

Fiscal 2002–2004 Environmental Action Plan and its Results

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

1 Improving environmentally-friendly functions and promoting technological development*	<p>1) Promote the use of energy-saving technologies in products. ----- Page 19</p> <ul style="list-style-type: none"> • Achieve Ricoh's energy-saving goals. <p>2) Promote pollution-preventing measures with regard to products. ----- Page 27</p> <ul style="list-style-type: none"> • Completely eliminate the use of environmentally-sensitive substances (i.e., lead, hexavalent chromium, polyvinyl chloride, and cadmium) in products. • Reduce noise levels by 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. <p>3) Develop new environmental technologies. ----- Page 22</p> <ul style="list-style-type: none"> • Develop practical application technologies for alternative paper and rewritable paper.
2 Increasing the resource conservation rate by improving the productivity of products and materials as well as profitability in the recycling business*	<p>1) Improve the quantity of reusable parts used by a factor of at least 20 (compared to fiscal 2000 in Japan).</p> <p>2) Improve the collection rate of used products and toner cartridges by at least 10% in terms of the number of units collected (the Ricoh Group as a whole, compared to fiscal 2000 figures.) ----- Page 23</p> <p>3) Increase the number of resource-recirculating-type products marketed by a factor of at least 20 (in Japan, compared to fiscal 2000 figures).</p> <p>4) Improve the resource recovery rate for used products and toner cartridges. ----- Page 23</p> <ul style="list-style-type: none"> • The resource recovery rate for equipment and toner cartridges rises to 98% (in Japan). • The resource recovery rate for equipment and toner cartridges rises to 85% (in Europe). • The resource recovery rate for equipment rises to 95% and that of toner cartridges to 100% (in the Americas). • The resource recovery rate for equipment rises to 85% and that of toner cartridges to 85% (in the Asia-Pacific region).
3 Environmental conservation activities at plants and offices*	<p>1) Reduce the amount of energy used. ----- Page 33</p> <ul style="list-style-type: none"> • Reduce CO₂ emissions at plants and offices by 62% in terms of CO₂ emissions per sales unit and by 13% in terms of total amount emitted (Ricoch in Japan, compared to fiscal 1990 figures). • Reduce CO₂ emissions by 20% per sales unit (all Ricoh business sites in Japan, compared to fiscal 2000 figures). • Reduce CO₂ emissions by 2% (the Ricoh Group in Japan, compared to fiscal 2000 figures). • Reduce CO₂ emissions by 2% (Ricoch Group manufacturing subsidiaries outside of Japan, compared to fiscal 2000 figures). <p>2) Promote pollution prevention. ----- Page 43</p> <ul style="list-style-type: none"> • Reduce environmentally-sensitive substances (Ricoch Group's target substances to be reduced) to 8% of those used and 50% of those emitted (Ricoch and Ricoch Group manufacturing subsidiaries in Japan and Ricoch Group manufacturing subsidiaries outside of 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 outside of Japan). • Restrict the increase in greenhouse gas emissions to a maximum of 1% (Ricoch and Ricoch Group manufacturing subsidiaries in Japan and Ricoch Group manufacturing subsidiaries outside of Japan, compared to fiscal 2000 figures). • Reduce emissions of ozone-depleting substances by 60% (Ricoch and Ricoch Group manufacturing subsidiaries in Japan and Ricoch Group manufacturing subsidiaries outside of Japan, compared to fiscal 2000 figures). <p>3) Promote resource conservation and recycling. ----- Page 39</p> <ul style="list-style-type: none"> • Reduce generated waste by at least 13% (Ricoch and Ricoch Group manufacturing subsidiaries in Japan and Ricoch Group manufacturing subsidiaries outside of Japan, compared to fiscal 2000 figures). • Improve the waste recycling rate to at least 90% (Ricoch Group non-manufacturing subsidiaries in Japan). • Reduce water consumption by at least 10% (Ricoch and Ricoch Group manufacturing subsidiaries in Japan and Ricoch Group manufacturing subsidiaries outside of Japan, compared to fiscal 2000 figures). • Reduce paper purchase by at least 10% (Ricoch and Ricoch Group manufacturing and non-manufacturing subsidiaries in Japan, Ricoch Group manufacturing subsidiaries outside of Japan, compared to fiscal 2000 figures).
4 Promoting Green Partnerships to increase the number of customers and reduce costs*	<p>1) Promote green marketing. • Improve the recycled pulp use rate for paper products to 60% (in Japan).</p> <p>2) Promote green procurement. ----- Page 31</p> <ul style="list-style-type: none"> • Identify the environmental impact at suppliers' sites to set goals for reducing that impact (Ricoch Group purchasing divisions). • Completely eliminate designated environmentally-sensitive substances in the suppliers' manufacturing process (Ricoch Group purchasing divisions). <p>3) Promote green purchasing. • Improve the green purchasing rate (for office supplies) to 100% (the Ricoch Group in Japan).</p>
5 Improving the sustainable environmental management system	<p>1) Establish an environmental management indicator. ----- Page 54</p> <p>2) Construct a companywide audit system.</p> <p>3) Construct an environmental management information system. ----- Page 49</p>
6 Promoting environment-conscious social contribution activities	<p>1) Promote forest conservation activities to preserve the ecosystem (the Ricoch Group). ----- Page 63</p>

