Ricoh Group's 16th Mid-Term Environmental Action Plan

Ricoh carries out the Environmental Action Plan with new targets and strategies in anticipation of changes in society.

Process of forming the 16th Mid-Term Environmental Action Plan

The Ricoh Group strives for environmental conservation after envisioning the ideal global environment and imposing high goals upon itself. To that end, the Group sets a mid-term environmental action plan every three years and promotes allparticipatory reduction activities. We believe it is also necessary to set longer-term goals for continuously achieving results and set the Year 2050 Extra-Long-Term Environmental Vision as one of our goals. The 15th Mid-Term Environmental Action Plan (from fiscal 2005 to 2007) is the first mid-term environmental action plan for which targets were set by the back-casting method. When formulating the 16th Mid-Term Environmental Action Plan (from fiscal 2008 to 2010), we reviewed the Extra-Long-Term Environmental Vision. The latest information, such as the IPCC Fourth Assessment Report, has revealed some issues that should be addressed without delay, including the acceleration of global warming and depletion of resources. We set the Year 2013 Long-Term Environmental Goals* in consideration of such global-scale issues, as well as long-term business forecasts of the Ricoh Group, development of environmental technologies and so forth, which are reflected in the action plan.

Targets and important strategies of 16th Mid-Term Environmental Action Plan

The targets and main strategies of the 16th Mid-Term Environmental Action Plan are shown below. The Ricoh Group will carry out this plan while enhancing and accelerating sustainable environmental management under new strategies.

Fiscal 2010 goals 20% reduction (integrated environmental impact) from fiscal 2000 levels

(1) Making thorough efforts for effective utilization of resources to realize a resource-recirculating society

The depletion of resources is now a practical issue. It is feared that not only fossil resources, but also mineral resources and water, might run short in the near future. Some of them are forecast to run short within 20 years. We are no longer in an age when companies can use abundant resources for production. The Ricoh Group has striven to use resources efficiently from the viewpoint of reduction of waste. Under the 16th Mid-Term Environmental Action Plan, our priority will shift to effective

use based upon the reduction of resource use and recycling of resources. We will actively promote the innovation of manufacturing processes and endeavor to establish a recycling-oriented manufacturing system, aiming to become a pioneering corporate model in a resource-recirculating society.

(2) Developing environmental technologies contributing to the reduction of environmental impact in society as a whole

It will never be possible for the Ricoh Group to achieve the high goals it has set if its business activities are based solely upon the existing technologies and methodology. The Ricoh Group will accelerate technological development to reduce environmental impact in business activities while expanding the development areas beyond its business sectors. We will thus strive to develop environmental technologies that will contribute to the reduction of environmental impact in society as a whole.

(3) Making sure to contribute to the reduction of environmental impact at customers' sites

Ricoh has put much effort in developing energy-saving technologies for copiers for many years. A customer survey, however, has shown that less than 10% of the customers actually use the energy-saving mode. No matter how excellent the energy-saving function is, it is meaningless if it is not used. Under the 16th Mid-Term Environmental Action Plan, Ricoh will not only work to improve energy-saving technologies, but also focus on saving energy and reducing paper-caused environmental impact by raising the rates of energy-saving and duplex copying function use by customers.

(4) Promoting activities to conserve biodiversity aiming to sustain and restore the Earth's self-recovery capabilities

To realize the ideal global environment, it is not simply sufficient to reduce damage to the global environment. It is important to restore the Earth's self-recovery capabilities. Recognizing the influence caused by its business activities upon, and responsibility for, biodiversity, the Ricoh Group will promote social contribution activities aiming at the conservation of biodiversity as an essential complement to environmental conservation activities.

Ricoh Group's 16th Mid-Term Environmental Action Plan (FY 2008 to 2010) * For items that do not specify a target fiscal year, the target year is fiscal 2010.

