

Fiscal 2002–2004 Environmental Action Plans and Fiscal 2002 Results

In fiscal 2001, the Ricoh Group made 17 environmental action plans for the period from fiscal 2002 to fiscal 2004. The plans set the following environmental impact reduction goals and environmental management targets: improved product environmental performance (energy conservation, resource conservation and recycling, and pollution prevention), environmental

The Ricoh Group's Environmental Action Plan (FY 2002–2004)

1. Improve environment-friendly functions and promote technological development.

- 1) Promote the use of energy-saving technologies in products. (* See page 38.)
 - Achieve Ricoh's energy-saving goals.
- 2) Promote pollution prevention measures with regard to products. (* See page 43.)
 - Completely eliminate the use of environmentally harmful substances (i.e., lead, hexavalent chromium, polyvinyl chloride, and cadmium) in products.
 - Reduce noise levels at least 2 dB (weighted average value for the number of units sold out of the number of units marketed in fiscal 2000).
 - Observe Ricoh standards that cover environmentally sensitive substances emitted by products, including styrene, ozone, and dust.
- 3) Develop new environmental technologies. (* See page 40.)
 - Develop practical application technologies for alternative paper and rewritable paper.

2. Increase the resource conservation rate by improving the productivity of products and materials as well as profitability in the recycling business.

- 1) Improve the quantity of reusable parts used by a factor of at least 20 (compared to fiscal 2000 in Japan). (* See page 58.)
- 2) Improve the collection rate of used products and toner cartridges at least 10% in terms of the number of collected units (the Ricoh Group as a whole and compared to fiscal 2000 figures). (* See page 58.)
- 3) Increase the number of resource-recirculating-type products marketed by a factor of at least 20 (in Japan and compared to fiscal 2000 figures). (* See page 58.)
- 4) Improve the resource recovery rate of used products and toner cartridges. (See page 58.)
 - The resource recovery rate of equipment and toner cartridges rises to 98% (in Japan).
 - The resource recovery rate of equipment and toner cartridges rises to 85% (in Europe).
 - The resource recovery rate of equipment rises to 95% and that of toner cartridges to 100% (in the Americas).
 - The resource recovery rate of equipment rises to 85% and that of toner cartridges to 90% (in China, Hong Kong, and Taiwan).
 - The resource recovery rate of equipment rises to 85% and that of toner cartridges to 85% (in Asia* and Oceania).

* Excluding Japan, China, Hong Kong, and Taiwan

3. Energy conservation activities at plants and offices

- 1) Reduce the amount of energy used. (* See page 47.)
 - Reduce CO₂ emissions at plants and offices 62% in terms of CO₂ emissions per sales unit and 13% in terms of total amount emitted (Ricoch in Japan and compared to 1990 figures).
 - Reduce CO₂ emissions 20% per sales unit (all Ricoh business sites in Japan and compared to fiscal 2000 figures).
 - Reduce CO₂ emissions 2% (the Ricoh Group in Japan and compared to fiscal 2000 figures).
 - Reduce CO₂ emissions 2% (Ricoch Group manufacturing subsidiaries outside Japan and compared to fiscal 2000 figures).
- 2) Promote pollution prevention. (* See page 51.)
 - Reduce environmentally sensitive substances (Ricoch Group's target substances to be reduced) 8% of those used and 50% of those emitted (Ricoch and Ricoch Group manufacturing subsidiaries in Japan and Ricoch Group manufacturing subsidiaries other than those in Japan, compared to fiscal 2000 figures).
 - Completely eliminate the use of dichloromethane (Ricoch and Ricoch Group manufacturing subsidiaries in Japan and Ricoch Group manufacturing subsidiaries other than those in Japan).
 - Restrict the increase of greenhouse gas emissions (other than CO₂) to a maximum of 1% (Ricoch and Ricoch Group manufacturing subsidiaries in Japan and Ricoch Group manufacturing subsidiaries other than those in Japan, compared to fiscal 2000 figures).
 - Reduce the emissions of ozone-depleting substances 60% (Ricoch and Ricoch Group manufacturing subsidiaries in Japan and Ricoch Group manufacturing subsidiaries other than those in Japan, compared to fiscal 2000 figures).
- 3) Promote resource conservation and recycling. (* See page 49.)
 - Reduce generated waste at least 13% (Ricoch and Ricoch Group manufacturing subsidiaries in Japan and Ricoch Group manufacturing subsidiaries other than those in Japan, compared to fiscal 2000 figures).
 - Improve the waste recycling rate to 90% (Ricoch Group nonmanufacturing subsidiaries in Japan).
 - Reduce water consumption at least 10% (Ricoch and Ricoch Group manufacturing subsidiaries in Japan and Ricoch Group manufacturing subsidiaries other than those in Japan, compared to fiscal 2000 figures).
 - Reduce paper purchase at least 10% (Ricoch and Ricoch Group manufacturing and nonmanufacturing subsidiaries in Japan and Ricoch Group manufacturing subsidiaries outside Japan, compared to fiscal 2002 figures)

