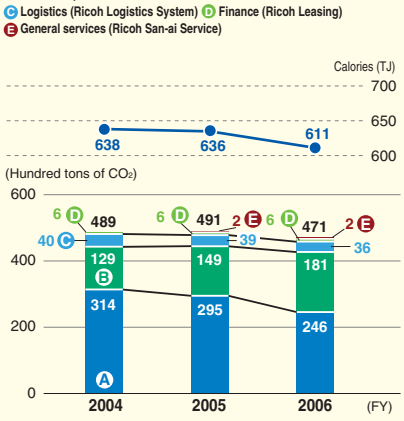
<Japan>

Energy Consumption (CO_2 conversion and calories)

❶ The Ricoh Group (production)



❷ The Ricoh Group (non-production)



Breakdown of Major Energy Consumption

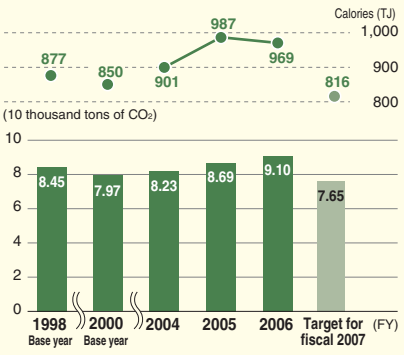
❸ The Ricoh Group (production)

	FY 2003	FY 2004	FY 2005	FY 2006
Kerosene (kℓ)	6,652	5,989	2,205	1,525
Heavy oil A (kℓ)	2,819	2,748	2,701	2,730
Town gas (1,000 m³)	14,640	15,339	15,400	15,899
Natural gas (1,000 m³)	0	0	6,079	7,219
Electric power purchased (1,000 kWh)	289,770	295,042	274,273	291,276

<Outside Japan>

Energy Consumption (CO_2 conversion and calories)

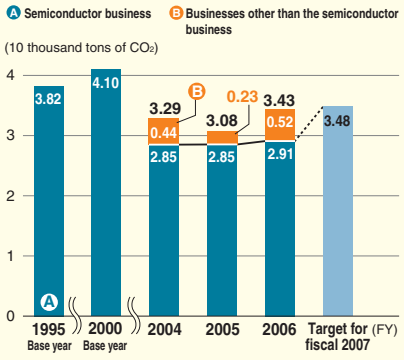
❹ The Ricoh Group (production)



<The Entire Ricoh Group>

Greenhouse Gas Emissions other than CO_2* (CO_2 conversion)

❺ The Ricoh Group (production)



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

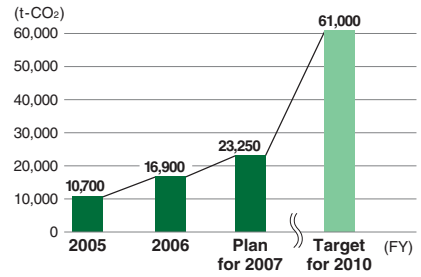
* The following CO_2 emissions coefficients are used in the graphs above.
❶, ❷, and ❺: Guidelines for accounting and reporting of greenhouse gas emissions from industrial commercial sectors (2003) by the Japanese Ministry of the Environment
❹: GHG Protocol
* Data on Ricoh Printing Systems and Shanghai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

Setting a Target for CO_2 Reduction through Improvements in Business Activities

<Ricoh Group (Japan)>

To ensure that we achieve the goal of reducing CO_2 emissions by 12% by fiscal 2010, it is necessary to make systematic reduction efforts. In 2003, Ricoh estimated growths in business up to 2010, and set a target for CO_2 reduction through improvements in business activities without relying upon CDM at around 61,000 tons. By clarifying a mid-term reduction target, activities can be implemented systematically, although it may be a long time before the effects appear after we start the project. In fiscal 2006, CO_2 emissions were reduced by about 6,200 tons mainly through innovations in production processes.

Total Reduction in CO_2 through Improvements in Business Activities



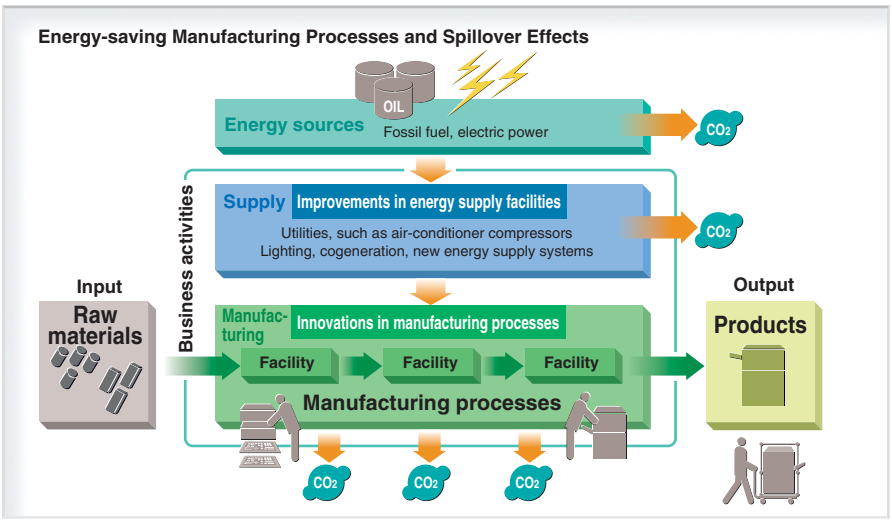
Innovations in Manufacturing Processes

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's energy-saving production process committee, which is made up of people in charge of the Group's major production sites in Japan, 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. To date, downsized production lines for photosensitive materials used in copiers have been put in operation, and a dramatic reduction in the size of toner filling devices, and innovation in the toner crush line process have been achieved.

Energy-saving Manufacturing Processes and Spillover Effects



Process Innovation in Toner Pulverizing Line

<Ricoh (Japan)>

Of the CO_2 generated in the production process for toner, which is a consumable used in copiers and printers, about 80% is generated in the toner pulverizing and classification processes. Small-particle size toners are a key product today. The conventional production method for small-particle size toners, however, needs more energy than for coarse toners. We assessed that it would be possible to reduce CO_2 emissions significantly if the high-efficiency production method used for coarse toners could be applied to the production of small-particle size toners, and started to develop a new production process. We succeeded in producing small-particle size toners in a short period of time, making the most of quality engineering and computer simulation to address various technical problems relating to quality and productivity, while achieving improved productivity by shortening the process. As a result of the innovations in the toner production method, we reduced CO_2 by 477 tons and cut costs by about ¥20 million in fiscal 2006.

Line spacing was also significantly reduced thanks to the new method.

Introduction of High-efficiency Equipment

CO_2 Reduction by Cogeneration System and Fuel Switch

<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. In introducing the system, a natural gas satellite was installed so that the natural gas could be supplied by tanker trucks because the infrastructure for supplying natural gas was not available at that time. The introduction of the system accompanying a natural gas satellite was the first such project in the Hokuriku District and served as a model case for the region. The total CO_2 reduction effect in fiscal 2006 was approximately 4,625 tons, including the amount reduced by the fuel switch.

Natural gas supply by tanker trucks

Introduction of Air Exchanger

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

Ricoh Industrie France S.A.S. (RIF), a manufacturing subsidiary in France, introduced an "air exchanger" into the thermal paper production line in September 2006. To produce thermal paper, base paper is coated with a heat sensitizer, which is dried with a drier, and the process is repeated. Driers have been installed at four spots along the manufacturing line at RIF. An air exchanger is a mechanism that uses waste heat generated by a drying process in another drying process that heats new air. The volume of natural gas used in the drying processes can be reduced using this mechanism. The reduction in the volume of natural gas used by the driers will result in a reduction in annual CO_2 emissions of 420 tons. It is also expected to reduce costs by 75,000 euros a year.

Air exchanger

Introduction of Natural Energy

Introduction of Solar Panels in the New Plant

<Ricoh Numazu Plant (Japan)>

In October 2006, when the construction of a new toner mass production plant started in Numazu Plant, solar power generation was introduced for the waste water treatment equipment. Using special technology, this equipment has 1,080 solar panels on three faces of its exterior walls, generating approximately 148 MW annually, which is used as a power source for treating waste water. This equipment has resulted in a reduction equivalent to about 56 tons of CO_2.

Waste water treatment equipment with solar panels on the exterior

Full Shift to Green Energy

<Ricoh Europe (Netherlands) B.V. (Netherlands)>

Ricoh Europe (Netherlands) B.V. European Regional Sales Headquarters switched all sources for electricity used at its three business sites in the Netherlands to green energy from January 1, 2007. Traditionally, 20% of the electricity consumed by the company had been generated by green energy. Considering the annual consumption of 1.5 million kWh per year together with the return on investment and added value to company strategies, the management judged a complete shift to hydroelectric power generation would be not only possible but preferable. When switched to the green energy, CO_2 emissions will be reduced by about 1,000 tons per year.

Certificate evidencing use of 100% green energy

Approach for CDM Project

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 advanced nations 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 is actively preparing for CDM as one way of mitigating an estimated 138,000-ton increase of CO_2 resulting from rapid business expansion associated with M&A, etc. and taking changes in external factors such as CO_2 emissions conversion coefficient into account. 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 2006, registration with the CDM Committee of the UN was completed for two projects from among wind power generation projects in India. In fiscal 2007, credit will be issued for these projects.

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

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

TOPIC

CDM Project Promoted by Ricoh Co., Ltd.

Afforestation Project to Conserve Biodiversity <Ecuador>


Seedling bed of seedlings for reforestation

Although the Choco Manabi Region in Ecuador is famous worldwide for its biodiversity, 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, collects seeds to grow seedlings for reforestation purposes and employs local people to conduct afforestation and maintains/manages virgin forests while giving consideration to biodiversity. Considering biodiversity conservation as a CSR activity, Ricoh started investing in the project in fiscal 2003, while promoting the process of CDM registration in partnership with CI. In February 2007, the methodology of this project was approved by the CDM Committee of the UN.
Unlike other projects that reduce CO_2 emissions, forestation and reforestation projects will serve to absorb CO_2 in the atmosphere, and so this project is expected to expand. However, because the method used to calculate the absorption level is complicated, the methodology* has been approved for only seven projects globally, including this project. The project is the first case of the methodology being approved among the many projects underway through investment solely by individual Japanese corporations. It is also the first project to be approved whose main purpose is biodiversity.

* "Methodology" in this context refers to the method of quantifying/monitoring greenhouse gas reductions in CDM projects. The methodology requires the approval of the CDM Committee.

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.

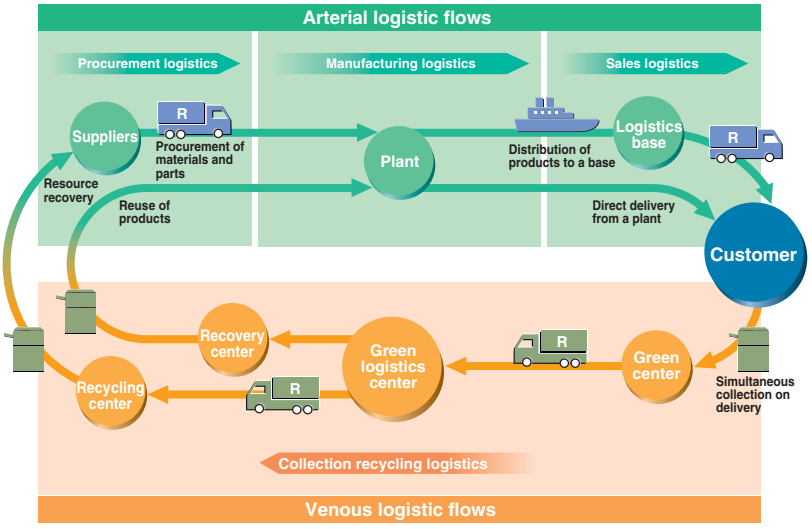
Wind Power Project <India>

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. Responding to this concern, 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.

The Ricoh Group is working to reduce CO_2 emissions and costs from transportation by global optimization of SCM.

To achieve a sustainable society, one of the most important issues is to reduce CO_2 emissions from logistics. To address this issue as a company, it is essential to reduce costs in parallel with curbing CO_2 emissions. To achieve this purpose, opportunities for improvement in the logistic process are identified and logistic costs as well as CO_2 emissions are visualized simultaneously to encourage improvements to be made. In addition, the effects are leveraged by rapidly spreading the improvement horizontally within the group. The Ricoh Group is striving to reduce environmental impact by optimizing SCM (Supply Chain Management), including through modal shifts, direct delivery to each customer and improved efficiency of transportation among warehouses.

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

Establishing an Information System to Calculate CO_2 Emissions in Distribution <Ricoh Logistics System Co., Ltd. (Japan)>

The amended Energy Saving Law requires shippers to save energy in physical distribution. Ricoh Logistics System Co., Ltd., is establishing an information system to calculate CO_2 emissions in physical distribution. This system offers information on the distance between the starting point and the destination, weight, vehicle type, fuel used, and loading rate for each type of transportation, which are necessary to calculate CO_2 emissions by the revised ton-kilo method*. The data obtained are used not only for saving energy but also for improving the physical distribution system. In the future, data obtained will be offered to shippers, while proposals will be made for improving the physical distribution scheme.

* Method of calculating CO_2 emitted in distribution activities that has been adopted under the revised Energy Saving Law.

❶ CO_2, NOx, and SOx Emissions in Transportation by Ricoh Logistics System

	CO_2 (t)	NOx (t)	SOx (t)
2004	1,451.0	2.8	0.4
2005	1,467.7	2.8	0.4
2006	1,368.0	2.6	0.4

INTERVIEW

Employee Interview | Centralized Green Purchasing

Tom de Bruin
in charge of purchasing at Ricoh Europe

Introducing centralized green purchasing for company-owned cars to reduce CO_2 emissions and fuel costs

Ricoh Group companies in Europe introduced centralized green purchasing for company-owned cars in 2003. In the coming two years, 4,000 cars will be replaced with fuel-efficient and low-emissions vehicles.

Sales subsidiaries in 34 European countries have introduced green purchasing in close cooperation.

Ricoh Europe (Netherlands) B.V. European Regional Sales Headquarters, is implementing centralized purchasing for company-owned cars, IT systems, mobile phones, etc., used at sales subsidiaries in 34 European countries. In addition, all Ricoh Group sales subsidiaries in Europe have received a target for reducing CO_2 emissions by 1% per person per year. To achieve the target, Ricoh Europe (Netherlands) B.V. judged it would be essential to reduce CO_2 emissions from company-owned cars used by sales people & technicians considering they cause 50% of total Group CO_2 emissions. Accordingly, the company set purchasing standards for vehicles considering fuel efficiency, CO_2 emissions and particle filters for diesel cars for all leased/purchased cars from 2003. It plans to set an even higher target in the summer of 2007. In accordance with the fixed standards, respective sales subsidiaries are striving to further reduce CO_2 emissions and fuel costs by introducing economical, fuel-efficient and low-emission vehicles. The Ricoh Group companies in Europe currently use about 8,000 company-owned cars. In the coming two years, 4,000 of them will be successively replaced with fuel-efficient and low-emission vehicles.

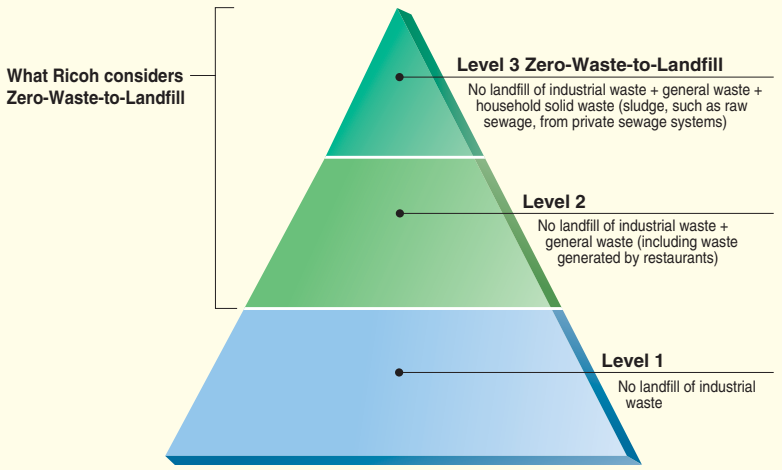
We promote Zero-Waste-to-Landfill activities worldwide while reducing waste and costs.

● 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 subsidiaries at home and abroad. In addition, an audit system for recyclers was introduced in Japan, aiming to upgrade and expand proper 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 2006

Waste volume generated at production sites increased by 2.9% from fiscal 2000 levels, reflecting a large increase in corrugated cardboard waste as a result of the procurement of parts from Asia and transportation among overseas sites (see graph ❶). At non-production sites, the resource recovery rate is steadily improving thanks to Zero-Waste-to-Landfill activities (see table ❹). In terms of water consumption, our continued efforts have contributed to an 11.8% reduction over the fiscal 2000 level (see graph ❷), while we achieved a 4.2% reduction in paper consumption compared with the fiscal 2002 level.

● Future Activities

Production sites will continue improving processes in cooperation with the development and design divisions to cope with increasing waste due to the expansion of business. To cope with an increase in packaging waste reflecting expanded global production activities, improvement of forms and the design of packing materials used among different sites will be introduced. After clarifying problems from the viewpoint of the entire physical distribution system, we will instigate efforts to tackle this problem.