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

Results

- ▶ The imagio Neo 602/752ec series of high-speed multifunctional digital copiers (with a copy productivity of 60/75 pages per minute) with a quick recovery function (10 seconds or less) from energy-saving mode were put on the market. With this introduction, Ricoh completed a wide-ranging energy-saving multifunctional monochrome copier lineup comprising machines with various productivities.
- ▶ Products in which lead, hexavalent chromium, polyvinyl chloride (PVC), and cadmium are completely eliminated were put on the market in fiscal 2004.
- ▶ The level of noise emitted from color copiers during operation and while on standby was reduced 3.1dB and 11.2dB, respectively.
- ▶ All 96 models of copiers, facsimiles, and printers marketed in fiscal 2004 follow Ricoh's standards concerning styrene, ozone, and dust.
- ▶ The RECO-View® IC tag sheet, which enables information recorded on IC tags to be displayed and rewritten, was put on the market. Rewritable IC tag sheets were introduced to more than 30 companies.
- ▶ Quantity of reusable parts used reached 3.3 times that used in fiscal 2000. Efforts will continue to make improvements.
- ▶ Collection rates of used products (compared to those in fiscal 2000): The collection rate of used products increased 56% worldwide, which is considerably higher than the goal that was set. Although the quantity of toner cartridges collected decreased, the collection rate (the ratio of the quantity of toner cartridges collected to the quantity of those marketed) increased by a large margin. (Collection rates increased 146% in Japan, 361% in Europe, 162% in the Americas, and 209% in the Asia-Pacific region.*) (*Compared to fiscal 2001 data)
- ▶ The number of resource-recycling-type products marketed reached 24.3 times that in fiscal 2000, and the goal was attained.
- ▶ Current status of resource recovery rate
 - Equipment: 99.4%; toner cartridges: 99.6% (Japan)
 - Equipment: 93.9%; toner cartridges: 96.5% (Europe)
 - Equipment: 95.0%; toner cartridges: 100% (the Americas)
 - Equipment: 88.4%; toner cartridges: 97.0% (Asia and Pacific)
- ▶ Current status of CO₂ emissions
 - Ricoh in Japan: Reduced 29.7% per sales unit and 6.9% in terms of total amount emitted (compared to fiscal 1990 figures)
 - Ricoh in Japan: Reduced 1.6% per sales unit (compared to fiscal 2000 figures)
 - Ricoh and Ricoh Group manufacturing subsidiaries in Japan: Increased 1.5% in terms of total amount emitted (compared to fiscal 2000 figures)
 - Ricoh Group non-manufacturing subsidiaries in Japan: Reduced 10.4% in terms of total amount emitted at Ricoh Logistics Systems; reduced 6.1% at Ricoh Techno Systems; reduced 10.8% at marketing subsidiaries; and increased 9.8% at Ricoh Leasing Company (compared to figures in the base fiscal year*) (*Base fiscal year: 2000 at Ricoh Logistics Systems and Ricoh Techno Systems and 2002 at marketing subsidiaries and Ricoh Leasing Company)
 - Ricoh Group manufacturing subsidiaries outside of Japan: Increased 2.2% in terms of total amount emitted (compared to fiscal 2000 figures)
- ▶ Progress in pollution prevention (compared to fiscal 2000 figures)
 - Environmentally sensitive substances used were reduced 36% and those emitted 77%.
 - Dichloromethane was completely eliminated from the manufacturing process in March 2005.
 - Greenhouse gas emissions other than CO₂ were reduced 20.7%.
 - The emission of ozone depleting substances were reduced 88%.
- ▶ Progress in resource conservation and recycling (compared to fiscal 2000 figures)
 - The amount of waste generated was reduced 2.5%.
 - The waste recycling rate went up to 85.2–99.0%.
 - Water consumption was reduced 4.7%.
 - Paper purchase was reduced 14.1%.
- ▶ The recycled paper use rate for paper production improved to 51%. Efforts to improve the rate will be continued.
- ▶ A trial method using a cost table was chosen to calculate environmental impact in the mold pressing process of parts.
- ▶ Out of 622 suppliers of Ricoh Group in Japan, 618 submitted certificates indicating the nonuse of chlorine organic solvents.
- ▶ The green purchasing rate in fiscal 2004 was 99% in terms of money value.
- ▶ Sustainable environmental management indicators were set. A simulation to measure the effect on cost was conducted when the new environmental action plan was made out.
- ▶ Based on some issues identified in the sustainable environmental management system, a management systems integration plan to improve performance and streamline the process was made.
- ▶ The creation of a sustainable environmental management system was completed as planned in and outside of Japan.
- ▶ Regional headquarters took part in forest preservation projects and attained their goals. Their activities were expanded to regional sales companies and their plants.
 - Europe: 1 (started in fiscal 2002)
 - The Americas: 1 (started in fiscal 2003 in cooperation with Ricoh Latin America, Inc.)
 - Asia and Pacific region¹: 1 (started in fiscal 2002 in cooperation with Ricoh Australia Pty, Ltd.)
 - Former China region²: 1 (started in fiscal 2001 and has now ended)
 - Japan: 8 (started in fiscal 1999–2001), 3 (started in fiscal 1999–2001 and has now ended)

1. Asia (except Japan and China but including Hong Kong and Taiwan) and Oceania 2. China, Hong Kong, and Taiwan *Number of projects driven by regional headquarters