4. Promoting green partnerships to increase the number of customers and reduce costs.

- 1) Promote green marketing. (* See page 55.)
 - Improve the recycled pulp use rate for paper products to 60% (Japan)
- 2) Promote green procurement. (* See page 45.)
 - Identify the environmental impact at suppliers' sites to set goals for reducing impact (Ricoch Group purchasing divisions).
 - Completely eliminate designated environmentally sensitive substances used in the supplier's manufacturing process (Ricoch Group purchasing divisions).
- 3) Promote green purchasing. (* See page 45.)
 - Improve the green purchasing rate (for office supplies) to 100% (the Ricoch Group in Japan)

5. Improving the environmental management system

- 1) Establish sustainable management indicator. (* See page 31.)
- 2) Construct a companywide audit system.
- 3) Construct an environmental management information system. (* See page 25.)

6. Promoting environment-conscious social contribution activities

- 1) Promote forest conservation activities to preserve the ecosystem (the Ricoch Group). (* See page 63.)

1. Results for items 1 through 4 were reviewed.

2. See page 13 for the definitions of "responsible stage" and "proactive stage."

conservation activities at factories and offices (global warming prevention, resource conservation and recycling, and pollution prevention), promotion of green partnership, improved EMS, and further contributions to the development of an environment-friendly society. The ultimate goal of 13 of these 17 plans is Responsible

Stage that enables both environmental contribution and business profitability. These plans are regarded as the Ricoh Group's commitment to its employees and society at large.