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

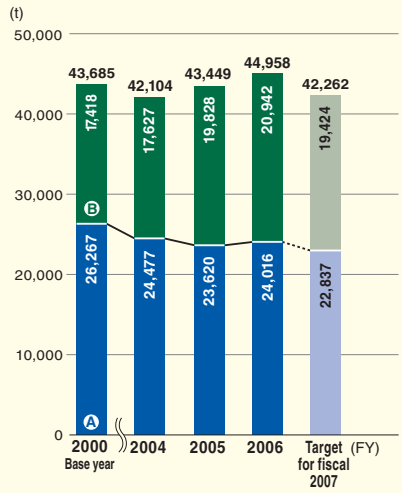
Costs			Effects			
			Economic benefits		Effect on environmental conservation	
Item	Main cost	Costs	Items	Benefits	Reduction item	Amount
Business area cost	Resource circulation cost	¥1,888.4 million	Reduction in waste disposal expenses	¥183.3 million	Amount of waste disposed/ reduced	124.3 (t)
			Proceeds from sale of valuables	¥487.3 million		

<The Entire Ricoh Group>

Total Amount of Waste Generated

❶ The Ricoh Group (production)

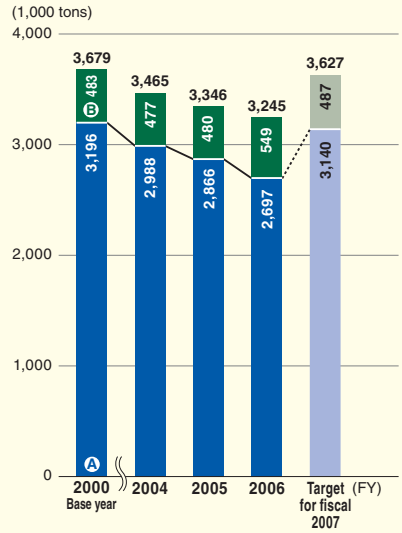
Ⓐ Japan Ⓑ Outside Japan



Volume of Industrial Water Used

❷ The Ricoh Group (production)

Ⓐ Japan Ⓑ Outside Japan

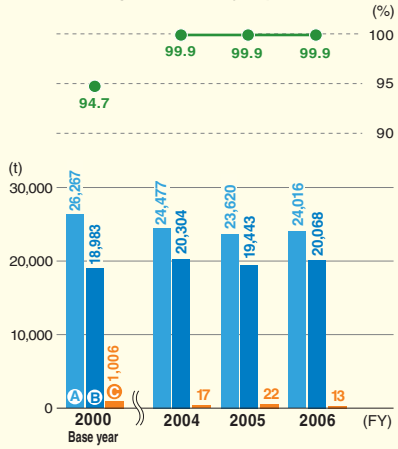


<Japan>

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)

● Resource recovery rate of waste
Ⓐ Total amount of waste generated
Ⓑ Total amount of waste discharged
Ⓒ Amount of waste finally disposed of



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	94.6	1,567	85
Maintenance and Services (Ricoh Technosystems)	97.7	931	21
Logistics (Ricoh Logistics System)	98.4	3,481	54
Finance (Ricoh Leasing)	95.1	60	3
General Services (Ricoh San-ai Service)	96.6	24	1

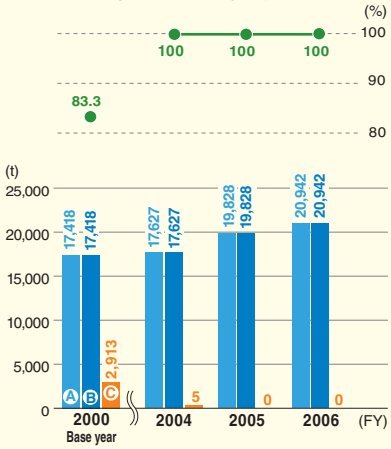
* At non-manufacturing subsidiaries, the amount of waste generated and the amount of waste discharged are the same, because waste is not processed at the business site. Therefore, only the total amount of waste discharged is listed.

<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)

● Resource recovery rate of waste
Ⓐ Total amount of waste generated
Ⓑ Total amount of waste discharged
Ⓒ Amount of waste finally disposed of



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

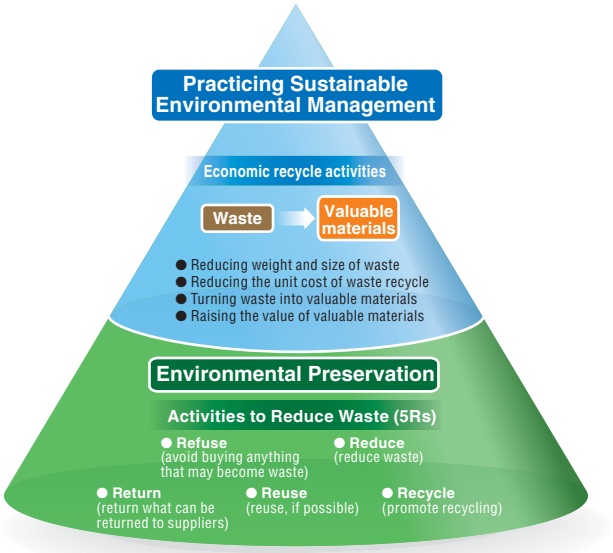
* Data on Ricoh Printing Systems and Shanghai Ricoh Digital Equipment are not included in graphs ❶ through ❺. Waste generated from the manufacturing of polymerized toner at Ricoh's Numazu Plant is not included either. Data that include waste from these sources are shown on Page 77

Developing and Raising the Level of Zero-Waste-to-Landfill Activities

<Ricoh Group (Global)>

Zero-Waste-to-Landfill activities are carried out at Ricoh's sites all over the world. The Ricoh Group defines Zero-Waste-to-Landfill as a 100% resource recovery rate, or no waste used as landfill. Zero-Waste-to-Landfill was achieved at its major production sites in Japan in March 2001 and at production sites outside of Japan in March 2002. Thus, the Group achieved Zero-Waste-to-Landfill at all its major global production sites. Since then, these activities have been promoted at non-production sites both at home and abroad and at companies that have newly joined the Group. At sites that have already achieved Zero-Waste-to-Landfill, efforts are being made to raise the level of Zero-Waste-to-Landfill, including controlling the volume generated and the conversion of waste into useful materials, under the concepts of sustainable environmental management.

Concepts in raising the level of Zero-Waste-to-Landfill Activities



Zero-Waste-to-Landfill Achieved at a New Group Company

< Ricoh Printing Systems, Ltd. (Japan)>

Ricoh Printing Systems, Ltd., is a printer manufacturer that joined the Ricoh Group in October 2004. Before joining the Group, the company's target was to achieve a landfill ratio of under 1% to total waste volume. The Ricoh Group's target, however, is to raise "the resource recovery rate of waste to 100%," and it was necessary for Ricoh Printing Systems to review its conventional waste disposal methods. In fiscal 2005, the company introduced Zero-Waste-to-Landfill activities in compliance with the Ricoh standards, reviewing the types of wastes and changing disposal methods and recycling routes. Consequently, Zero-Waste-to-Landfill was achieved at all of its five sites. Specific revisions were made in 13 cases at the Katsuta, Taga, and Yamagata sites. They improved disposal methods for every type of waste, introducing the recycling of corrugated cardboard and wooden pallets and reducing the generation of toner waste by establishing new recycling facilities. These efforts resulted in a reduction in disposal costs of ¥12 million.

Staff members in charge of environmental activities at Ricoh Printing Systems

Recycling Solder Used in the Manufacturing Process for Printed Circuit Boards

<Ricoh Microelectronics Co., Ltd. (Japan)>

Ricoh Microelectronics Co., Ltd. (RME) developed technology to collect and reuse unused paste solder generated during the manufacturing process for printed circuit boards, jointly with the Tottori University of Environmental Studies. The use of paste solder in manufacturing printed circuit boards was under strict control in order to maintain the quality of the solder, and paste solder exceeding the time limit had to be thrown away. The introduction of lead-free products, however, led to higher solder costs, causing a heavy cost burden. Using recently developed technology, paste solder is heated on the spot and separated cleanly into metal solder and solvent, which are collected and used in other processes. The original technology including the separation method and automatic control was adopted in the newly installed facility, which realizes steady treatment of solder. As a result, no more solder is disposed of, which has reduced both purchasing and disposal costs. The technology, which is expected to contribute widely to society by solving common problems in the manufacturing of printed circuit boards, was awarded an Excellent Performance Award at the Fiscal 2006 Awards for Resource-Recycling Technology and Systems hosted by the Clean Japan Center.

Waste solder recycling facility

Auditing Recyclers

<Ricoh (Japan)>

Ricoh has integrated the auditing of recyclers and created an auditor recognition system in order to ensure proper waste disposal. In the past, because each business site audited recyclers individually, such problems as different evaluations of the same recyclers and duplication of audit operations had emerged. To address these issues, Ricoh started to share information on recyclers within the Ricoh Group in fiscal 2005, established audit standards and a system, and launched auditor training and a recognition system targeting staff in charge at its production sites and manufacturing subsidiaries in Japan. In fiscal 2006, 27 auditors certified by the Group audited 159 recyclers handling waste from Ricoh's production sites, through assessment by authorized business type and on-the-spot inspection. Any recyclers where any incongruity was detected were given directions and requested to make improvements and after a few days, a confirmation audit was completed. From fiscal 2007 onward, recyclers handling waste from non-production sites, those that newly handle waste from production sites, and those who have been requested to make improvements will be audited. In addition, Ricoh will try to raise the audit level by improving the efficiency of recycler audit operations and implementing an auditor rotation system and follow-up education. Thus, efforts will be made to ensure even more reliable and efficient waste disposal.

Scene from audit

INTERVIEW

Recycler Interview | **Sakai Shoten**

Passing the strict audit enabled us to confirm the appropriateness of our business operations.

Mr. Sueji Sakai
President,
Sakai Shoten

Disposal facilities and total operations were audited against severe standards.

The Ricoh Group audited our waste disposal operations in August 2006. We have handled plastic waste and waste from general business operations by Ricoh Keiki Co., Ltd., for more than ten years. Having gone through many audits and inspections by our customers, we were confident that no defects would be found in our operations in any audit by any auditors. So, we did not worry too much when Ricoh told us that it wanted to audit our waste disposal operations. But when Ricoh actually carried out an audit, we were somewhat surprised that the audit was so severe. No other companies have requested us to present various licenses for our business operations. However, Ricoh checked the site and all the licenses, documents, records, equipment, facilities, etc., against each item on the assessment sheet. In ordinary audits, they only check facilities used for handling waste generated by our customers. The audit by Ricoh, however, covered our operations from collection and transportation to final disposal, as well as all facilities related to those operations.

We fulfill all our responsibilities as a recycler.

We were informed that as a result of the audit, there would be no problem with us continuing to offer our services. We are really pleased that we were able to confirm that our waste disposal operations are carried out appropriately in compliance with all relevant laws, thanks to Ricoh's strict audit. Recyclers are supposed to assume full responsibility for companies generating waste and it is our duty to fulfill these obligations and responsibilities. Ricoh's audit allowed us to recognize once again the importance of proper waste disposal and global environment conservation and try to obtain an "Eco Action 21" certificate. In December 2006, we became the first recycler in Saga City to acquire this certificate. We realize that the responsibilities of recyclers in environmental conservation will become even greater.

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. In addition, we communicate the risk involved in chemical substances so that the Group can be trusted by the local community.

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 2006

Ricoh completely attained its target to eliminate the use of chlorine organic solvents in the consignment production of photo conductors by the end of fiscal 2005. The use of environmentally-sensitive substances was reduced 48.7%[2] from fiscal 2000, while the amount emitted decreased 88.9%[3] from fiscal 2000. Thus, Ricoh succeeded in maintaining the current levels (see graph ❶). In fiscal 2006, solvent combustion equipment was introduced to the Ricoh Numazu Plant while a risk communication meeting was held at Ricoh Unitechno Co., Ltd.

2&3. The figures have been converted using an environmental impact coefficient.

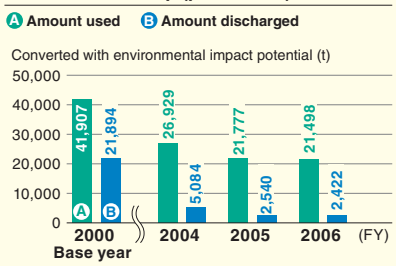
● Future Activities

We will continue our efforts to reduce the use and emissions of chemical substances so that they will not increase even though business operations will be significantly expanded. In fiscal 2007, we plan to continue the efforts we have made so far to reduce them. In addition, efforts will be made to upgrade the levels of risk assessment and management of chemical substances and risk communication.

<The Entire Ricoh Group>

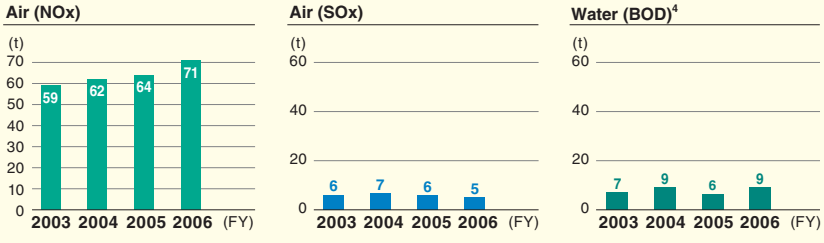
Changes in the Amount Used and Discharged of Ricoh Target Substances for Reduction

❶ The Ricoh Group (production)



Changes in the Amount of Nox, SOx and BOD

❷ The Ricoh Group (production)



4. 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)

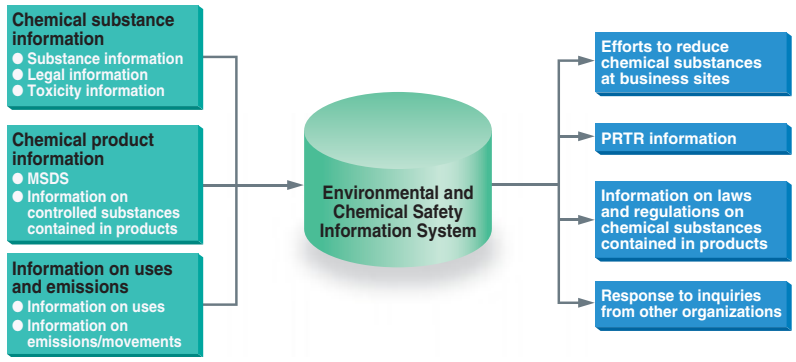
Costs			Effects			
			Economic benefits		Effect on environmental conservation	
Item	Main cost	Costs	Items	Benefits	Items	Amount
Business area cost	Pollution prevention cost	¥186.4 million	Reduction in social cost	¥15.4 million	NOx SOx BOD PRTR substances (calculated with the conversion potential)	–5.0 (t) 1.1 (t) –3.1 (t) 101.7 (t)
			Amount of risk avoidance effect (incidental effect)	¥1,226.6 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



TOPIC

Ricoh held a risk communication meeting, inviting residents of the city and people from the local community and municipal government.

<Ricoh Unitechno Co., Ltd. (Japan)>

Discussions focused on environmental risk reduction

An "Environmental Communication Meeting" sponsored by Saitama Environment Counselor's Association was held on January 24, 2007, at Ricoh Unitechno Co., Ltd. (Yashio City, Saitama). The meeting aimed to provide citizens, the municipal government, and companies with an opportunity to get together to share information on environmental contamination and chemical substances and promote mutual understanding, so that environmental risks could be reduced. A total of 28 people participated in the meeting, including local residents, environmental counselors (NPO), local government officials from Yashio City in Saitama, and Ricoh and Ricoh Unitechno employees. At the meeting, Ricoh's sustainable environmental management and Ricoh Unitechno's environmental conservation activities were presented, while participants observed assembly processes for copiers and facsimile machines. They seemed to be interested in the Ricoh Group's original production process innovations, including the "pull cart type production line" which reduces electricity consumption to 1/40 of the amount used in the conventional conveyor line.

Visit to the copier assembly line

Scene from the meeting

More environmental conservation know-how should be conveyed to the community.

At the exchange of opinion session that was held at the end of the meeting, many people supported the concepts in Ricoh's sustainable environmental management, saying, "Many companies report their emission densities of xylene, toluene, etc., but Ricoh is reducing the absolute value it uses" (a local resident); "I was impressed to see that Ricoh has attained its environmental targets while achieving excellent results in business" (a local resident); and "The idea that environmental consideration goes with profit generation is great. I believe it is the job of environmental counselors and the municipal government to support the expansion of such excellent activities" (NPO). In the meantime, some requests were also made. One local resident said, "Excellent activities by only one company do not make Yashio City as a whole better. I would like Ricoh to convey more know-how to the local community," while an officer from the municipal government said, "I want Ricoh Unitechno to issue an environmental site report for local residents." Ricoh Unitechno intends to hold specific discussions on the opinions presented, which it regards as future issues, and incorporate them into its activities in and after fiscal 2007.

From the viewpoints of corporate social responsibility and environmental risk management, surveys have been completed at all business sites throughout the world.

● Concept

Soil and underground water contamination, if left alone, 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. The survey was completed in fiscal 2006.

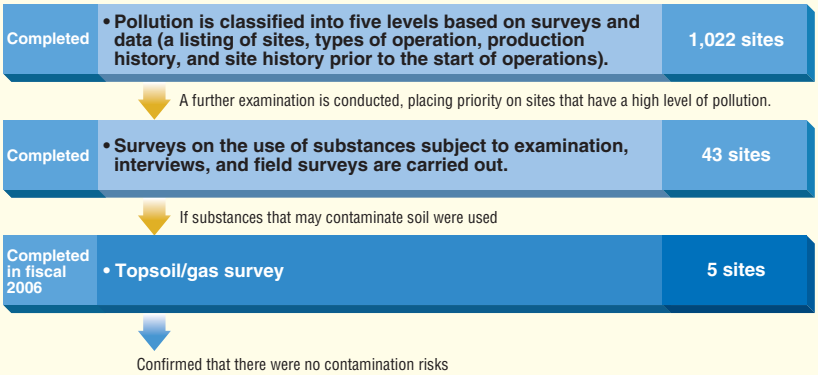
● Targets for Fiscal 2007

◎ 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.

