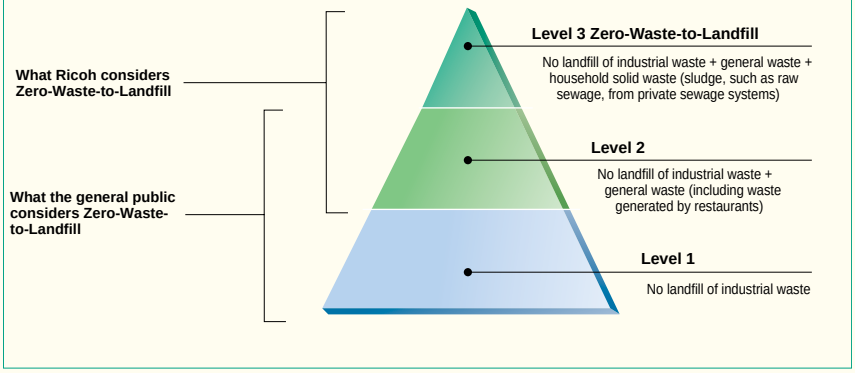
The Ricoh Group promotes Zero-Waste-to-Landfill activities at not only major production sites, but also nonproduction sites, including sales companies.

● 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 companies in Japan as well as at sales companies outside Japan.

* 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 2004

◎ Reduce generated waste by at least 13% (Ricoh and Ricoh Group manufacturing subsidiaries, compared to fiscal 2000)
◎ Improve the waste recycling rate to at least 90% (Ricoh Group non-manufacturing subsidiaries in Japan)
◎ Reduce water consumption by at least 10% (Ricoh and Ricoh Group manufacturing subsidiaries, compared to fiscal 2000)
◎ Reduce paper purchases by at least 10% (Ricoh, Ricoh Group manufacturing subsidiaries, and Ricoh Group non-manufacturing subsidiaries in Japan, compared to fiscal 2000)

● Review of Fiscal 2004

Although the amount of waste generated was heightened due to the increase in production of supplies, the resource recovery rate is improving, even at non-manufacturing sites, with the progress of Zero-Waste-to-Landfill activities (see table ❹). The volume of industrial water used decreased, compared to the figures in the previous fiscal year, due to improvements in the production process. However, the goal was not achieved because production increased to a higher level than planned (see graph ❷). Paper purchases were reduced by 14.1% due to the positive use of duplex and n-up copying functions and the introduction of projectors to meetings.

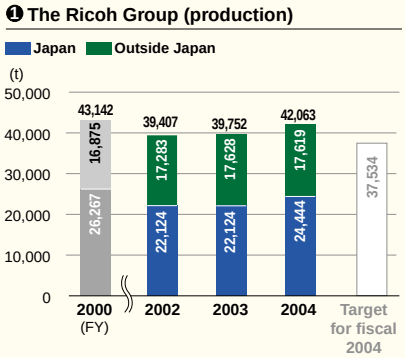
● Future Activities

The plan for fiscal 2005 and thereafter estimates a large-scale increase in production as a result of business expansion. To limit the generation of waste, Ricoh will promote improvements in the production process to make the most of resources at not only production sites but also the development and design divisions.

<The Entire Ricoh Group>

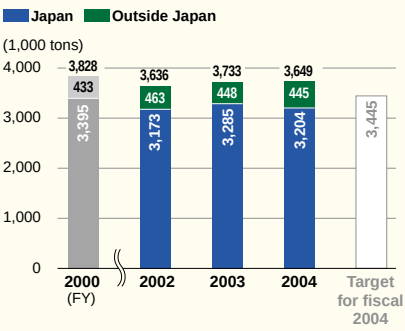
Total Amount of Waste Generated

❶ The Ricoh Group (production)



Volume of Industrial Water Used

❷ The Ricoh Group (production)



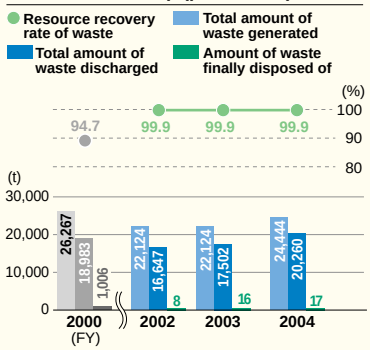
Segment Environmental Accounting of Recycling Activities at Business Sites (The Entire Ricoh Group)

Costs			Effects			
			Economic benefits		Effect on environmental conservation	
Item	Main cost	Costs	Items	Benefits	Reduction item	Amount
Business area cost	Resource circulation cost	¥1,094.4 million	Reduction in waste disposal expenses	¥12.3 million	Amount of waste disposed/ reduced	2.3 (t)
			Proceeds from sale of valuables	¥231.2 million		

