

Basis and Range of Environmental Conservation Activities

Environmental Management System

This is the basis for environmental conservation to satisfy the targets set in each region (resource conservation and recycling, energy conservation, and pollution prevention). The environmental management system consists of the following five parts.

● Environmental Management Information System..... p. 9
This is an information system for effectively assisting activities to reduce the environmental impact of the Ricoh Group as a whole.

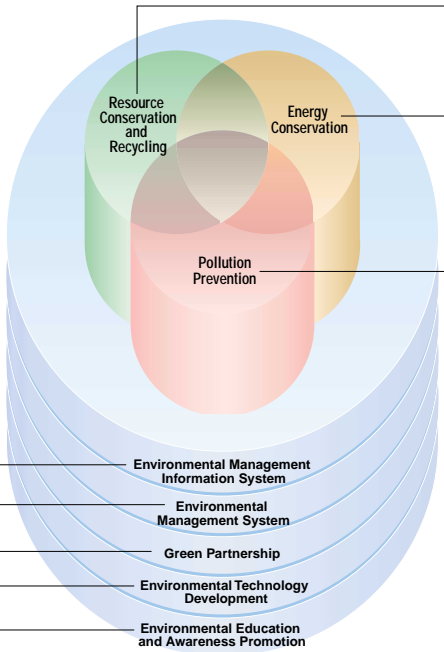
● Environmental Management System..... p. 9
We are constructing an environmental management system that complies with ISO 14001 and permits us to continue making environmental improvements.

● Green Partnership..... p. 11
We are cooperating with our partners to recognize all the stages of the Comet Circle for more efficient reduction of environmental impact.

● Environmental Technology Development..... p. 12
We are developing technologies to reduce the environmental impact of our products and business sites.

● Environmental Education and Awareness Promotion..... p. 12
We are educating our employees on environmental issues. We are also promoting awareness towards environmental conservation both inside and outside the Ricoh Group through diverse information sources.

Five Foundations and Three Pillars for Environmental Conservation



● Resource Conservation and Recycling (Products)..... p. 15
We are developing products based on recyclable designs. We are also constructing a recycling system and manufacturing products using recycled parts.

● Resource Conservation and Recycling (Business Sites)..... p. 19
To achieve maximum results with minimum resources, the Ricoh Group is promoting a "zero waste" movement (100% resource recovery rate).

● Energy Conservation (Products)..... p. 21
To prevent global warming, we are developing and selling various energy-saving products.

● Energy Conservation (Business Sites)..... p. 22
We are promoting the efficient use of energy based on the belief that energy is also a resource.

● Pollution Prevention (Products)..... p. 23
We are promoting the proper management of the chemicals used in our products to reduce and eliminate toxic substance use.

● Pollution Prevention (Business Sites)..... p. 25
In manufacturing, the Ricoh Group strives to reduce toxic substance use, emissions, and waste.

Environmental Action Plan

In order to promote progressive environmental conservation acts through our global business activities, the Ricoh Group has established the following environmental action plans and is striving to implement them.
(See the text from page 9 for more details.)

Environmental Management System

- Construct an environmental management information system by the end of fiscal 2000.
- Construct an environmental impact information system in the fields of copiers, facsimiles, and laser printers by the end of fiscal 2000 and construct such a system for other product lines by the end of fiscal 2001.
- Acquire ISO 14001 certification for domestic and overseas business bases in addition to production bases by September 2000 for Ricoh and by the end of fiscal 2001 for the Ricoh Group.*

Resource Conservation and Recycling (Products)

- Establish a recovery and recycling system for products and supplies, especially toner cartridges, in Japan, Europe, the Americas, China and Taiwan, and Asia-Pacific by the end of fiscal 2001.
- Increase the resource recovery rate for copiers, facsimiles, and laser printers, including toner cartridges, to over 90% by the end of fiscal 2001.

Resource Conservation and Recycling (Business Sites)

- Reduce final waste by 90%, compared with that in fiscal 1992 by the end of fiscal 2001.
- Achieve a 100% resource recovery rate (zero waste) at all domestic production sites by the end of fiscal 2000.
- Achieve a 70% resource recovery rate at all domestic nonproduction sites by the end of fiscal 2000.
- Achieve a 100% resource recovery rate at all overseas production sites by the end of fiscal 2001.

Energy Conservation (Products)

- Reduce the energy consumed in manufacturing by 30%, compared with that in fiscal 1996, on a per product basis by the end of fiscal 2001.
- Increase the scope of use for recycled paper and increase the speed of dual-sided copying to promote the efficient use of paper thus reducing the amount of CO₂ during paper manufacturing.

Energy Conservation (Business Sites)

- Reduce CO₂ emissions by at least 15% by the end of fiscal 2001 on a per sales volume basis, compared with those in fiscal 1990.
(Domestic and overseas production sites other than Ricoh's have set numeric goals of 15% or more each.)

Pollution Prevention (Products)

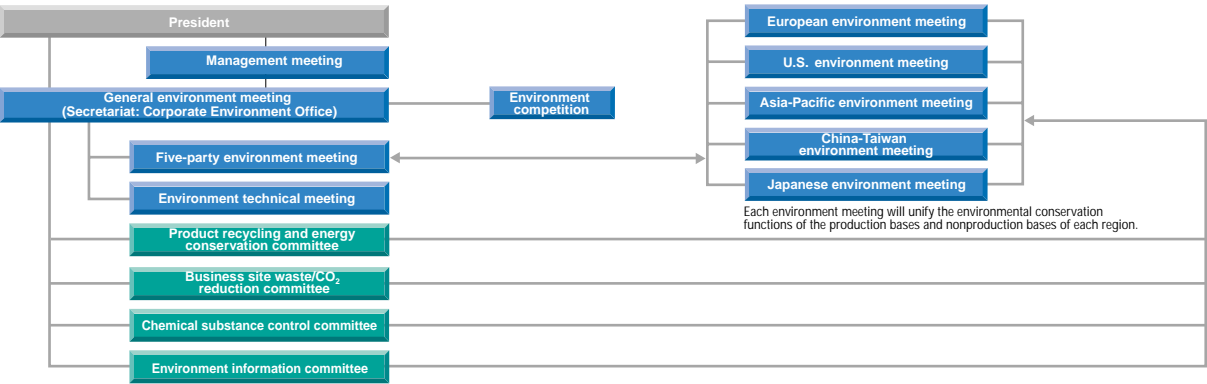
- Reduce the volume of specified chemical substances, such as lead and PVC, at least 50% on a per product basis in all products developed after fiscal 2001, compared with products introduced in fiscal 1997.
- Reduce the level of noise emitted at least 2 dB and emissions of ozone and other by-products at least 20% for all copiers, facsimiles, and laser printers developed fiscal 2001, compared with products introduced in 1997.

Pollution Prevention (Business Sites)

- Reduce the use of substances subject to PRTR (Pollutant Release and Transfer Register) by at least 20%, emissions more than 50%, compared with those in fiscal 1997, and totally eliminate landfill waste in all domestic and overseas business sites by fiscal 2001.
- Completely eliminate the use of trichloroethylene and tetrachloroethylene in all domestic and overseas business sites by fiscal 2001.

*Modifications have been made from the 1998 environmental report.

Ricoh Group Environmental Conservation System



Each committee prepares technical standards and an infrastructure common to the Ricoh Group.

Each environment meeting will unify the environmental conservation functions of the production bases and nonproduction bases of each region.