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



● Review of Fiscal 2006

History surveys of non-production sites showed that soil at five sites might be contaminated, so topsoil from the five sites was tested. The survey revealed no contamination that required action. As all the surveys have been completed, we now understand all the contamination risks at all Ricoh Group sites. Systematic cleanup measures are being taken at production sites where some contamination was detected, including measures to prevent outflow when pumping up underground water. Thus the contamination is under control. Tohoku Ricoh Co., Ltd., has completed its cleanup work.

● Future Activities

It has become apparent that contamination risks at non-production sites are smaller than originally expected. In response to this, the occasions currently requiring surveys, including the buying, selling, and leasing of land, will be reviewed and the environmental risk management model will be revised. For our production sites, information on the activities at respective sites will be shared at committee meetings so that contamination risks can be systematically reduced. The Ricoh Group had spent about ¥1.95 billion on surveys and countermeasures by the end of fiscal 2006 and will need to spend about ¥1.02 billion more in the future.

Surveys of 1,022 Non-production Sites Completed

<Ricoh Group (Global)>

The Ricoh Group started soil contamination surveys of owned and leased land at 1,022 non-production sites worldwide in fiscal 2004 and completed them in September 2006. The history of business activities and the use of chemical substances were surveyed at non-production sites for sales, distribution, services, and technological development, as well as production sites of subsidiaries of Ricoh's subsidiaries. The topsoil was surveyed at the five sites which had used chemical substances that could lead to contamination to confirm that there were no contamination risks. This made it clear that no costs for removing contamination from the ground would accrue at non-production sites in the future. As a result of completing the surveys, the Ricoh Group now understands and controls soil contamination risks at all its sites including production sites.

Cleaning up Sites Where Contamination Was Detected.

<Ricoh Ikeda Plant (Japan)>

Ricoh Ikeda Plant carried out a soil survey in July 2006 when it rebuilt the facilities. The survey showed that the soil at the site was partially contaminated by arsenic, boron, and fluorine at amounts slightly exceeding the standards. Because of this, we requested the Department of Environment, Agriculture, Forestry and Fisheries of the Osaka Prefectural Government to stand by during a detailed survey we conducted. As a result of the survey, we confirmed that contamination was limited to parts of the ground and underground water had not been contaminated. The survey also showed that there were no wells for drinking water downstream of the underground water. In light of these results, we plan to continue to conduct soil surveys and take countermeasures systematically and as needed on the site, although no effects are expected in the neighboring areas. Based upon the fact that soil contamination was detected at a site where the conventional survey had detected no contamination, we will conduct topsoil surveys at some of the sites, where necessary, after examining the results of history surveys conducted in the past.

Scene from the survey

❶ **Survey Results of Underground Water Pollution and Purification Efforts at the Ricoh Group's Production Sites (as of March 2007)**

	Business site	Pollutant	Survey result (mg/ℓ)	Standard value in Japan (mg/ℓ)	Measures in implementation
Japan	Ricoh Ohmori Office	Cis-1.2 dichloroethylene	0.047	0.04	• Pumping up underground water • Bioremediation • Regular monitoring
		Trichloroethylene	0.11	0.03	
		Tetrachloroethylene	0.051	0.01	
	Ricoh Optical Industries	Cis-1.2 dichloroethylene	0.21	0.04	• Pumping up underground water • Bioremediation • Regular monitoring
		Trichloroethylene	0.19	0.03	
		Tetrachloroethylene	0.23	0.01	
	Ricoh Elemex, Okazaki Plant	Cis-1.2 dichloroethylene	0.092	0.04	• Pumping up underground water • Neutralization of soil gas • Regular monitoring
		Trichloroethylene	2.1	0.03	
		1.1-dichloroethylene	0.35	0.02	
		Hexavalent chromium	2.5	0.05	
		Cadmium	0.088	0.01	
	Ricoh Elemex, Ena Plant	Cis-1.2 dichloroethylene	0.31	0.04	
		Trichloroethylene	5.0	0.03	
		Hexavalent chromium	0.25	0.5	
		Fluorine	2.6	0.8	
	Ricoh Keiki	1.1-dichloroethylene	0.05	0.02	• Pumping up underground water • Bioremediation • Regular monitoring
Outside of Japan	Ricoh Electronics Inc., Irvine Plant (U.S.A.)	Cis-1.2 dichloroethylene	0.0056		• Pumping up underground water • Regular monitoring • Neutralization of soil gas • Chemical oxidization trial test
		Trichloroethylene	0.16		
		Tetrachloroethylene	3.0		
	Ricoh Industrie France S.A.S. (France)	Tetrachloroethylene	0.29		• Pumping up underground water • Regular monitoring
	Ricoh UK Products Ltd.* (U.K.)	Cis-1.2 dichloroethylene	2.4		• Pumping up underground water • Regular monitoring • Chemical oxidization trial test
		Trichloroethylene	1.1		
		Tetrachloroethylene	8.9		
		Vinyl chloride	0.6		
		Total petroleum hydrocarbon (TPH)	220		

• Contamination cases that seem to be attributable to natural causes are excluded.
• The highest densities recorded at the monitored wells are shown in the above survey results.
• The areas surrounding all business sites are not affected by pollutants.
• As for a list of 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
* Measured in April 2007

Ricoh promotes the harmonization of environmental preservation and business operations to realize sustainable environmental management.

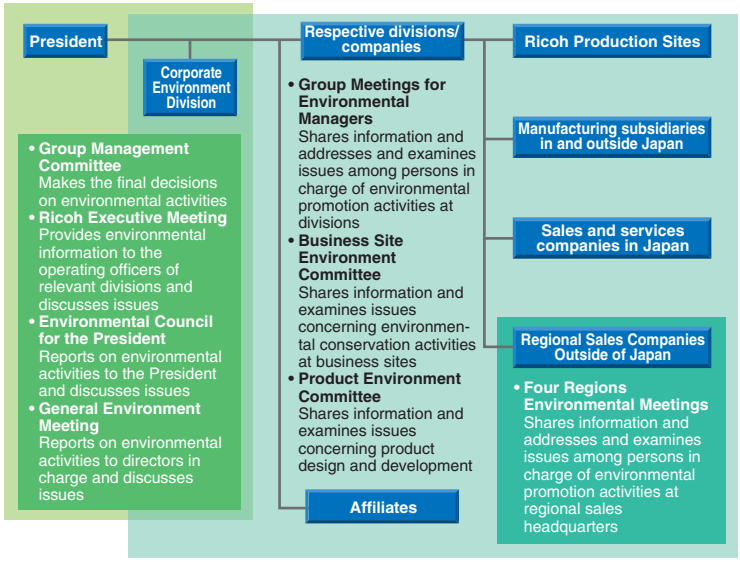
The Ricoh Group's environmental management system (EMS) is an important tool in facilitating sustainable environmental management on a global scale. We established a system to reflect the environmental action plan set by management in the goals of respective divisions and provide feedback on the results 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.

Upgrading the Level of the Environmental Management System

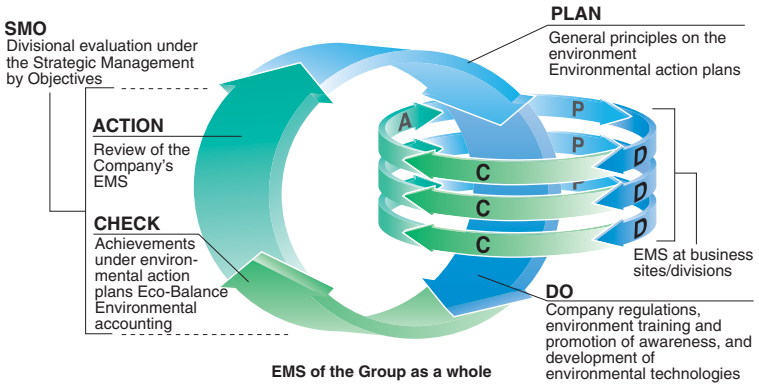
To realize sustainable environmental management, it is essential to incorporate environmental perspectives into business operations instead of separating environmental preservation activities from business operations. The Ricoh Group has traditionally promoted the acquisition of ISO 14001 certification by each business site and division to fortify its environmental management system. Starting with Ricoh Gotemba Plant, which received ISO/DIS 14001 certification in 1995, all major Ricoh production sites worldwide were ISO 14001 certified as of March 2000. In 2001, the sales group in Japan as a whole was ISO 14001 certified. Sales subsidiaries 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, as shown by further unification of management systems in fiscal 2006 to better harmonize business and the environment. Also, Ricoh and its sales subsidiaries in Japan acquired integrated ISO 14001 certification in February 2007.

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

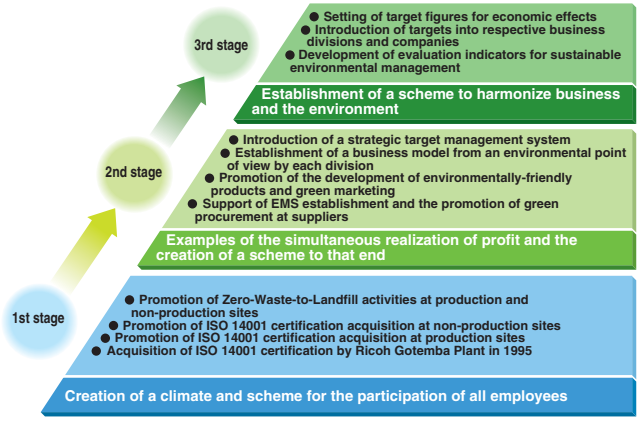
Organizational Chart for the Ricoh Group's Sustainable Environmental Management System



EMS of the Ricoh Group



Improvement in the EMS Activity Level

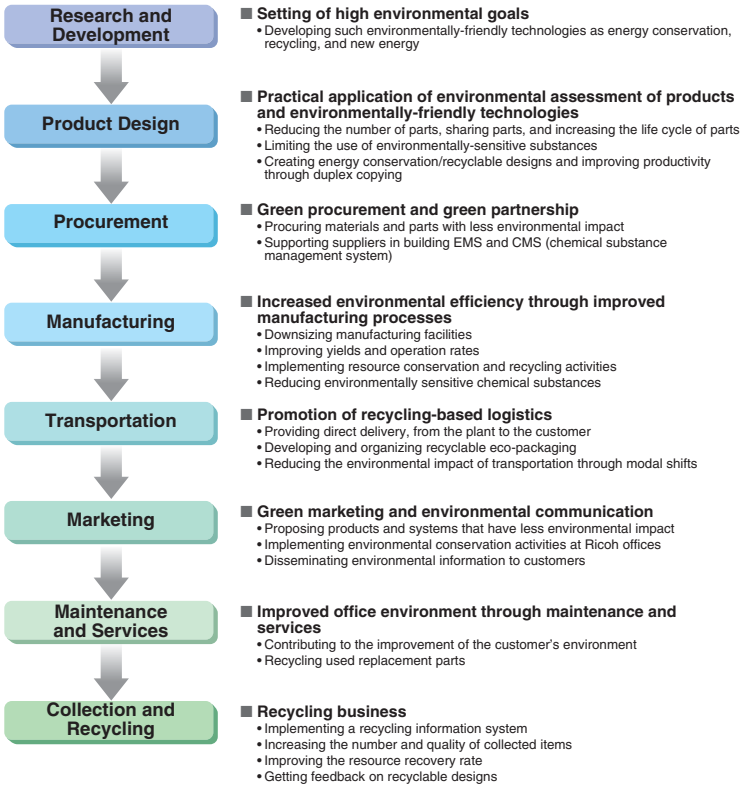


Participatory Approach by All Employees

The Ricoh Group is making an effort to improve sustainable environmental management based on an "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.

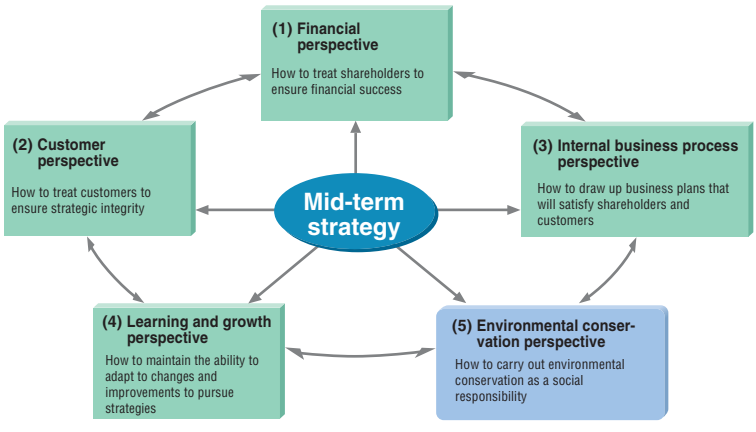
Sustainable Environmental Management Activities Participated in by All Employees



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 for 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 on 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 integrated environmental impact[1] of overall operations; draw up environmental action plans[2]; support decision-making in sustainable environmental management; promote environmentally-friendly design; improve activities by each division; process Corporate Environmental Accounting[3]; and disclose information to the public.

1. See page 53. 2. See page 21. 3. 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. Efforts are being 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. In fiscal 2006, we established a system for the automatic judgment of information on environmentally-sensitive substances in major parts as well as for the disclosure of product recycling information including WEEE*.

* See page 30.

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 6.

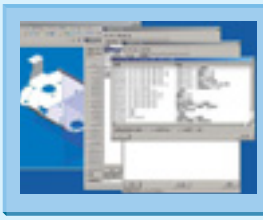
Sustainable Environmental Management Information System

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 2006, this system was completed at the weighing and measuring instruments division of Ricoh Elemex Corporation.

Design

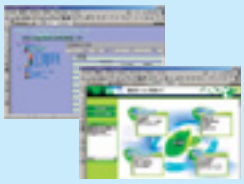


This is a system to select the most suitable materials and parts from the viewpoint of environmental conservation and costs in order to promote environmentally-friendly design. This CAD system works in tandem with the procurement management system and the chemical substance management system.

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.

Transportation/Sales

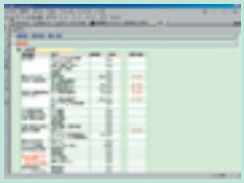


This system collects data on power consumption as well as the amount of gasoline used and waste generated in order to reduce the environmental impact caused by logistics sites, transportation processes, and sales sites. The collected data are used to support the PDCA cycle of EMS at each site. In fiscal 2006, a system was established to deal with the amended Energy Saving Law.

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

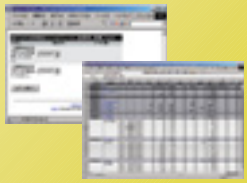
Environmental accounting information

Analysis of information

Processing of information

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

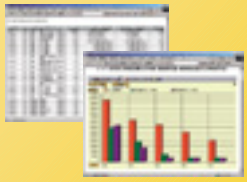
* See page 49.



Understanding Integrated Environmental Impact

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.

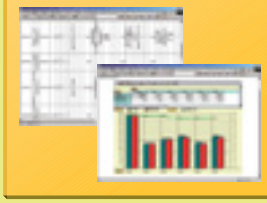
See page 55.



Preparing and Managing Environmental Action Plans

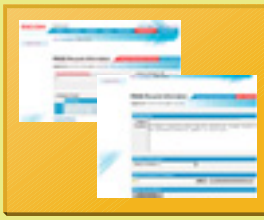
An action plan is drawn up based on the integrated environmental impact calculated by the sustainable environmental management information system. Reduction targets are also established in the plan. We identify problems and take actions to address them as soon as possible by introducing automatic aggregation,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

See page 21.



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.



Information Disclosure

Environmental information on products is disclosed to customers, suppliers, recycling companies, and so forth. In fiscal 2006, product recycling information was disclosed on our web site.

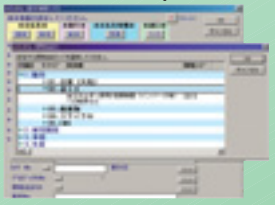
See page 30.

Environmental Accounting System

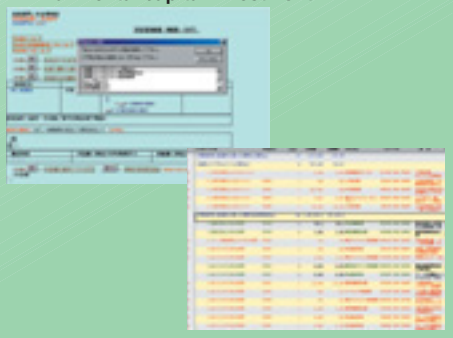
Accounting System

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

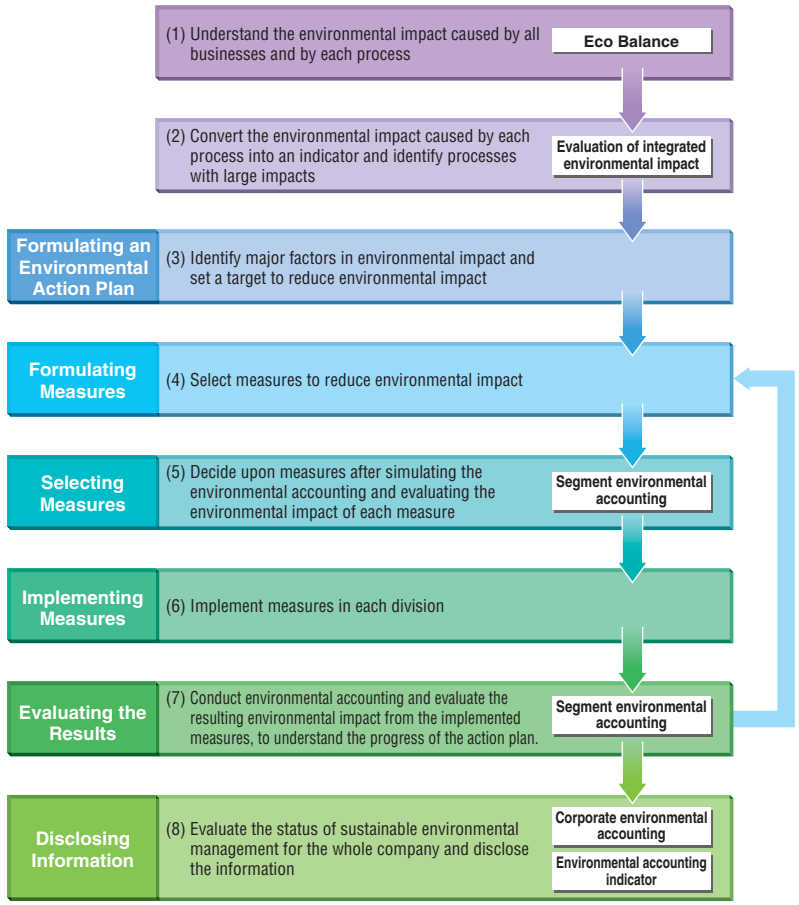
Data on the economic benefits of environmental conservation activities and the environmental conservation costs/economic benefits for each company in the Ricoh Group are input to the aggregate database of environmental accounting on a quarterly or biannual basis to calculate these figures every six months.