<Japan>

Resource Recovery Rate of Waste/Total Amount of Waste Generated/Total Amount of Waste Discharged/Amount of Waste Finally Disposed of

❸The Ricoh Group (production)



❹The Ricoh Group (nonproduction)

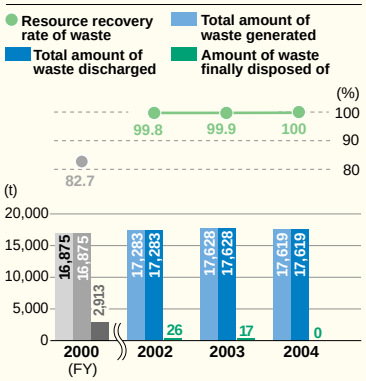
	Resource recovery rate of waste (%)	Total amount of waste discharged (t)	Amount of waste finally disposed of (t)
Sales Companies	85.2	2,255	335
Maintenance and Services (Ricoh Technosystems)	98.5	2,477	36
Logistics (Ricoh Logistics System)	96.7	3,773	124
Finance (Ricoh Leasing)	90.6	57	5

* 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

❺The Ricoh Group (production)



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

* With the change in the method used to total the amount of waste at domestic business sites, data in graphs ❶, ❷, and ❸—except those for fiscal 2004—are revised.

Zero-Waste-to-Landfill Activities at Production Sites outside Japan

<Shanghai Ricoh Facsimile Co., Ltd. (China), Ricoh Wellingborough Products Ltd. (U.K.)>

Shanghai Ricoh Facsimile Co., Ltd. (SRF), and Shanghai Ricoh Digital Equipment Co., Ltd. (SRD), achieved Zero-Waste-to-Landfill in December 2004. Corner displays providing environmental information were set up to build environmental awareness among employees, and competitions for crafts using waste were held and participated in by all divisions. Searching for new recycling companies was also an important issue for both companies. In Shanghai, IC substrates, used toner, oily mops, and ballpoint pen refills are classified as “hazardous waste” and must be incinerated. However, because simply incinerating such waste does not satisfy Ricoh’s definition of Zero-Waste-to-Landfill, the companies had to look for a recycling company that provides an energy recovery service. Currently the companies sort waste into seven categories and plan to add subcategories to recycle into valuable resources. Ricoh Wellingborough Products Ltd., a manufacturing subsidiary in the United Kingdom, achieved Zero-Waste-to-Landfill in September 2004.

Maintenance of Zero-Waste-to-Landfill and Continuous Improvement Activities

<Ricoh Electronics, Inc. (United States)>

Ricoh Electronics, Inc., a manufacturing subsidiary in the United States, became a Zero-Waste-to-Landfill facility in February 2001. Since then the company has continued to promote the effective use of resources in various aspects, and reduce waste and emissions. REI established the Sustainability Improvement Sharing & Benchmarking System, which encourages employees to voluntarily submit process improvements that result in reduced environmental impact, and achieve high economic performance. In fiscal 2004, employees submitted 504 improvements, and recognition awards were given for each improvement. These improvements include the elimination of packaging materials used in packing thermal paper rolls, the reuse of laminated cardboard boxes and packaging paper used in packing parts, and improved efficiency in perforating sheet metal parts. These achievements were recognized by society as well; Ricoh Electronics was one of the top 10 companies in the Waste Reduction Awards Program that were recognized in December 2004 by the California Integrated Waste Management Board.

Zero-Waste-to-Landfill Activities at Outside Japan Sales Campanies

<Ricoh Europe B.V. (Netherlands)>

Zero-Waste-to-Landfill activities that started at production sites are now spreading to overseas non-production sites. In October 2004, Ricoh Europe (REBV), the European Regional Sales Headquarters, achieved Zero-Waste-to-Landfill status at both its office and spare part distribution center. The initiative got started by identifying types and volumes of waste being generated at the office and ESPC and cooperating in improving waste processing flow with recycling companies. To raise the awareness of its 400 staff members in sorting waste, an environmental promotion team was created. By producing posters illustrating types of waste, sorting and collection methods as well as indicating the amount of resources saved by Zero-Waste activities and promoting duplex copying and electronic files for the paperless office, the company continued its efforts to reduce resource use and raise awareness. The waste-processing cost decreased by 25% thanks to these efforts. Similar steps are expected to be taken at the branch office in Düsseldorf, Germany .

Waste-sorting corner at the Head Office

Poster