1

Using resources

society

effectively to realize a

resource-recirculating

Developing frontier

technologies to cope

with climate change

promoting business activities that reduce

energy consumption

environmental

problems and

(1) Develop environmental technologies aiming to reduce environmental impact.

• Develop environmental technologies contributing to the reduction of environmental impact in business and society as a whole.

(2) Increase recirculation of resources and use resources effectively to reduce the use of new resources in products.

1) Promote the reuse of parts.

- Increase the use of reusable parts recovered from used products to 1,910 tons by fiscal 2010 (Japan).
- Increase the use of reusable parts recovered from used products to 6,000 tons by fiscal 2010 (outside Japan).

2) Promote PCMR (plastic closed material recycling).

• Achieve the fiscal 2010 target for the quantity of recycled plastic used (Japan). Fiscal 2010 target: 750 tons

3) Increase the amount of resources recirculated from used products (outside Japan).

• Increase the amount of resources recirculated from used products (the amount reused + the amount recycled) to 16,000 tons by fiscal 2010.

4) Use plant-based plastic for products.

· Commercialize plant-based toners.

(3) Reduce waste generated by production activities.

- 1) Reduce waste of resources in the thermal media business.
- Reduce the amount of waste generated by 10%, compared to fiscal 2006 figures.
- 2) Reduce waste of resources relating to packaging materials.
- Reduce packaging material waste per production volume in the manufacturing of imaging products in Japan by 30%, compared to fiscal 2006 figures.

3) Reduce waste generated in the manufacturing of polymerized toners.

• Reduce waste generated per production volume by 77%, compared to fiscal 2006 figures.

2

(1) Promote development of energy-saving technologies.

Develop technologies to save energy consumed by products and innovate production processes that contribute to the reduction of environmental impact in business and society as a whole.

(2) Improve the energy-saving performance of products.

1) Achieve Ricoh's energy-saving targets.

(3) Reduce greenhouse gas emissions in production activities.

- Reduce CO₂ emissions by 12% by fiscal 2010 (Ricoh and manufacturing subsidiaries in Japan, compared to fiscal 1990 figures).
- Reduce CO₂ emissions by 10% by fiscal 2010 (manufacturing subsidiaries outside of Japan, compared to fiscal 1998 figures).
- Reduce emissions of greenhouse gases other than CO2 by 10% by fiscal 2010 (semiconductor business sector, compared to fiscal 1995 figures).

(4) Reduce greenhouse gas emissions in non-production activities.

• Reduce CO₂ emissions to a level that is below fiscal 2006 figures (Ricoh and non-manufacturing subsidiaries in Japan).

(5) Reduce CO2 emissions in logistics.

• Improve by 1% or more by the basic quantity unit (compared to the previous fiscal year's figures).

(6) Expand CO₂ emission reduction efforts to involve suppliers.

(7) Contribute to the reduction of environmental impact at customers' sites.

1) Survey the frequencies of energy-saving and duplex copying functions used and raise their rates of use.

3

(1) Improve environmentally-friendly functions.

- 1) Promote measures to reduce chemical emissions.
 - Observe Ricoh standards that cover such substances as ozone, dust, and VOC.

Upgrading chemical substance control aiming at environmentally safer

manufacturing and business activities

(2) Upgrade risk management relating to chemical substances.

1) Establish a global system for management of risks from chemical substances.

2) Reduce environmentally-sensitive substances.

- Reduce the amount of environmentally-sensitive substances used by at least 30% (Ricoh production sites and manufacturing subsidiaries, compared to fiscal 2000 figures).
- Reduce environmentally-sensitive substance emissions by at least 80% (Ricoh production sites and manufacturing subsidiaries, compared to fiscal 2000 figures).

(3) Enhance the management of chemical substances contained in products.

1) Respond to the REACH Regulation.

• Upgrade systems for management and information transmission necessary for responding to the REACH Regulation.

4

Conserving biodiversity

(1) Promote ecosystem conservation activities to enhance the self-recovery capabilities of the global environment.