Action plans are mapped out and sustainable environmental management is evaluated using Eco Balance, integrated environmental impact, and environmental accounting as tools.

The Ricoh Group has an extra-long-term environmental vision to reduce environmental impact generated by the advanced nations to one-eighth the fiscal 2000 levels 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. To achieve this, it is necessary to map out appropriate action plans to reduce environmental impact caused by all our businesses, consider and implement effective measures, and establish a scheme to evaluate and disclose the results. The Ricoh Group is operating PDCA, evaluating action plans, measures, and activity results, using Eco Balance[1], integrated environmental impact[2], and environmental accountings as tools.

1&2. See page 54.

PDCA and the Roles of Tools for Sustainable Environmental Management



Understanding the Environmental Impact Caused by All Our Businesses Using Eco Balance and Integrated Environmental Impact Evaluation

The Ricoh Group obtains information on the environmental impact caused by all its businesses and by each process, using Eco Balance and integrated environmental impact as tools, to effectively reduce the environmental impact generated by processes with large environmental impact. First, Eco Balance is prepared based upon input and output data for each process and for each environmentally-sensitive substance. The data are collected by the sustainable environmental management information system[1]. At this stage, however, the significance of the environmental impact generated by each process cannot be compared because each process employs different environmentally-sensitive substances. Therefore, an integrated analysis method is used to convert the total environmental impact caused by business activities—including impact upon human health, depletion of resources, and impact upon ecosystems—into indicators to evaluate the integrated environmental impact and identify processes generating large environmental loads. The Ricoh Group has set the Year 2010 Long-Term Environmental Goals[2] and has prepared an environmental action plan[3] based upon its evaluation of the integrated environmental impact that is identified by Eco Balance.

1. See page 51. 2. See page 18. 3. See page 21.

Selecting Measures by Environmental Accounting and Evaluating Activity Results

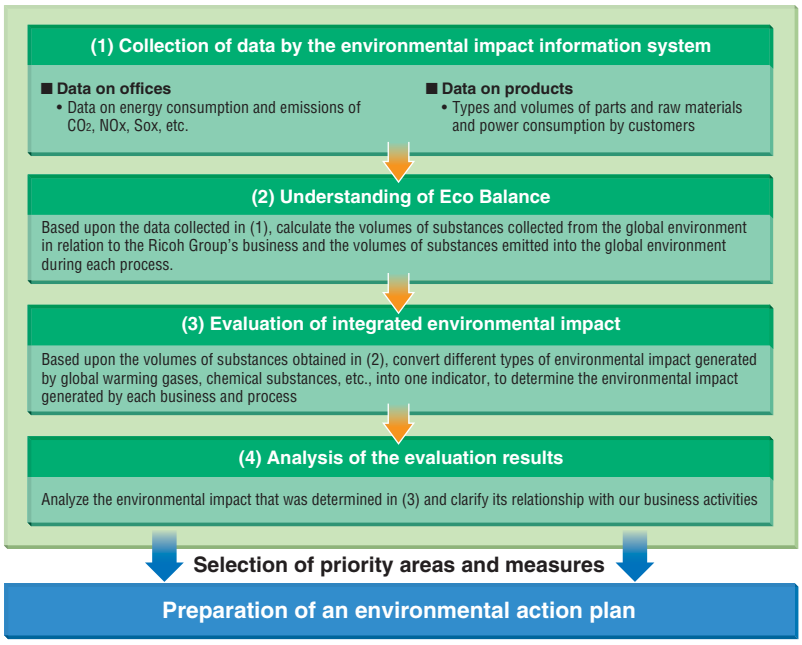
Reducing environmental impact using measures that will lead to the creation of benefits is crucial to promoting sustainable environmental management. The Ricoh Group uses environmental accounting to determine what measures should be taken for what processes and for what operations so that the maximum effect can be obtained. A number of improvement plans to reduce the identified environmental impact are examined in consideration of developments in society and laws/regulations and competition to improve processes generating large environmental impact identified through evaluation based upon Eco Balance and the integrated environmental impact. Then, using segment environmental accounting, we simulate how much environmental impact is reduced and how much profit is created compared with the costs for each measure, while surveying the results of the individual measures.

Eco Balance of the Ricoh Group

The Ricoh Group introduced the concept of Eco Balance in fiscal 1998 to clarify the environmental impact caused by all its businesses and effectively reduce it. Currently, the Ricoh Group is calculating the integrated environmental impact using EPS, which is an integrated analysis method developed by the Swedish Environmental Research Institute (IVL). We adopted EPS because we found that its characteristics agree with the Ricoh Group's ideas about environmental impact caused by the collection of resources and the Comet Circle*, Ricoh's original concept aiming at establishing a recycling-based society, after evaluating various methods adopted at home and/or abroad. We have mapped out environmental action plans based upon the concept of Eco Balance since fiscal 2002 and have applied the concept in the formulation of long-term environmental goals since fiscal 2005.

* See page 16.

Flow of Eco Balance and Evaluation of Integrated Environmental Impact



Ricoh Group's environmental accounting

The Ricoh Group disclosed its environmental accounting for the first time in 1999. Subsequently, the Group introduced corporate environmental accounting to determine the status of sustainable environmental management and disclose related information, as well as segment environmental accounting and business sector environmental accounting that are used to prepare environmental action plans, select measures, and verify achievements. Thus efforts are being made to establish environmental accounting as a tool for sustainable environmental management.

● Corporate Environmental Accounting

This is compiled in accordance with the Environmental Accounting Guidelines of the Japanese Ministry of the Environment and used as a tool to inform the public of relevant information. 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.

● 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. The Group examines and uses this indicator internally as an environmental accounting tool to determine how such environmental activities contribute to sustainable environmental management conditions in respective business sectors.

Eco Balance
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.

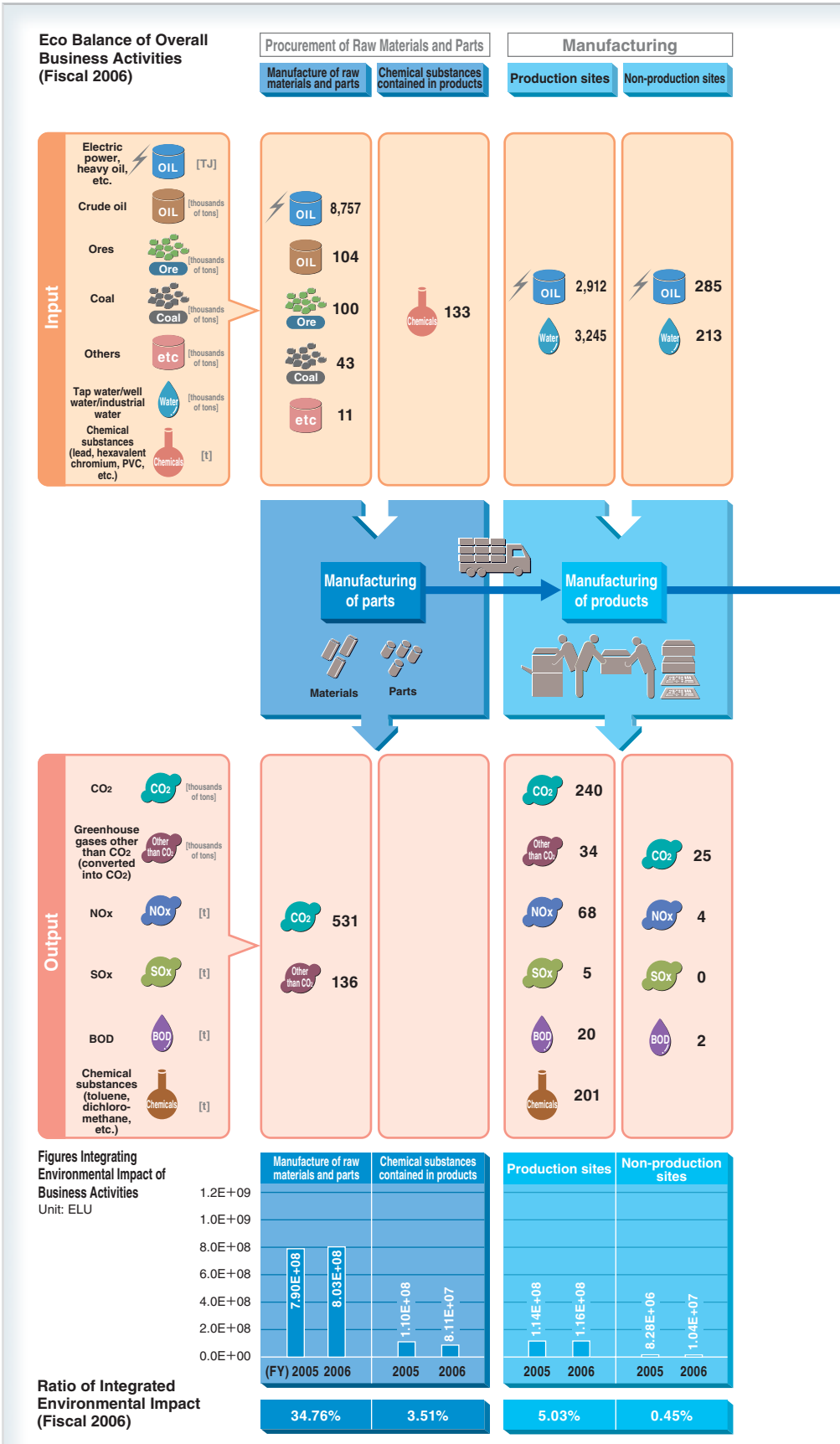
Integrated Environmental Impact
This is an integrated indicator shown in ELUs (environmental load units), incorporating various types of environmental impact caused by environmental load. Substances that put a load on the environment cause various phenomena including global warming and air pollution, which negatively affect the ecosystem and human health. In addition to these, the depletion of resources is taken into consideration, and all these factors are incorporated into one single indicator that represents the significance of environmental impact as a whole. Determining the environmental load caused by all our businesses and calculating the integrated environmental impact allow us to formulate a specific plan to reduce them. A method called EPS, which was developed by the Swedish Environmental Research Institute (IVL), is used for calculation.

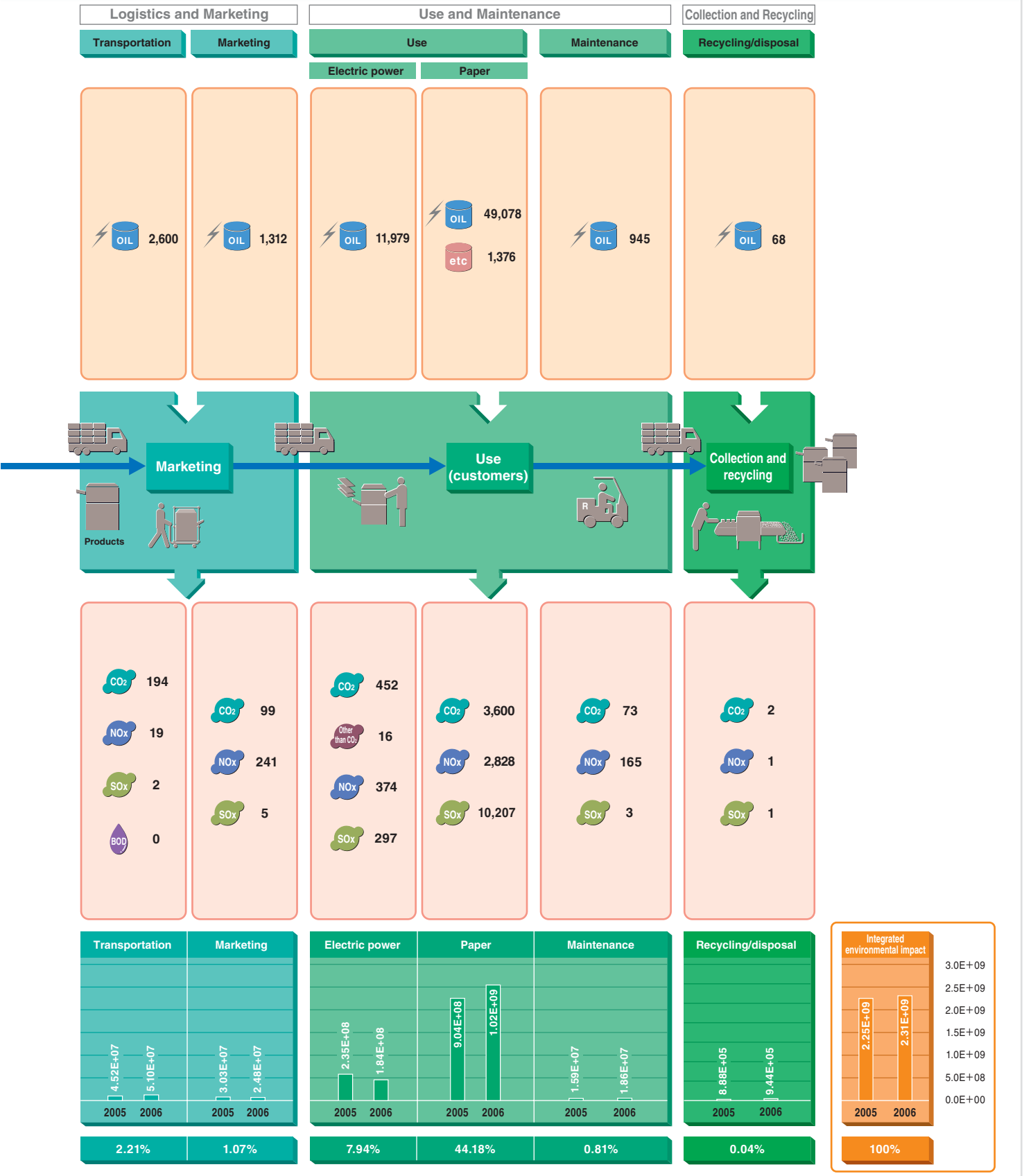
Sustainable Environmental Management Evaluation Method
Eco Balance (Identifying Environmental Impact and Target Setting)

● Review of Fiscal 2006

As a result of a growth in sales of about 8%, the integrated environmental impact produced by the entire Ricoh Group in relation to corporate activities increased 2.7% over that of the previous year. Particularly large environmental impact is caused by business processes such as the procurement of raw materials and parts and when products are used by our customers. The environmental impact generated by business sectors showing favorable results, such as the image processing product business, increased with the procurement of raw materials and parts. Resources used in weighing appliances (gas meters, water meters, etc.) decreased, which resulted in only a slight increase in environmental impact. There are two aspects to the environmental impact caused by the use of our products by customers. While the environmental impact generated by paper consumption increased, we are seeing a reduction in power consumption as a result of the introduction of color copiers that incorporate energy-saving technology.

* Eight businesses covering semiconductors, thermal media, and PC unit products, in addition to image processing products and weighing appliances, were incorporated into the product-related data. Also, as a result of changes in evaluation methods, the figures for fiscal 2005 differ from those shown in the Sustainability Report (Environment) 2006.





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

Ricoh Group's Corporate Environmental Accounting in fiscal 2006

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.)

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

Cost unit: ¥100 million (Exchange rate: $1 = ¥117.02 €1 = ¥150.08)

Item	Costs			Economic Benefits		
	Environmental Investments	Environmental Costs	Main Costs	Monetary Effects	Category	Item
Business area costs	7.5	26.5	Pollution prevention cost ..... ¥190 million Global environmental conservation cost ..... ¥570 million Resource circulation cost ....¥1,890 million	–1.6	a1	Energy savings and improved waste processing efficiency
				63.3	b	Contribution to value-added production
				12.3	c	Avoidance of risk in restoring environments and avoidance of lawsuits
Upstream/ Downstream costs	0.1	83.4	Cost of collecting products, turning recycled materials into saleable products, and so forth	194.0	a1	Sales of recycled products, etc.
				[25.1]	S	Reduction in society's waste disposal cost
Administration costs	0.8	42.7	Cost generated by the division in charge of environmental conservation; cost to establish and maintain an environmental management system	17.1	b	Effects of media coverage and environmental education
Research and development costs	2.4	15.6	Research and development costs for environmental impact reduction	52.9	a2	Contribution to gross margin through environmental research and development
				[1.4]	S	Reduction in user's electricity expenses thanks to an improved energy saving function and product performance
Social activity costs	0.1	13.6	Costs of preparing environmental reports and advertisements	7.9	b	Publicity from environmental advertisements, etc.
Environmental remediation costs	0.3	0.7	Costs of restoring soil and environment-related reconciliation	—	—	None
Other costs	0.3	0.3	Other costs for environmental conservation			
Total	11.4	182.7		345.9	Sum of a1: 192.3, a2: 52.9, b: 88.3, and c: 12.3.	
				26.6	Total S's	

a1: Substantial effect
a2: Estimated substantial effect
b: Secondary effect
c: Incidental effect
S: Social effect (Customer benefits)

• **Environmental investment rate: 1.3%**
[= environmental investment (11.4)/total investment (858)]

• **Environmental R&D cost rate: 1.4%**
[= Total environmental R&D cost (15.6) /Total R&D cost (1,149)]

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 five categories as follows:

● Substantial effect (a1)
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.