Progress (FY 2002 Performance)		Reviewed by BVQI (6) ¹	Environmental Management Goals ² (FY 2004)
<ul style="list-style-type: none"> ▶ Energy saving standards for copiers for fiscal 2006 set by Japanese law, the Law Concerning the Rational Use of Energy, was met by the imagio Neo 601/751 (copying productivity: 60/75 sheets/min.). * The standard was already surpassed by copiers with a copying productivity less than 60 sheets per minute. 			Responsible stage
<ul style="list-style-type: none"> ▶ For products marketed in fiscal 2002, the volume of lead, hexavalent chromium, and polyvinyl chloride (PVC) was further reduced. Products in which lead, hexavalent chromium, PVC, and cadmium are completely eliminated are scheduled to be marketed from fiscal 2004. ▶ The level of noise emitted from color copiers during operation and while on standby was reduced 1.5 dB and 6.4 dB, respectively. ▶ All 57 models of copiers, facsimiles, and printers marketed in fiscal 2002 follow Ricoh's standards concerning styrene, ozone, and dust. 			Responsible stage
<ul style="list-style-type: none"> ▶ Practical application technologies for alternative paper and rewritable paper are being developed. Samples of such paper were exhibited at Eco Products in December 2002. 			Responsible stage
<ul style="list-style-type: none"> ▶ The number of reusable parts used steadily increased and reached 3.7 times that used in fiscal 2000. 			Responsible stage
<ul style="list-style-type: none"> ▶ Collection rates of used products (compared to those in fiscal 2000) • Increased 18% in Japan; 73% in Europe; 26% in the Americas; decreased 10% in China, Hong Kong, and Taiwan; and also increased 107% in Asia* and Oceania. * Excluding Japan, China, Hong Kong, and Taiwan 			Responsible stage
<ul style="list-style-type: none"> ▶ Thanks to the release of new resource-recirculating-type products, the number of products marketed increased steadily, reaching 6.4 times that in fiscal 2000. 			Responsible stage
<ul style="list-style-type: none"> ▶ Current status of resource recovery rate • Equipment: 99%; toner cartridges: 100% (Japan) • Equipment: 95%; toner cartridges: 95% (Europe) • Equipment: 95%; toner cartridges: 100% (the Americas) • Equipment: 93%; toner cartridges: 100% (China, Hong Kong, and Taiwan) • Equipment: 59%; toner cartridges: 89% (Asia* and Oceania) * Excluding Japan, China, Hong Kong, and Taiwan 			Responsible stage
<ul style="list-style-type: none"> ▶ Current status of CO₂ emissions • Reduced 29.2% per sales unit and 10.7% in terms of total amount emitted (Ricoch in Japan, compared to fiscal 1990 figures) • Ricoch in Japan: Reduced 0.9% (CO₂ emissions per sales unit, compared to fiscal 2000 figures) • Ricoch and Ricoch Group manufacturing subsidiaries: Reduced 2.4% (total emissions, compared to fiscal 2000 figures) • Ricoch Group non-manufacturing subsidiaries: Reduced 4.4–14.8% (total amount emitted, compared to fiscal 2000 figures; each subsidiary's goal was 2.0 %.) • Ricoch Group manufacturing subsidiaries outside Japan: Reduced 2.1% (total amount emitted, compared to fiscal 2000 figures) 			Responsible stage
<ul style="list-style-type: none"> ▶ Progress in pollution prevention (compared to that in fiscal 2000) • Environmentally sensitive substances used were reduced 36.1% and those emitted 64.3%. • Greenhouse gas emissions other than CO₂ were reduced 16.3%. • The emissions of ozone depleting substances were reduced 60.9%. 			Proactive stage
<ul style="list-style-type: none"> ▶ Progress in resource conservation and recycling (compared to fiscal 2000) • The amount of waste generated was reduced 8.0%. (Ricoch and Ricoch Group manufacturing subsidiaries in Japan and Ricoch Group manufacturing subsidiaries other than those in Japan) • The waste recycling rate went up to 73.1–93.8%. (Ricoch Group nonmanufacturing subsidiaries*) * Other than sales companies • Water consumption was reduced 4.5%. (Ricoch and Ricoch Group manufacturing subsidiaries in Japan and Ricoch Group manufacturing subsidiaries other than those in Japan) • Amount of paper purchased is surveyed. 			Responsible stage
<ul style="list-style-type: none"> ▶ The recycled paper use rate for paper products improved to 51%. (mass ratio) ▶ FSC certified recycled paper "FSC NB Copy Paper" was put on the market. 			Proactive stage
<ul style="list-style-type: none"> ▶ Data collection method for environmental impact in the processing of parts was reviewed, and preparation for trial calculation began. ▶ Some suppliers began replacement tests for chloric organic solvents used in the manufacturing process. 			Responsible stage
<ul style="list-style-type: none"> ▶ Activities are being conducted to achieve the goals for fiscal 2004. The green purchasing rate in fiscal 2002 was 72.6% in terms of money value. 			Proactive stage
<ul style="list-style-type: none"> ▶ Sustainable management indicators (proposals) were established. 			Responsible stage
<ul style="list-style-type: none"> ▶ The effectiveness of internal environmental auditing was confirmed at 15 business sites that acquired ISO 14001 certification. 			Responsible stage
<ul style="list-style-type: none"> ▶ Data required as environmental management indicators are reviewed to expand data collection areas and locations. 			Responsible stage
<ul style="list-style-type: none"> ▶ New projects that started in fiscal 2002 Europe: Forest preservation and restoration project 1 China, Hong Kong, and Taiwan: Forest restoration project 1 Asia* and Oceania: Forest preservation project accompanied by environmental education 1 * Excluding Japan, China, Hong Kong, and Taiwan 			Proactive stage