

Environmental Action Plan up to Fiscal 2007 and Fiscal 2005 Results

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

1 Improving environmentally-friendly functions and promoting environmental technological development	1) Develop new environmental technologies. (*Details of the progress of new technologies not currently released.) Page 21 ① Develop new environmental technologies to reduce resource use. ② Develop new environmental technologies to realize a society that is less dependent on fossil resources. 2) Improve environmentally-friendly functions. ① Promote the use of energy-saving technologies in products. Page 23 • Achieve Ricoh's energy-saving goals. ② Promote the use of resource-saving technologies in products. • Improve the quantity of reusable parts used by a factor of at least five (compared to fiscal 2003 figures in Japan). • Increase the quantity of recycled plastics used to 1,000 tons or more. ③ Observe Ricoh standards that cover environmentally-sensitive substances emitted by products. Page 31 • Observe Ricoh standards that cover such substances as ozone, dust, and VOC.
2 Promoting green marketing	① Increase the number of recycled copiers marketed. Page 27 • Increase the number of recycled copiers marketed by a factor of at least 10 (compared to fiscal 2003 figures in Japan). ② Promote the green marketing of paper. • Improve the recycled pulp use rate for paper products to 60% or more (in Japan).
3 Environmental conservation activities that improve the effect on cost at plants and offices	1) Promote energy conservation at business sites. ① Reduce total amount of CO₂ emitted as a result of business activities. Page 35 • Reduce CO ₂ emissions by 12% by fiscal 2010 (Ricoch 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% (Ricoch 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% (Ricoch 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 (Ricoch production sites and manufacturing subsidiaries in and outside of Japan). ④ Reduce paper consumption. • Reduce paper consumption by at least 10% (Ricoch, manufacturing and non-manufacturing subsidiaries in Japan, and manufacturing subsidiaries outside of Japan, compared to fiscal 2002 figures). 3) Promote pollution prevention at business sites. ① Completely eliminate the use of chlorine organic solvents. Page 45 • Completely eliminate chlorine organic solvents used in manufacturing Organic Photo Conductors at manufacturing contractors as well as at Ricoh manufacturing divisions. ② Reduce greenhouse gas emissions (except CO₂). 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 (Ricoch and affiliates in and outside of Japan). • Make and implement plans to improve sites where pollution is detected.
4 Improving the sustainable environmental management system and making it more consistent through systems integration	1) Improve the sustainable environmental management system. ① Improve the ISO 14001 system. Page 49 • Integrate the sustainable environmental management system with that of Ricoh (in fiscal 2005) and the Ricoh Group (in fiscal 2007). ② Create a system of managing chemical substances contained in products. Page 31 • Create and enforce a system of managing chemical substances contained in Ricoh Group products (in fiscal 2005). ③ Improve the sustainable environmental management information system. Page 51 • Introduce the information system, which manages real-time information on the environmental impact caused at resource processing sites, to various business divisions other than the imaging equipment division. • Introduce the information system, which manages real-time information on the environmental impact caused by transportation processes, to overseas transportation processes.
5 Promoting environmentally-friendly social contribution activities to preserve the ecosystem	① Promote forest conservation activities and environmentally-friendly social contribution activities to preserve the ecosystem. Page 63 • Promote environmentally-friendly social contribution activities to preserve the ecosystem (overseas regional sales headquarters; Ricoh production sites, manufacturing subsidiaries, and marketing subsidiaries in Japan; Ricoh Logistics Systems Co., Ltd.; Ricoh Leasing Company, Ltd.; and Ricoh San-ai Service Co., Ltd.).

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

Progress (fiscal 2005 performance)

- ▶ For imaging equipment, a range of elemental technologies is being developed to reduce size and weight.
- ▶ Efforts are being made to adopt new materials to replace oil. In fiscal 2005, plant-based plastic parts were used in multifunctional copiers for the first time in the industry.

- ▶ Monochrome and color multifunctional copiers that achieved energy-saving targets were put on the market.

- ▶ Quantity of reusable parts used increased 2.3 times.
- ▶ Quantity of recycled plastic used amounted to 578 tons.

- ▶ Ricoh's standards for ozone, dust, and VOC were achieved in 10 models of copiers, multifunctional copiers, and printers launched on the market in fiscal 2005.

- ▶ Sales of recycled copiers increased 3.1 times.

- ▶ Composition ratio of recycled pulp in paper was increased to 56% (51% in fiscal 2004).

- ▶ Total CO₂ emissions decreased 3.7%.
- ▶ Total CO₂ emissions increased 2.8%.

- ▶ Ricoh and manufacturing subsidiaries in Japan: Total CO₂ emissions increased 2.0%.
- ▶ Manufacturing subsidiaries outside of Japan: Total CO₂ emissions increased 9.0%.
- ▶ Changes in total CO₂ emissions: 18.1% reduction at sales subsidiaries; 3.1% increase at Ricoh Technosystems; 0.3% reduction at Ricoh Leasing; 8.6% reduction at Ricoh San-ai Service; 7.6% reduction at Ricoh Logistics Systems
- *Each company's base year for comparison: 2002 for sales subsidiaries, Ricoh Leasing, and Ricoh San-ai Service; 2000 for Ricoh Technosystems and Ricoh Logistics Systems

- ▶ Generated waste decreased 0.5%.
- ▶ Changes in generated waste: 9.8% reduction at sales subsidiaries; 21.9% reduction at Ricoh Technosystems; 23.3% increase at Ricoh Leasing; 1.5% reduction at San-ai Service; 26.3% reduction at Ricoh Logistics Systems
- *Each company's base year for comparison: 2002 for Ricoh Logistics Systems and 2004 for other companies

- ▶ Waste recycling rate improved from 84.6% to 98.4%.

- ▶ Water consumption decreased 9.1%.

- ▶ Paper consumption decreased 1.2%.

- ▶ Use of chlorine organic solvents was completely discontinued in the consignment production of photoconductors at plants other than Ricoh's in March 2006.

- ▶ Greenhouse gases other than CO₂ were reduced by 30%.

- ▶ Examination of all nonproduction sites of the Ricoh Group, approximately 1,000 sites, was completed.
- ▶ No contamination was found at nonproduction sites where the examination of surface soil was conducted in fiscal 2005.

- ▶ In fiscal 2005, Ricoh's standardized ground rules for its environmental management system were created. The company is scheduled to acquire integrated certification by a third-party organization by the end of fiscal 2006.

- ▶ Common guidelines for the Ricoh Group were established. A system of managing chemical substances contained in products was created based on guidelines for the entire Ricoh Group in Japan.

- ▶ For digital printers, an information system that manages information about environmental impact generated by resource input was created.
- ▶ Detailed information items to be identified are being examined, and issues to be solved at the introduction of the system are being discussed.

- ▶ Environmentally-friendly social contribution activities to preserve the ecosystem were expanded at home and abroad in fiscal 2005, and sales subsidiaries and plants in various places actively participated in the projects.
 - Regional headquarters and sales subsidiaries outside of Japan: 62 projects
 - Manufacturing subsidiaries outside of Japan: 16 projects
 - Ricoh manufacturing subsidiaries and production sites in Japan: 72 projects
 - Sales companies in Japan: 116 projects
 - Non-manufacturing companies in Japan (Ricoh Logistics Systems, Ricoh Leasing, and Ricoh San-ai Service): 9 projects