● Estimated substantial effect (a2)
Substantial contributions to sales or profits whose value cannot be measured without estimation. They include improving the environmental performance of a product which leads to an increase in sales or profit.

● Secondary 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 contributes to profit in some form. In practice, out of the effects generated by environmental conservation activities, those which do not appear as an increase in sales or profit or a reduction in costs are represented in monetary value calculated by the formula specified 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 ..... –4,189.1	1.0	–4,189	–0.68	CO_2 317,120	1.0	317,120	51.40
NOx ..... –5.0	19.7	–98	–0.02	NOx 179	19.7	3,528	0.57
SOx 1.1	30.3	33	0.01	SOx 9	30.3	279	0.05
BOD ..... –3.1	0.02	–0.1	–0.00	BOD 9	0.02	0	0.00
Final waste disposal amount 124.3	104.0	12,926	2.10	Final waste disposal amount 172	104.0	17,848	2.89
PRTR substance emissions	(Ricoh standards per substance)	1,017	0.16	PRTR substance emissions	(Ricoh standards per substance)	25,137	4.07
Environmental impact reduction through products CO_2 ..... 3,806.3 (t) NOx ..... 3.1 (t) SOx ..... 2.5 (t) Final waste disposal amount ··· 31,430 (t) Calculation for companies in Japan only							
		9,688	1.57			363,913	58.99

Data coverage
● **Companies: 93 Ricoh Group companies.** See page 74.
● **Period: From April 1, 2006 to March 31, 2007 (for costs and total environmental impact).**
* Social cost is calculated using the factor of 108 Euro/t-CO_2 (16,209 yen/t-CO_2).
* Environmental impact reduction represents the difference between figures in fiscal 2005 and fiscal 2006.

(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.

(2) Formula for Estimated Substantial Effects

R&D profit contribution amount	Product gross margin × gross margin contribution rate calculated using environmentally-friendly points

(3) Formula for Secondary 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

(4) Formula of Incidental Effects

Amount of incidental effects	Standard amount × occurrence coefficient × impact coefficient x continuance 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

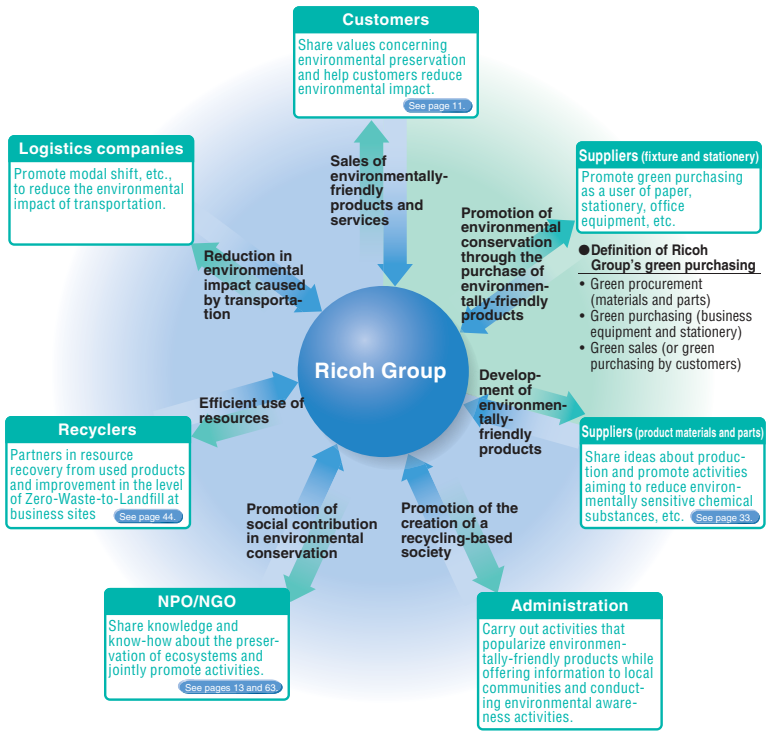
(5) Formula for Social Effects (economic benefits from use of products by customers)

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.

Ricoh Group's Green Partnerships



Sustainable Environmental Management Network Expanded through Green Partnerships <Ricoh Group (Global)>

Under the concept that environmental conservation cannot be achieved on a global scale by the efforts of only one company, the Ricoh Group continued to promote sustainable environmental management in cooperation with a variety of partners and made positive efforts to expand the network of activities in fiscal 2006.

● Customers

Promotes environmental conservation activities in cooperation with many customers through the Tree Dedication Programme in the U.K. See page 11.

● Suppliers

Supported and promoted CMS examiner training and CO_2 reduction efforts by suppliers. See page 33.

● NPO

Held events aimed at promoting conservation of the global environment through cooperation between different NPOs and between companies and NPOs. See page 13.

● Recyclers

Promotes activities aiming at reliable waste disposal. See page 44.

Green Partnership with Customers <Ricoh Malaysia Sdn. Bhd. (Malaysia)>

Ricoh Malaysia Sdn. Bhd. (RMS), a sales subsidiary, supports its customers in the creation of environmental sections in their offices and in their environmental activities. There is a green balance section in the RMS office, where benches made from recycled toner cartridges are placed and the process of recycling is presented. Local plants are also exhibited beautifully in the section. As a result of this exhibition, Shell Information Technology International Sdn Bhd (Shell IT) requested RMS to propose environmental conservation measures, and in response, RMS proposed the creation of a green balance section in Shell IT's office and the reduction of waste through 3R activities. The proposal was accepted. We will communicate more intensely with our customers from an environmental viewpoint and continue to engage ourselves in activities aiming to expand the environmental conservation network.

Green balance section in the RMS office

We are making efforts to train our employees so that they will realize that they are global citizens and will promote their individual sustainable environmental management.

To make all-employee participatory sustainable environmental management really effective, the commitment of senior management and the active efforts of all divisions are essential, and so is the fostering of employees who can carry out sustainable environmental management in their own operations. Although sustainable environmental management concerns corporate activities, these activities are the accumulation of the actions of individual employees. The Ricoh Group has about 82,000 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."

Implementation of Educational Measures Based upon an Environmental Awareness Survey <Ricoh Group (Japan)>

The environmental awareness of each employee 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 takes a variety of measures for environmental awareness activities and education based upon regular environmental awareness surveys of employees, aiming to foster employees who can spontaneously incorporate environmental viewpoints into their own business activities and put them into practice. In fiscal 2006, elementary environmental e-learning was conducted for employees in Japan, and a pamphlet offering information on sustainable environmental management was distributed.

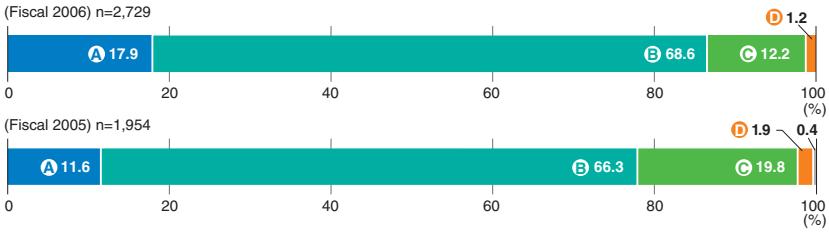
Implementating the Ricoh Group Environmental Awareness Survey in Fiscal 2006

The Ricoh Group has set targets concerning how much environmental knowledge and power of action Ricoh employees should have, and it has prepared and produced an educational curriculum based upon the results of a survey conducted in fiscal 2005. We were able to confirm the effectiveness of the education in the survey conducted in February 2007. Priority in education was given to improving understanding of sustainable environmental management and on how far individual employees' work affected the environment. A comparison of the answers to these questions with those of the previous year revealed significant changes, proving that educational measures were definitely effective. We plan to formulate educational curriculums for each job type and division in the future.

Results of Survey in Fiscal 2006 (extract)

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

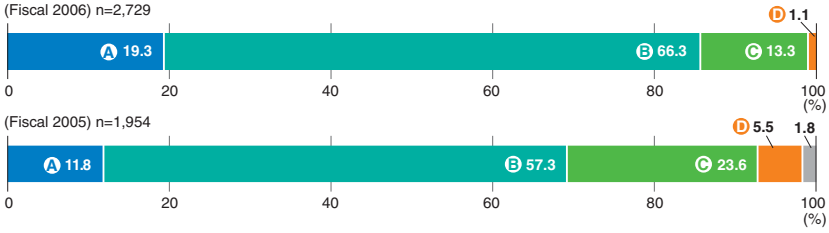
Ⓐ I understand it sufficiently and can explain it to others.
Ⓑ I understand most of it but cannot explain it to others.
Ⓒ I know the phrase but do not understand it well.
Ⓓ I do not know what the phrase means.



Comparison with the previous survey	The number of employees who selected Ⓐ or Ⓑ increased significantly, from 78% to 87%.

❷ How much do you understand what impact your activities at work have on the environment?

Ⓐ I roughly understand what impact they generate and know some of the actual figures.
Ⓑ I understand the relationship between them but do not know the actual figures.
Ⓒ I have some idea of the relationship between them.
Ⓓ I have never thought about it.



Comparison with the previous survey	The number of employees who selected Ⓐ or Ⓑ increased significantly, from 69% to 86%.

Employee Education and Divisional Education

Elementary Environmental e-learning for Employees <Ricoh (Japan)>

An elementary e-learning course, "First Steps to Sustainable Environmental Management," was conducted over the in-house LAN for Ricoh employees in fiscal 2006. The curriculum covered "Current Condition of the Global Environment," "Companies' Missions in Global Environment Problems," "Ricoh Group's Sustainable Environmental Management," "Activity Cases in Respective Divisions," and other subjects. It aimed to enhance understanding and awareness of sustainable environmental management. The English version of this curriculum will be used for employees at Ricoh Group companies abroad, while intermediate e-learning for employees in charge of environmental activities in each of the divisions will be planned and implemented.

Distributing a Pamphlet on Sustainable Environmental Management to Employees <Ricoh (Japan)>

A pamphlet titled "Sustainable Environmental Management by Everyone" was distributed to each employee who completed the elementary environmental e-learning. It is a compact version of the Ricoh Group's Sustainability Report (Environment) and offers information on Ricoh's sustainable environmental management in an easy-to-understand manner, using, for example, simple four-frame comic strips. It is read not only by employees but also by their family members and used as a tool to expand the network of sustainable environmental management.

Ricoh Group's Sustainable Environmental Management Conference <Ricoh Group (Global)>

In February 2007, Ricoh Group's 13th Sustainable Environmental Management Conference was held at the Ohmori Office. Its theme was the "enhancement of sustainable environmental management." At the conference, achievements in sustainable environmental management so far were reviewed, while an explanation was given about the future direction and the progress of the current environmental action plan. A commendation ceremony for the 5th Ricoh Sustainable Development Award was also held during the conference. The Award for Sustainable Environmental Management Improvement Activities was given to Ricoh's Fukui Plant in recognition of its activities to reduce their environmental impact by introducing a cogeneration system and changing fuels[1], and the Award for Technology Applied to Products was given to the Thermal Media Company in recognition of its development of the RECO-View IC tag sheet[2].

1. See page 38. 2. See page 27.

A scene from Sustainable Environmental Management Conference

European Environment Conference <Ricoh Group (Europe)>

The European Environment Conference was held in June 2006 in Schiphol in the Netherlands. Forty-nine people in charge of the environment and recycling from 27 sales subsidiaries and manufacturing subsidiaries in 15 countries in the European region participated in the conference. They explained environmental and recycling conditions, as well as policies regarding environmental and recycling activities. Group discussions were also held about environmental marketing, the collection of used products, and activities to reduce CO_2. In addition, the chosen venue for this year's conference was near the airport in Amsterdam, which is near Europe's midpoint, so that CO_2 emissions caused by the holding of the conference, including those emitted by the methods of transport used by the participants and electricity consumption in the meeting rooms for the conference, could be reduced. As a result, CO_2 emissions more than halved, from 27.5 tons in the previous year to 11 tons. Furthermore, this year's conference, as well as the previous year's conference, took the "carbon neutral" approach, which means that the CO_2 generated by the conference was completely offset by the planting of trees.

Scene from the European Environment Conference

Eco Challenge Held <Ricoh Group (Latin America)>

Ricoh Latin America, Inc. (RLA), which manages sales in Latin America, has held a contest, Eco Challenge, to promote sustainable environmental management by sales subsidiaries since 2001. In Eco Challenge, such matters as the acquisition of ISO14001 certification, establishment of schemes for collection, reuse, and recycling, sales promotion of environmentally-friendly products, and social contribution to environmental conservation are examined. In the 2006 contest, Ricoh Costa Rica, S.A., and Ricoh El Salvador, S.A., received awards, and were invited to visit the factory of Ricoh Electronics, Inc., a manufacturing subsidiary in the U.S. The award aimed to provide them with an opportunity to visit a factory that is carrying out high-level environmental conservation including zero-waste-to-landfill, so that they could use this experience to improve their future activities. Ricoh Latin America intends to fortify sustainable environmental management at its sales subsidiaries in Latin America through this contest.

Visiting Ricoh Electronics' plant

Environmental Awareness Building

Parent-Child Nature School Held
<Ricoh Group (Japan)>

The fifth Ricoh parent-child nature school was held on July 22 and 23 in Afan Woodland in Kurohime in Nagano Prefecture under the joint sponsorship of Ricoh and the C.W. Nicol Afan Woodland Trust, and 24 people (Ricoh employees and their families) participated. This school has been designed to offer parents and children the opportunity to go to woodlands together and to feel and experience the importance of nature. Participants enjoyed coming into touch with a variety of plants and other living things, with a night hike through the forest and a children's expedition that allowed children to explore the forest by themselves.

Ricoh Group employees and their children participating in the nature school

Participation in European Mobility Week
<Ricoh Group (Europe)>

The Ricoh Group companies in Europe participated in the European Mobility Week (EMW), held from September 16 to 22, 2006. The event, which aims to reduce greenhouse gases via promoting more environmental friendly means of transport, has been held annually within the EU since 2002, and is under the sponsorship of the European Commission*. The Ricoh Group in Europe organized a variety of events ranging from putting up illustrative posters at all its sales subsidiaries in Europe to more active contributions. Ricoh Espana S.A. and Ricoh Norge A.S. presented awards to employees who commuted by environmentally-friendly transport methods, such as public transport. Ricoh Nederland B.V. held an Eco Driving Contest. In addition, 238 staff members of Ricoh Europe B.V. commuted by bike, public transport, carpooled or walked,. In the office building the operation of two elevators out of four was suspended for the whole week and employees were encouraged to use the stairs. Thus, Ricoh Europe could achieve a reduction in CO_2 emissions of almost 1,000 kg during the Mobility week.

* Administrative organization of the European Union (EU)

Elevators out of service

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 2006
Life Cycle Assessment (LCA) (basic)	17
Life Cycle Assessment (LCA) (application)	8
Safety of Supplies (elementary)	26
Safety of Supplies (advanced)	38
Environment-Related Laws and Regulations	91
Noise (basic)	36
Recyclable Design	31
Thermal Design for Office Equipment	19
Ricoh Group's Chemical Substance Management System (outline)	26
Total	292

We are making efforts to expand the network of forest ecosystem conservation 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 in many places all over the world in partnership with environmental NPOs and local communities. Considering that in order to expand the network of this activity and make it more effective, it is important to promote cooperation between NPOs and companies and between NPOs, Ricoh is engaged in actively promoting communication.* Furthermore, manufacturing subsidiaries and sales subsidiaries in various regions in the world are committed to environmentally-friendly social contribution activities with NPOs and customers. 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 13.

Forest Ecosystem Conservation Projects

<Ricoh (Global)>

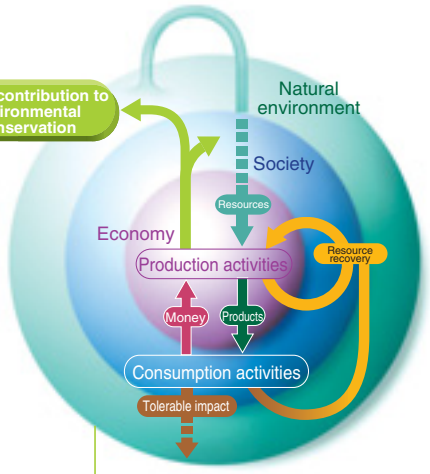
On the earth, various life habitats exist and unique ecosystems are maintained in forests, lakes and ponds, coral reefs, and oceans. If these ecosystems are damaged, the natural environment that is indispensable for maintaining the life of human beings will be harmed. Ricoh places priority particularly 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).

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 organizations 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.

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



Pursuing the Ideal Society (Three Ps Balance™)

See page 15.

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	Expansion of the habitats of endangered species, including the orangutan
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

TOPIC

Ricoh Project for Restoration of Tropical Forests and Orangutan Habitats

The Ricoh Group actively supports a project to restore tropical forests in Sabah on Borneo in Malaysia, which is home to a variety of rare animals, including orangutans.

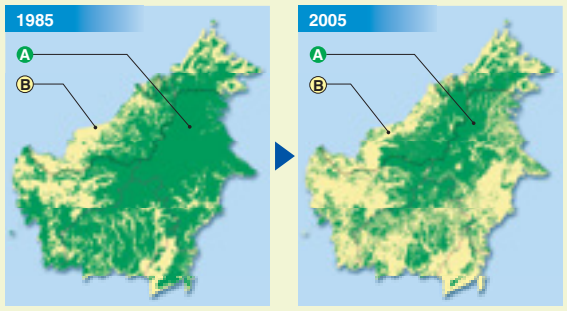
Background of Project

Sabah is located in the northeast of Borneo, where the area of tropical forests is decreasing drastically due to encroaching plantations. There are sanctuaries for wild animals and tropical forests around the Kinabatangan River, the longest river in Sabah. Even some of those sanctuaries have become wasteland or split into sections as a result of illegal timber-felling. Large wild animals such as orangutans cannot keep on living in divided tropical forests. The water quality of the river has deteriorated while the quality of the soil has become even worse, which has started having a negative impact on, not only wild animals, but also people's lives. The object of the project is to expand the habitat of wild animals by creating corridors to connect divided forests in sanctuaries.

Development and Goal of Project

For the project to be truly successful, the ecosystem has to be restored and people's lives have to be stabilized at the same time. To be specific, the project aims at the recovery of tropical forests, autonomous conservation of sanctuaries by local residents, and the promotion of eco tours that financially support residents. Ricoh is offering continuous support through WWF-Malaysia, which is the main body for the activities, and thus together we are striving to achieve the goals. In October 2000 when the project was launched Ricoh first appealed to people in the community near the project site to participate in the project. We organized project teams in cooperation with local residents, who got together and investigated the effectiveness of afforestation by carrying out test afforestation, while moving ahead with the planning of eco tours. The biggest problem in our activities is that the planted areas are subject to flooding, resulting in a low survival rate for seedlings that have been newly planted. To solve this problem, we have developed an afforestation method that is suitable for the soil in the area, by selecting appropriate tree varieties and improving and accumulating related know-how such as sowing methods. Since fiscal 2005, we have promoted the recovery of a tropical forest at a second site, applying the know-how we have accumulated to date.

Decline of tropical forests on Borneo



Source: WWF-Malaysia

In the 1970s, tropical forests on Borneo accounted for about 86% of the total area. As a result of the expansion of oil palm plantations, etc., they are said to account only for less than 50% today.

Activities and Problems in Fiscal 2006

In fiscal 2006, we carried out afforestation activities and a monitoring survey of seedlings, and learned about surveys on the environment and reforestation in the habitat of the orangutans in the region. The promotion of the project has gradually started to produce results in the recovery of tropical forests. As local residents became more conservation-conscious, illegal timber-felling is now under stricter surveillance. Also, communication between residents has been actively promoted. We also intend to promote the commercialization of eco tours in cooperation with the national and local governments, aiming to stabilize the lives of local residents.

We are implementing afforestation activities in floodplains where the survival rate of seedlings is low, with the support of Ricoh.

Mr. Darrel Webber
WWF-Malaysia Project leader
(Corridor of Life—Landscape Manager)

The project supported by Ricoh is within a major conservation programme commonly called the "Kinabatangan-Corridor of Life" programme. The RICOH project constitutes an important part of this programme to create a "corridor of life" to connect two important ecoregions in Borneo. It connects the Heart of Borneo (a mountainous area in the middle of Borneo) and the Sulu-Sulawesi Marine Ecoregion. (one of the ocean areas with the richest biodiversity in the world). This Corridor of Life constitutes a floodplain that still has tropical forests even under considerable pressure of development, it is expected that the programme can be a world-class model for sustainable development. As a result of Ricoh's support, we could demonstrate to local residents that it is possible to restore forests in places in difficult conditions such as wetlands and flood areas. I believe that we would be able to apply the reforestation know-how we obtained through this project to various other areas. WWF is currently formulating a long-term strategy for the period to 2020, specifying priority areas for the recovery of tropical forests at a landscape level of the Kinabatangan. The WWF willfully utilizes the knowledge we have accumulated so far combined with the use of state-of-the-art technology including the geographic information systems (GIS) and satellite images. These technologies will enable us to combine information on the existing quality of forests, the spatial distribution of orangutans, the movement patterns of the Borneo Pygmy Elephant, soil types and also flooding patterns. We have enjoyed a good relationship with RICOH and we hope RICOH will continue to be a partner in this vision for a Corridor of Life.

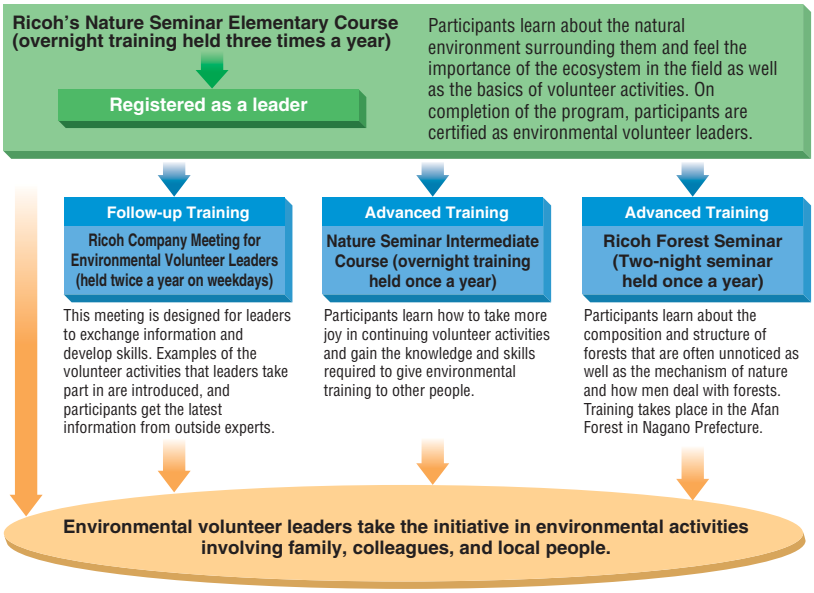
Promotion of Environmental Volunteer Activities

Environmental Volunteer Leader Development Program

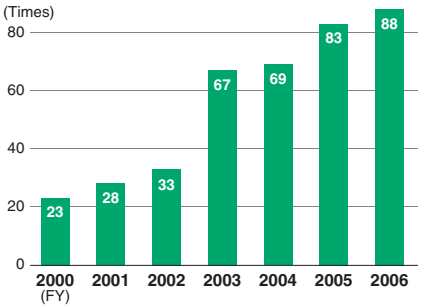
<Ricoh Group (Japan)>

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 2006, 379 environmental volunteer leaders, including directors, had been fostered. The programs consist of Nature Seminar Elementary Courses, Nature Seminar Intermediate 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.

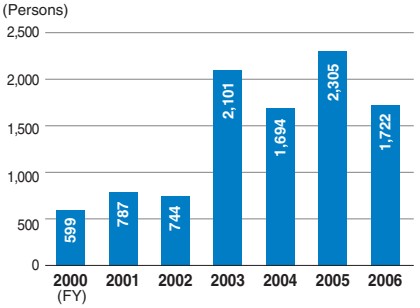
Environmental Volunteer Leader Development Program



Number of Activities Sponsored by Environmental Volunteer Leaders



Number of Participants in Activities Sponsored by Environmental Volunteer Leaders

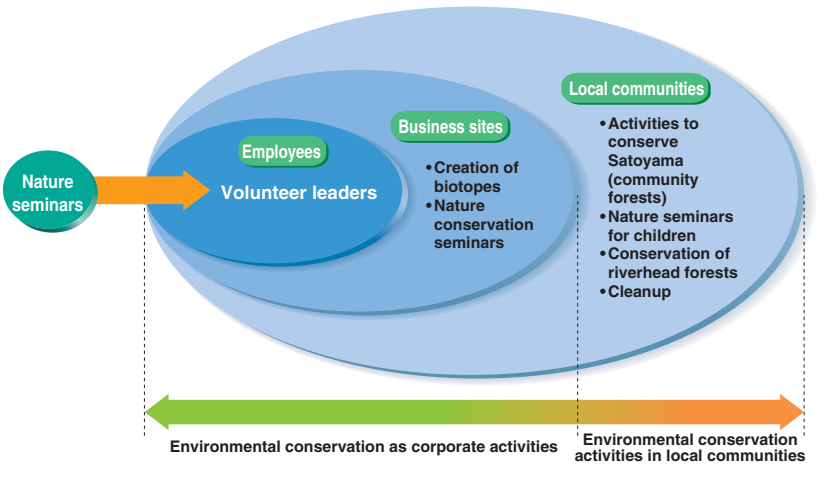


Expansion of Environmental Volunteer Activities

<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.

Expansion of Environmental Volunteer Activities



Environmental Volunteer Activities

Thicket Conservation Activities by Lake Shinsei

On April 8, 16 people, including members of the Hadano Thicket Conservation Group, one of Ricoh's environmental volunteer groups, and their families, carried out conservation activities in thickets by Lake Shinsei in the suburbs of Hadano City, Kanagawa Prefecture. They swept up fallen leaves in thickets and tried to make wood chips.

Conservation Activities of Shishigaya Green Zone

On November 4, 11 people, including members of the Shishigaya Green Zone Conservation Group—another one of Ricoh's environmental volunteer groups—and their families, carried out conservation activities such as constructing an apartment for insects, weeding, and repairing the protection fence for Kanto tampopo (Japanese dandelions native to the Kanto region) at the Shishigaya Green Zone in Yokohama.

Activities to Conserve Tanzawa-Harudake-no-Mori

On June 17, 12 members of the Ricoh Yadoriki Shinboku Group—another one of Ricoh's environmental volunteer groups—carried out forest conservation activities in Tanzawa-Harudake-no-Mori in Hadano City, Kanagawa Prefecture. After weeding, they transplanted five ten-year-old zelkova trees that had grown to about three meters. They will contribute to the creation of a mixed forest of needle-leaved and broad-leaved trees in the future.

Cleaning Up the Natori Riverbed

On June 21, 23 people, including Ricoh environmental volunteer leaders and employees of Tohoku Research and Development Center, Research and Development Group, Ricoh, cleaned up the area from the riverbed of the Natori River at the back of the Kumanodo Shrine and on downstream. Partly because this event was held on the day for Ricoh Global Eco Action*, a lot of people participated in spite of the unfavorable conditions after the rain. *See page 9.

Maintenance of Murase-no-Mori

On September 24, eight Ricoh Group employees participated in maintenance activities at a bamboo forest in Murase-no-Mori in Yokohama, Kanagawa Prefecture. Along with local residents, they conducted weeding and cut down bamboo. After that, they enjoyed eating "Nagashi Somen" (Japanese thin noodles put in water flowing along a long bamboo gutter) using the bamboo they had cut down and making Baumkuchen.

Activities to Refresh Hadano Farmland

On September 16, nine people, including Ricoh Group employees and its former members, carried out activities to revive the farmland in the suburbs of Ricoh Hatano Plant. Hadano City called on neighboring companies to revive unused farmland, and the activities were carried out in response to this call. The day was favored by good weather, and the planting of Japanese radish went smoothly. A lot of tomatoes, okra, and water melons were harvested.

Sample Activities in Japan

"Ogitsuyama Nature Park" in Hitachi City, Ibaraki Prefecture

<Ricoh Printing Systems, Ltd. (Taga Administrative Division)>

On January 28, 13 people, including Ricoh Group employees and their families, participated in forest ecosystem conservation activities in Ogitsuyama Nature Park sponsored by Ibaraki Forest Club and carried out tree thinning. Participants split up into teams consisting of five members respectively and cut down trees with a chain saw.

Cleanup of Mikuni Sunset Beach in Sakai City, Fukui Prefecture

<Ricoh Fukui Plant>

On September 2, 34 people, including employees of Ricoh Fukui Plant and affiliates and their families, participated in the event to clean up Mikuni Sunset Beach, which was sponsored by the Fukui Ecological Partnership Federation and the Consumer Cooperative Union. A total of 120 participants worked for about two hours, after which the sand on the beach was wonderfully clean.

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

<Ricoh Leasing Co., Ltd., etc.>

On September 2, 92 employees of Ricoh Leasing Co., Ltd., and the Ricoh Group 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 "Mt. Fuji Afforestation Project by the Green Fund-Raising Campaign." Ricoh Leasing made donations through the preferential system for shareholders for social contributions, and participation in the event was in relation to such donations.

Forest Conservation Activities at the Foot of Mt. Tarumae in Hokkaido

<Hokkaido Ricoh, Ricoh Technosystems Co., Ltd., Ricoh Leasing Company, Ltd.>

Ricoh Group companies in Hokkaido have decided to cooperate in activities for reforestation of the national forests at the foot of Mt. Tarumae, which were seriously damaged by typhoon No.18 in September 2004, for five years from fiscal 2006. On June 3, when the first activities were conducted, 40 employees participated and planted about 200 young mountain cherry trees. They will monitor the growth of the avenue of trees, which they have named "Ricoh Cherry Street."

Ricoh Chiba's Fureai-no-Mori in Chiba City

<Ricoh Sales Co., Ltd., Ricoh Technosystems Co., Ltd., NBS Ricoh Co., Ltd., Ricoh>

On February 16, 16 people, including Ricoh Group employees and their families, carried out forest conservation activities in Chiba City. The activities are carried out every month, and this was the twenty-fifth time. They cut down 10 Japanese cedars that were bent over or decaying. They will plant broad-leaved trees including konara trees in the space created.

Observation Site in the Prefectural Forest Park in Tokushima Prefecture

<Shikoku Ricoh Co., Ltd., Ricoh Technosystems Co., Ltd.>

On October 7, 35 Ricoh Group employees thinned out unnecessary trees in areas around the Observation Site in the Prefectural Forest Park, with guidance from prefectural personnel. The day was favored with good weather, and all the participants worked up a good sweat.

Map of Forest Conservation Activities by Sales Subsidiaries in Japan

Hokkaido
- Tree planting by local residents along the Barato River (Hokkaido Ricoh)
- Volunteer activities to restore the forest on Mt. Tarumae (Hokkaido Ricoh)
- Moiwayama Cleanup Climb (Hokkaido Ricoh)
- Forest cleanup activities in Asahiyama Memorial Park (Hokkaido Ricoh)
- Arbor Day by Citizens in Muroran (Hokkaido Ricoh)

Aomori Prefecture
- Tree planting to commemorate the recovery of Mt. Byobu after the forest fire (Aomori Ricoh)

Akita Prefecture
- Tree planting volunteer experience in Nishi-Yurihara (Akita Ricoh)
- Tree planting volunteer experience on Mt. Shirakami (Akita Ricoh)

Iwate Prefecture
- Appi Kogen Cleanup Campaign (Iwate Ricoh)
- 35th Morioka Afforestation Festival by Citizens (Iwate Ricoh)

Yamagata Prefecture
- Arbor Day in Yamagata City (Yamagata Ricoh)

Miyagi Prefecture
- Arbor Day in Zao (Ricoh Tohoku)

Fukushima Prefecture
- Utsukushima Afforestation Festival (Fukushima Ricoh)
- Hakaseyama Arbor Day (Fukushima Ricoh)

Gunma Prefecture
- Afforestation activities in Mine Park (Gunma Ricoh)

Tochigi Prefecture
- 44th Arbor Day in Tochigi Prefecture (Tochigi Ricoh)

Ibaraki Prefecture
- Conservation of Suigo Citizens' Forest in Ibaraki (Ibaraki Ricoh)

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

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.)

Kanagawa Prefecture
- Thicket conservation by Lake Shinsei in Hadano City (Ricoh Sales Co., Ltd.)
- Conservation of Shishigaya Green Zone (Ricoh Sales Co., Ltd., and Ricoh Technosystems)

Ishikawa Prefecture
- Volunteer activities for Oonomi Green Tourism Promotion Council (Ishikawa Ricoh)

Gifu Prefecture
- NPO Star Magnolias Preservation Society (Gifu Ricoh)
- Forest conservation activities in Taniguchi Sundo (Gifu Ricoh)
- Protection and breeding of fireflies (Gifu Ricoh)

Aichi Prefecture
- Satoyama Aigo-kai at Nagoya Heiwa Park (Ricoh Chubu)

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

Mie Prefecture
- 34th Suzuka Range Cleanup Climb (Mie Ricoh)
- Conservation of Kasado Shrine's grove (Mie Ricoh and Ricoh Chubu)

Tottori Prefecture
- 52nd Arbor Day in Tottori Prefecture (Tottori Ricoh)
- Promotion of citizens' forest project (Tottori Ricoh)

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

Shimane Prefecture
- Tree planting activities in Hirose-cho (Shimane Ricoh)

Oita Prefecture
- Conservation activities for Yunomidake (Oita Ricoh)

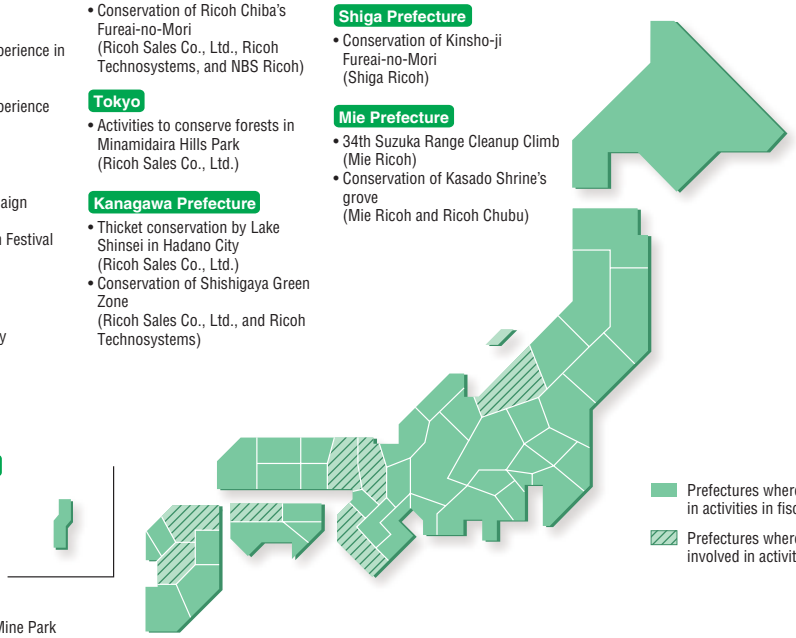
Saga Prefecture
- Saga 22 Forest Nurturing Festival on the Basin in Sefuri-mura (Saga Ricoh)
- The 22nd-Century Asian Forest Project (Saga Ricoh)

Nagasaki Prefecture
- Forestation volunteer experience on Mt. Unzen-Fugen (Nagasaki Ricoh)

Miyazaki Prefecture
- Citizens' gathering to develop forests rich in water and greenery (Miyazaki Ricoh)
- Aya-machi Evergreen Forest Project (Miyazaki Ricoh)

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

Okinawa Prefecture
- Green Growing Festival 2006 (Okinawa Ricoh)



Prefectures where Ricoh Group companies were involved in activities in fiscal 2006

Prefectures where Ricoh Group companies were not involved in activities in fiscal 2006

Yamanashi Prefecture
- Cleanup campaign on Mt. Fuji (Yamanashi Ricoh)

Shizuoka Prefecture
- Chakkiri-kai voluntary activities (Shizuoka Ricoh)
- Afforestation activities on Mt. Fuji (Ricoh Sales Co., Ltd.)

Nagano Prefecture
- Conservation of Afan Forest (Nagano Ricoh and Niigata Ricoh)
- Activities to conserve Nagano Citizens' Forest (Nagano Ricoh)

Toyama Prefecture
- Seventh Forest Festival in Toyama (Toyama Ricoh)
- Activities in Kinomi-no-mori forest (Toyama Ricoh)

Nara Prefecture
- Arbor Day in Wild Bird Forest (Nara Ricoh)

Fukui Prefecture
- Conservation of Nakaikemi Wetland (Fukui Ricoh)
- Maintenance of Mt. Jouyama (Fukui Ricoh)

Osaka
- Conservation activities on Mt. Sekku by Ikeda Green Echo (Ricoh Kansai)

Hiroshima Prefecture
- Volunteer activities for Gongenzan Ikoi-no-Mori (Ricoh Chugoku)

Yamaguchi Prefecture
- Afforestation at springs (Yamaguchi Ricoh)

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

Kagawa Prefecture
- Conservation of Kagawa Fureai-no-Mori (Shikoku Ricoh)

Kochi Prefecture
- Memorial friendship gathering at Kochi Citizens' Forest (Shikoku Ricoh)

Sample Activities outside Japan

Afforestation Activities for Recovery of Biodiversity

<Ricoh Distribution Center (Uruguay)>

Ricoh Distribution Center (RDC), a distribution base in Uruguay, is committed to continuous forest ecosystem conservation activities with the participation of employees and their families. RDC has been engaged in social contribution activities since fiscal 2003. In fiscal 2005, the company decided to concentrate on afforestation to recover the biodiversity, and conducted afforestation in the Salto del Penitente Park in April 2005 and Humedales del Santa Lucia Park in March 2006. In addition, it cooperated with the project to recreate a native Uruguayan forest, carried out by the Uruguay Sciences University in December 2006. All the projects are aimed at recovering the ecosystem indigenous to Uruguay with rich biodiversity, including plants, reptiles, amphibians, mammals, and birds. We hope that more people will visit the areas as more and more of the beautiful natural scenery is recovered. A total of 180 RDC employees and their families participated in these activities, planting 150 trees. A small message board which tells visitors about Ricoh's efforts to conserve the ecosystem is placed at each place where trees have been planted.

Environmental Awareness Building and Afforestation Activities

<Ricoh Costa Rica, S.A. (Costa Rica)>

Ricoh Costa Rica, S.A., a sales subsidiary in Costa Rica, carried out afforestation activities to support the eco system in August 2006, aiming to build environmental awareness among local children. Sixteen employees and their families from the company, as well as 59 people including children and staff from the local school and their families, and people from their school participated and planted 400 trees on two hectares of land in San Carlos.

Tree-Planting Activities to Restore the Riverhead Forest

<Ricoh (Philippines) Inc. (Philippines)>

Ricoh (Philippines) Inc., the Ricoh Group's sales subsidiary in the Philippines, has been supporting tree-planting activities in the La Mesa Ecopark, a riverhead forest for Metro Manila, since 2005. In November 2006, 21 Ricoh Philippines employees participated in the tree-planting activity. Together with a total of 88 people from NGOs and other companies, they trod down soil and planted 315 trees. La Mesa is the only remaining vast forest area within the Metro Manila area. By 1999, 45% of the 2,700-hectare forest had been lost. Currently, replanting has been completed for 300 hectares and there are plants for a further 900 hectares to be replanted.

TOPIC

Ricoh Thailand Ltd. (RTH) expands the environmental conservation network in close cooperation with its customers.

We hold environmental conservation events in which our customers can freely participate, and we encourage them to do so.
<Ricoh Thailand Ltd. (Thailand)>

Ricoh Thailand Ltd. (RTH), a sales subsidiary in Thailand, carried out afforestation in Nakhon Ratchasima on March 18 and 19, 2006. Seventy-three people from 36 customer companies, as well as the President and 28 employees of RTH, participated in the afforestation. RTH plans and holds environmental conservation events, in which customers can freely participate, and uses them as a means to establish even better relationships with its customers. At the above event, participants planted about 4,500 trees with the regional forestry office staff; other than planting, they could also take part in cooking lessons or experience various aspects of living on a farm including milking and horseback riding. Customers who participated in the event enjoyed the experience, with some of the customers saying that they would like to participate in the future activities as well. RTH expects that such activities will lead to the expansion of the environmental conservation network. RTH plans to organize a "Green Club" so that the afforestation activities it carried out in March can lead to continuous environmental conservation activities in cooperation with its customers.

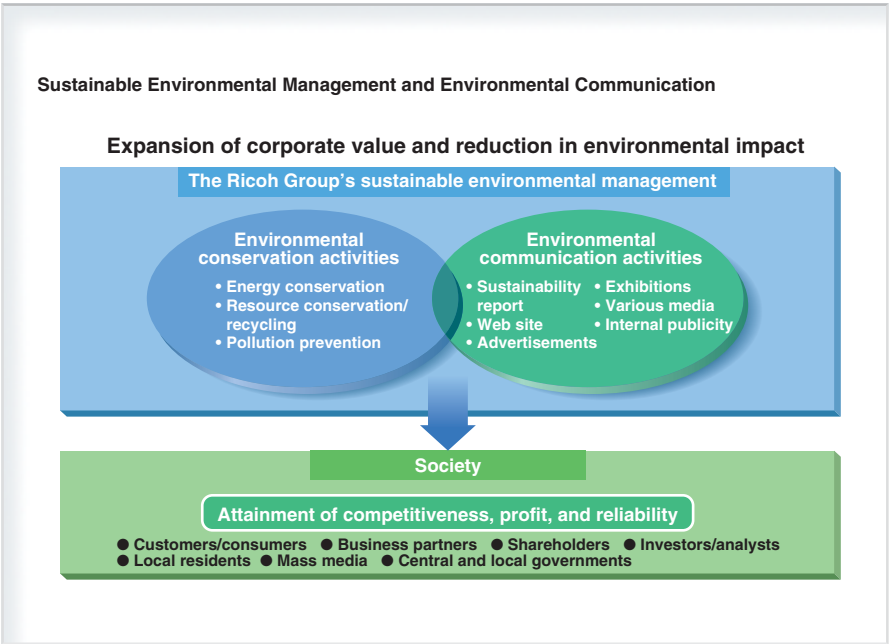
Cooking lessons

Restoration of Mangrove Forests and Environmental Awareness Building
<Ricoh Malaysia Sdn. Bhd. (Malaysia)>

Ricoh Malaysia Sdn. Bhd. (RMS), a sales subsidiary in Malaysia, carried out activities to restore mangrove forests in wetlands with rich biodiversity in Kuala Gula, Taiping, in June 2006, as part of efforts to revive areas hit by natural disasters such as tsunami and typhoons. In addition to about 100 employees from Ricoh Malaysia, around 100 people from the local community including officials from environment-related ministries and agencies, NPO staff members, and students participated and planted some 2,000 seedlings. Educational activities were also conducted to show the importance of the ecosystem of mangrove forests.

Expanding the Netwok of 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 expanding the network of the conservation activities through the promotion of communications in good faith.



Communication Activities

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. 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. Ricoh's sustainability reports were awarded the Environmental Reporting Grand Prize (Minister of the Environment Award) at the 10th Environmental Communication Awards in 2006. The Ricoh Group's sustainability reports can be ordered from our website*.

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

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, which is currently used within the Group. Ricoh Sales Co., Ltd., issued its first environmental report in fiscal 2006. Ricoh Fukui Plant was given the Continued Excellence Award for the Site Report of the 10th Environmental Report Award.

Environmental Web Site

<Ricoh (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 Russia, 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

Issue Dates of Sustainability Reports (Environment) 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 (Environment) 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	18,535	84
	English	Sept. 2005	7,000	
Ricoh Group Sustainability Report (Environment) 2006	Japanese	Jun. 2006	17,380 (As of the end of April 2007)	84
	English	Sept. 2006	7,000	

Environmental Advertisements

<Ricoh Group (Global)>

Ricoh produces environmental advertisements to inform of its idea of sustainable environmental management based on actual company activities. In fiscal 2006, we launched advertisements with our Year 2050 Environmental Vision as the theme. The advertisements promote Ricoh's concept of sustainable environmental management: in order to solve our environmental problems, it is necessary to set targets based on a long-term perspectives and to carry out specific activities based on those targets. Ricoh's environmental advertisements are launched outside as well as inside Japan.

Advertisement in magazines introducing our environmental vision

Advertisement in magazines introducing part of our sustainable environmental management

Advertisement in magazines introducing part of our sustainable environmental management

Exhibitions

<Ricoh Group (Japan and Singapore)>

In December 2006, Ricoh participated in a general environmental exhibition titled Eco-Products 2006 held at Tokyo Big Sight. Under the theme "The Environment Won't Wait," Ricoh introduced its digital multifunctional full-color copiers, which have a substantially shortened recovery time from energy-saving mode using color QSU technology, and GELJET-type multifunctional color copiers, which drastically cut back on maximum electric power consumption. 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 October 2006, Ricoh Asia Pacific Pte. Ltd. and Ricoh (Singapore) Pte. Ltd. participated in the Eco-Products International Fair (EPIF) 2006 held at Suntec Singapore. Energy-saving multifunctional copiers—Aficio MP C1500, C3500/4500, and SP C410DN—and copiers using plant-based plastic were exhibited and the social contribution activities in Singapore that Ricoh is engaged in were introduced at the booth.

Ricoh's booth at EPIF 2006

Building Awareness in Children

The World's Largest Science Contest for High School Students

<Ricoh Americas Corporation (Global)>

Ricoh Americas Corporation (RAC), the Ricoh Group's regional sales headquarters for the Americas, is one of the major sponsors of the International Science & Engineering Fair (ISEF). ISEF is one of the largest science contests for high school students and about 1,500 students not only from the U.S. but also from more than 40 countries participate in the final round. To raise the students' awareness of the importance of environmental conservation and sustainability, RAC has been giving the Ricoh Sustainable Development Award since 2005. This award is given to a study which has a high potential for making environmental conservation and business compatible. Surviving the fiscal 2006 preliminaries, the best awards were given to DJ Ray Horton from the U.S. for his study on the ecological system, and to Emily Levine and Danielle Lent, also from the U.S., for their study on recycling plastic. The award-giving ceremony was held at Albuquerque in New Mexico, U.S.A., on May 17, 2007.

(From left) Danielle Lent, Emily Levine, and DJ Ray Horton, posing with Robert Whitehouse of RAC

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 third round of awards was given in March 2007. 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 2006 (April 1, 2006 to March 31, 2007).

Environmental impact and environmental accounting data: fiscal 2006 data
Descriptions in articles and chronological tables: fiscal 2006 data (in principle)

The environmental impact and environmental accounting data are taken from the Ricoh Group's major business sites in five 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

On November 1, 2006, the Ricoh Group obtained all the stocks of Yamanashi Electronics Co., Ltd. (number of employees: 130; sales: ¥4,735 million), a 100% subsidiary of Shindengen Electric Manufacturing Co., Ltd.

On January 25, 2007, Ricoh founded a new company, InfoPrint Solutions Company LLC (number of employees: approx. 1,200; sales: about US$1 billion; Ricoh's investment ratio: 51%), as a joint investment with IBM Corporation and based on IBM's Printing Systems Division. Ricoh is planning to increase its share of InfroPrint gradually over the next three years and eventually up to 100%.

On January 31, 2007, Ricoh Europe B.V., Ricoh's European Regional Sales Headquarters, obtained all the stocks of all the European sales subsidiaries of Danka Business Systems PLC and holding companies (16 companies; number of employees: approx. 2,300: sales: approx. US$520 million).

* There is no change in the scope of collection of environmental impact and environmental accounting data during fiscal 2006 as a result of the above events.

● Fines concerning the Environment (Ricoh Group)

	FY 2004	FY 2005	FY 2006
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 2007 Report in English was issued in September 2007. The 2008 Report in English will be issued in September 2008.

Head Office

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, Ohmori 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.[3], 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 26 sales companies in the region

■ China

- **Manufacturing companies:**
  Ricoh Asia Industry (Shenzhen) Ltd. (China)
  Shanghai Ricoh Facsimile Co., Ltd. (China)
  Shanghai Ricoh Digital Equipment Co., Ltd. (China)[4]

■ Asia-Pacific Region

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

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

Imaging solutions

Digital copiers, color copiers, analog copiers, printing machines, facsimiles, diazo copiers, scanners, multifunctional printers (MFP), printers, and related supplies and maintenance services, related software, and others

Network system solutions

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

Industrial field

Thermal media, optical devices, semiconductors, PC unit products, measuring instruments, and others

Other businesses

Optical-disk products, digital cameras, and others

Profile of Organization

Ricoh Co., Ltd., was established in Japan on February 6, 1936. The Ricoh Group consists of Ricoh Co., Ltd., 307 subsidiaries, and 15 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 approximately 82,000 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
infotec

Market Evaluation Results and Economic Performance

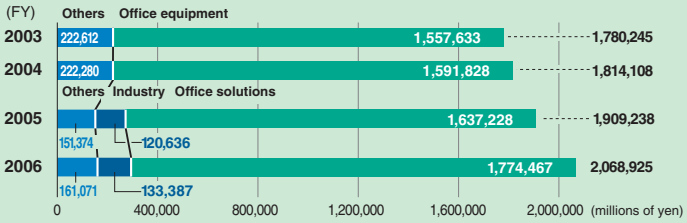
In 2006, Ricoh held the largest share of the office-use black-and-white copier market and the second largest share of the color copier market in Japan. In the same year, the Ricoh Group held the largest share of both the office-use black-and-white copier and the color copier markets in the United States.[1] In the office-use black-and-white copier market in Europe,[2] the Group held the largest share for the tenth year in a row.

* Figures for market share show rankings by units sold. Office-use copiers refer to A3 copiers.

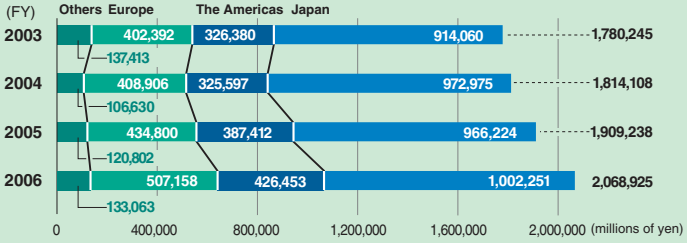
1. Total number of products marketed under the Ricoh, Savin, Gestetner, and Lanier brand names
2. Including products marketed under the Ricoh, Gestetner, Nashuatec, Rex-Rotary, and Lanier brand names as well as OEM products (excluding the segment for personal copiers)

Source: Gartner Dataquest, February 2007, GJ007222 (Data for Japan and the United States)
Infosource S.A. (Data for Europe)

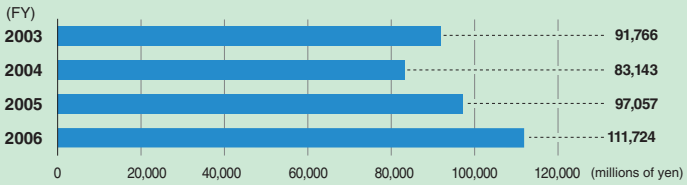
The Ricoh Group's Sales Classified by Business



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.
* Sales figures for fiscal 2005 are after adjustment for business that was discontinued in the first quarter of fiscal 2006.
* Business classifications were changed in fiscal 2005.

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	1,143	1,143	0.0	124
Hatano Plant–Printed circuit boards and electronic components 423 Hirasawa, Hadano, Kanagawa 257-8586, Japan	100	158	158	0.0	12
Numazu Plant–Supplies 16-1 Honta-machi, Numazu, Shizuoka 410-8505, Japan	100	12,810	8,863	0.0	1,700
Gotemba Plant–Copiers, fax machines, and data processing systems 1-10 Komakado, Gotemba, Shizuoka 412-0038, Japan	100	2,813	2,813	0.0	45
Fukui Plant–Supplies 64-1 Ohmi, Sakai-cho, Sakai, Fukui 919-0547, Japan	100	2,233	2,233	0.0	189
Ikeda Plant–Electronic devices and office equipment 13-1 Himemuro-cho, Ikeda, Osaka 563-8501, Japan	100	166	166	0.0	129
Yashiro Plant–Electronic devices 30-1 Saho, Kato, Hyogo 673-1447, Japan	100	504	504	0.0	158
Non-production sites	99.2	1,635	1,635	13.4	218
Total	99.9	21,463	17,515	13.4	2,577
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	1,544	1,544	0.0	147
Hasama Ricoh, Inc.–Parts for copiers and data processing equipment 86 Aza-Kitasanden, Sanuma, Hasama-cho, Tome, Miyagi 987-0511, Japan	100	2,575	2,575	0.0	10
Ricoh Unitechno Co., Ltd.–Fax machines, copiers, and microfilm equipment 713 Tsurugasone, Yashio, Saitama 340-0802, Japan	100	301	301	0.0	17
Ricoh Optical Industries Co., Ltd.–Photographic equipment 10-109 Ohata, Hanamaki, Iwate 025-0303, Japan	100	905	905	0.0	56
Ricoh Keiki Co., Ltd.–Parts for copiers and data processing equipment 3144-1 Aza-Ipponguri, Shimoizumi, Kuboizumi-machi, Saga 849-0903, Japan	100	188	188	0.0	3
Ricoh Microelectronics Co., Ltd.–Printed circuit boards 10-3 Kitamura, Tottori, Tottori 680-1172, Japan	100	503	503	0.0	18
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	1,197	1,197	0.0	83
Ricoh Printing Systems Ltd.[4]–Office equipment 2-15-1 Konan, Minato-ku, Tokyo 108-6021, Japan	99.8	2,213	2,213	4.0	160
Total	100	9,425	9,425	4.0	494
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	7,417	7,417	0.0	203
Ricoh UK Products Ltd. (RPL) –Office equipment and supplies Priorslee, Telford, Shropshire TF2 9NS, U.K	100	1,657	1,657	0.0	27
Ricoh Industrie France S.A.S. (RIF) –Office equipment and supplies 144, Route de Rouffach 68920, Wettolsheim, France	100	9,851	9,851	0.0	71
Ricoh Asia Industry S.Z. Ltd. (RAI) –Copiers Color TV Industrial Zone, Futian District, Shenzhen, P.R. China	100	1,460	1,460	0.0	216
Shanghai Ricoh Facsimile Co., Ltd. (SRF) –Facsimiles No. 885, Jingang Road, Jinqiao Export Processing Zone, Pudong New Area, Shanghai, People's Republic of China	100	556	556	0.0	32
Shanghai Ricoh Digital Equipment Co., Ltd. (SRD) –Office equipment, parts for copiers No.887 Jingang Road, Jinqiao Export Processing Zone, Pudong New Area, Shanghai, People's Republic of China	100	801	801	0.0	8
Total	100	21,744	21,744	0.0	557

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. Waste includes valuable materials. Waste generated from recycling business and waste production equipment and utility equipment are excluded.

	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)					
	13,140	146.9	1.626	0.009	0.000	147.1	1.2
	1,187	11.8	0.025	0.000	0.000	127.3	0.0
	35,036	555.8	18.363	0.000	4.210	10,910.4	1,420.2
	3,003	33.5	0.534	0.003	0.059	0.0	0.0
	22,794	392.7	13.601	0.001	0.398	7,813.6	504.5
	7,864	86.3	0.961	0.000	0.000	111.1	40.4
	31,127	342.2	4.059	0.000	0.000	675.1	260.1
	24,048	276.2	3.082	0.147	0.001	3.2	0.0
	138,198	1,845.2	42.251	0.160	4.668	19,787.8	2,226.4
	10,393	116.7	2.752	1.863	0.000	470.9	97.1
	1,871	20.3	0.271	0.068	0.060	37.7	32.0
	1,281	13.8	0.097	0.000	0.020	7.4	7.4
	9,703	107.3	1.931	1.096	0.100	52.8	4.1
	919	8.9	0.000	0.000	0.000	23.6	0.4
	3,298	33.2	0.247	1.459	0.102	139.2	0.9
	7,057	74.1	0.319	0.039	0.000	230.5	43.7
	7,069	72.5	0.966	1.383	0.031	75.2	75.2
	41,591	446.8	6.583	5.908	0.313	1,037.2	260.9
	48,615	440.5	12.405	0.000	4.467	400.0	9.9
	8,212	89.2	1.468	0.000	0.000	135.0	0.0
	11,481	325.5	8.463	0.000	0.000	4.0	0.2
	20,671	102.0	0.577	0.541	0.000	208.8	0.0
	2,043	11.3	0.000	0.000	0.000	0.0	0.0
	2,557	13.0	0.000	0.000	0.000	0.0	0.0
	93,579	981.5	22.913	0.541	4.467	747.8	10.1

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

The Ricoh Group's Environmental Conservation Activities

■ 1976–March 2006

	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 ever given to a manufacturer.
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.
July	Ricoh RS Products Division is given the Eco Rail Mark.
August	Ricoh acquires China's Type I Environmental Label for the first time.
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.
2006 February	Tohoku Ricoh starts resource-recirculating eco-packing, using used PET bottles as cushioning material.
March	The Ricoh Group in Japan establishes the Management System for Chemical Substances Contained in Products.

	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 announced to coincide with the World Economic Forum (the Davos Meeting).
July	Ricoh is given the world's highest rating for corporate social responsibility by oekom research AG of Germany in its Environmental Ranking of the IT industry.
November	Ricoh's environmental advertisements are given the gold prize in the magazine category of the 45th Advertisement Beneficial to Consumers Contest.

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

■ Fiscal 2006 (from April 2006 to March 2007)

	The Ricoh Group's Activities
2006 May	Digital multifunctional color copier, imagio MP C4500/C3500, with Color QSU energy-saving technology is launched.
May	Mr. Sakurai, president of Ricoh, gives a speech at a meeting between U.N. Secretary, Mr. Kofi Annan, and CEOs of Japanese companies participating in the United Nations Global Compact.
May	Ricoh presents the Ricoh Sustainable Development Award at a science contest, the International Science & Engineering Fair (ISEF), which is held for high school students all over the world.
May	The 21st Ricoh Nature Seminar Elementary Course is held in Kyushu.
June	Ricoh Global Eco Action is held at all Group companies around the world.
June	The first Ricoh Global Environment Month Symposium is held and is attended by companies and NPO personnel.
July	The Management System for Chemical Substances Contained in Products is established in all Group companies around the world.
July	Ricoh has been collecting used cartridges from GELJET printers by mail, and based on this result, gives a donation for the fourth time to the Woods of Magpies Project of the Green Earth Network.
July	Ricoh's purchasing policy is explained at Shanghai Ricoh.
July	The fifth Ricoh parent-child nature school is held.
September	The Ricoh Group companies in Europe participate in the European Mobility Week.
September	The fifth Ricoh Forest Seminar is held in the Afan Forest in Kurohime, Nagao Prefecture. The number of Ricoh forest conservation leaders totals 56.
September	The 19th Ricoh Company Meeting for Environmental Leaders is held.
October	Completion ceremony for a factory to mass produce polymerized toner, "PxP toner," is held at Ricoh Numazu Plant.
October	The 23rd Ricoh Nature Seminar Elementary Course is held. The number of environmental volunteer leaders totals 379.
October	Ricoh Asia Pacific and Ricoh Singapore participate in Eco-Products International Fair (EPIF) 2006.
November	Ricoh signs an official partnership contract with the National Museum of Emerging Science and Innovation.
December	Environmentally-friendly high-speed digital multifunctional copier, imagio Neo 751RC/601RC series, is launched.
2007 February	The reforestation methodology promoted by Ricoh is approved at the United Nations CDM Executive Board.
February	The 13th Ricoh Group's Sustainable Environmental Management Conference is held under the theme, "Enhancement of sustainable environment management."
February	Environmentally-friendly digital multifunctional copier, imagio Neo 452RC/352RC series, is launched.

	Society's Recognition of the Ricoh Group's Activities
2006 April	The Ricoh Group receives the highest "AAA" environmental rating by the Tohmatsu Evaluation and Certification Organization Co., Ltd., for two consecutive years.
May	The Ricoh Group's 2005 sustainability reports (Environmental Report, Corporate Social Responsibility Report, and Annual Report) are given the Sustainability Report Excellence Award for CSR Report and Sustainability Report Excellence Award at the 9th Environmental Report Award.
May	Ricoh Fukui Plant's 2005 Environmental Report is given a Continued Excellence Award for the Site Report at the 9th Environmental Report Award.
June	Ricoh is given an award as a Distinguished Contributor in Recycling by the Ecological Life and Culture Organization.
June	Environmental volunteer group from Tohoku Ricoh is given an award as a Distinguished Contributor in Environmental Clean-Up from Shibata-machi in Miyagi Prefecture.
June	Okazaki Plant of Ricoh Elemex is given the Environmental Activity Award from Okazaki City in Aichi Prefecture.
September	Kagawa Branch of Shikoku Ricoh is accredited as a Kagawa Prefecture Environment-Conscious Model Office.
October	Ricoh's resource-recirculating PET bottle rack wins the Large-sized Equipment Packaging Category Award at the 2006 Japan Packaging Contest held by the Japan Packaging Institute.
October	Toner type C2 for the imagio is given the Ecology Design Award (Minister of Economic, Trade and Industry Award) at the 2006 Good Design (G Mark) Award.
October	Ricoh Microelectronics is awarded the Incentive Award for Resource-Recirculating Technology & Systems by the Clean Japan Center.
October	Digital multifunctional full-color copier, Aficio (imagio) MP C1500 series, receives the Silver Eco-Award at Eco-Products International Fair (EPIF) 2006.
November	Ricoh is ranked the No. 1 company in Forest Conservation Level Ranking by S.P. farm corporation.
2007 January	Ricoh is chosen as one of the Global 100 Most Sustainable Corporations in the World (Global 100) by Corporate Knights Inc. of Canada for three consecutive years.
January	Ricoh Asia Industry is given an award as the Excellent Company in Environmental Conservation by Shenzhen City.
January	Digital multifunctional full-color copier, imagio MP C1500 series, receives the Energy Conservation Center Chairman's Award in the 17th Energy-Saving Awards.
February	North Plant of Ricoh Numazu Plant and Ricoh Atsugi Plant together receive the Kanto Bureau of Economy, Trade and Industry Director-General's Award as excellent energy management plants.
February	Ricoh Microelectronics receives the Chugoku Bureau of Economy, Trade and Industry Director-General's Award as an excellent energy management plant.
March	Ricoh's Sustainable Environmental Management website is given an Award of Excellence in the 2006 Environment Goo Awards.
March	Ricoh Group's 2006 sustainability reports (Environmental Report, Corporate Social Responsibility Report, and Annual Report) are given the Environmental Reporting Grand Prize (Minister of the Environment Award) in the 10th Environmental Communication Awards.

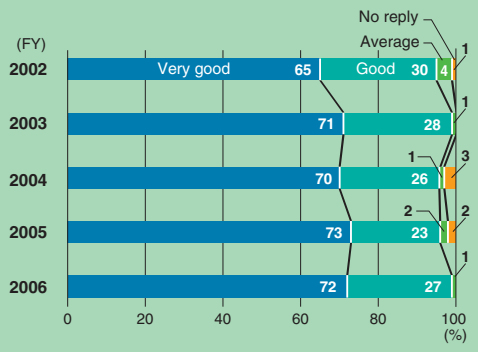
Responses to the Questionnaire for Ricoh Group Sustainability Report 2006

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 17,380 copies of the Japanese version report were distributed and 105 readers answered the questionnaire as of the end of April 2007. The main responses are as follows.

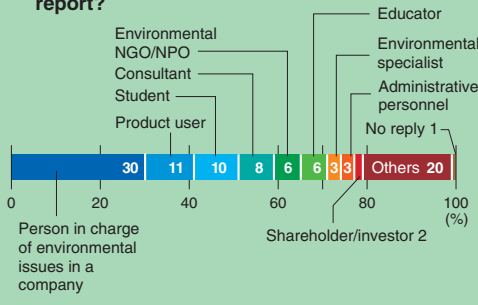
❶ How would you rank the Ricoh Group's environmental conservation activities that are described in the report?



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

1st	Extra-Long-Term Environmental Vision
2nd	Feature Article: Developing "Live Offices"
2nd	Business Sites: Energy Conservation and Prevention of Global Warming
2nd	Environmental Accounting
2nd	Social Contribution of Environmental Conservation
6th	Feature Article: Practical Application of Plant-Based Plastic
7th	Three Ps Balance
8th	Business Sites: Resource Conservation and Recycling

❸ In what capacity did you read this report?



Some of the opinions from the Ricoh Group Sustainability Repot 2006 and Improvements in the 2007 Report

○ There is no mention of direct talks with stakeholders.
○ I think that it lacks any dialogue with different stakeholders.
▶ We held the Ricoh Environmental NPO Meeting and the Global Environment Month Symposium with an aim of strengthening the partnership between environmental NPOs and companies. We plan to hold these meetings regularly. See pages 13 and 14.
▶ When we rolled out our Extra-Long-Term Environmental Vision, we received assessments and opinions from experts in universities, research institutes, environmental NPOs, etc., and incorporated these opinions in our vision. See pages 17 to 20.
▶ We held risk communication meetings with citizens, local communities, and administrations to share information on environmental pollution and chemical substances and to promote understanding between each other. See page 46.

○ I have been running a dealer selling Ricoh products for years. Environment is an issue we can never avoid these days. My trading partners and clients are also keen on environmental matters. The Report is helpful as it provides information that is useful when selling Ricoh products.
▶ Ricoh is working on developing easy-to-use products which will help our customers save energy and reduce costs by reducing the energy consumption of individual products and by shortening the recovery time from energy-saving mode. In the 2007 Report, we explained the benefits of reductions in CO_2 emissions and costs brought by the energy-saving mode. We hope these articles will be useful for your business. See pages 25 and 27.

○ There are three reports and I first thought it was too much information to digest. However, each report seems to be honestly and carefully compiled. I think that the voices of stakeholders such as customers, suppliers, and employees are appropriately included in the Report.
▶ In the 2007 Report, we included the opinions of recyclers in addition to the opinions of our customers, suppliers, and employees. See pages 23, 27, 29, 30, 33, 40 and 44.

○ The Report has many graphs, charts, and photos, and I can see that efforts were made to make it easier to understand. It was very informative. At the same time, I felt that it takes a lot of effort to digest this amount of information unless you are an expert.
▶ We have added the new "Summary on Sustainable Environmental Management" pages. This summarizes the results of our sustainable environmental management during fiscal 2006 in a two-page spread. We hope it makes it easier for readers to understand. See page 5.

○ The Report gives me great hope. I hope more people in Atsugi City find out about Ricoh's activities. I also feel very happy that there is a company like Ricoh in my city.

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.

BUREAU VERITAS
Certification

Ricoh Group Sustainability Report
Independent Verification Report
To: Ricoh Co., Ltd.
Chairman of the Board,
President and Chief Executive Officer
Mr. Shiro Kondo

31st May 2007

YOKOHAMA

Bureau Veritas 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) 2007, issued under the responsibility of Ricoh's management.

Scope of Work
Bureau Veritas visited six sites, listed below, and verified data from each site applicable to Ricoh's production and non-production activities for the reporting period April, 2006 to March, 2007.

Head Office, Corporate Environment Division	Administration
Ricoh Elemex Corporation, Okazaki Plant	Manufacture of measurement instruments (gas and water meter)
Ricoh Printing Systems Ltd., Katsuta	Manufacture of office equipment
Ricoh Leasing Co., Ltd.	Financial related service
Shanghai Ricoh Facsimile Co., Ltd. (SRF)	Manufacture of office equipment
Shanghai Ricoh Digital Equipment Co., Ltd.(SRD)	Manufacture of office equipment

Verification Methodology
Bureau Veritas has conducted verification activities at:
Head Office
1. The reliability of data collection and aggregation systems and the adequacy of the processes.
2. The accuracy and consistency of data collected for the fiscal year 2006 (2006/4-2007/3) 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
Bureau Veritas reports as follows:
1. The data collection and compilation system is reliable and systems are operated adequately at all sites whereupon Bureau Veritas conducted verification activities as per the scope of work.
2. All the data included in the Report that has been subject to independent verification is reliable and an accurate reflection of data that is regularly collected at site level and collated at Head Office.

Reference View

BUREAU VERITAS has reported many findings and opinions through the data verification process at the head office and site level. BV has concluded as follows:

1. Positive Findings

- Data aggregation systems for new sites that have been included as part of this year's scope of reporting and verification are seen to be as reliable as those for sites previously covered, and adequate for the management of data for the Report. This in turn indicates the adequacy and effectiveness of the entire aggregation system of the Ricoh group (including that for human resources).
- Ricoh has taken prompt action to meet the change of requirements for Blue Angel for its products and has addressed this in a consistent manner. With regard to energy consumption of copier machines, Ricoh promotes the evaluation of existing user needs in relation to actual usage, and is incorporating this information into design improvement, based on Ricoh's QSU (Quick Start Up) concept.
- Ricoh has taken appropriate action for soil contamination identified during its reconstruction work, already known through an investigation conducted at the Ikeda Plant five years ago, for substances related to the manufacturing process. Since then Ricoh has implemented appropriate risk management and prevention measures across the group including soil contamination investigations at production and non-production sites.

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2. Opportunities for Improvement

- Fuel use of company-owned cars is included in the inventory data, however fuel use for rental cars is not included. Ricoh should consider including this fuel use in order to better manage and reduce this emissions source in future.
- CO_2 emissions from steam used in SRF and SRD in China is not included in the inventory data due to a lack of an appropriate CO_2 emission factor. In the absence of a definitive figure, Ricoh should consider using a best estimate that would provide the reader with an indication of impact in this area.
- Bureau Veritas is identifying and reporting on improvement items that have previously been identified for other sites. For example, recommendations for data input error prevention systems and chemical substances transfer measures have been made in relation to more than one site in previous reporting. An enhancement of internal communications could be made more effective in order to share improvement issues across sites; this will ensure that duplication of findings is avoided and that all sites benefit from best practice measures.

The English versions of the Independent Verification Report and Reference View from BV are translated from the original Japanese versions. The Japanese versions shall be the sole official texts in case of discrepancy.

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

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