

Combining environmental conservation and business growth

We favor a transformed business model that supports the realization of a sustainable society.

Ricoh's take on sustainability

The trend toward globalization of economies continues apace, and emerging countries continue to enjoy economic growth. Along with this, however, comes an ever-increasing number of problems for society, particularly issues related to climate change, biodiversity depletion, a widening gap between the haves and have-nots and greater poverty, and human rights abuses. Finding solutions to these problems and ensuring a higher level of sustainability for society, which includes the global environment, are pressing concerns for the people of our planet.

Companies, as global citizens, are expected to act with greater responsibility in regard to the issues that burden society. In addition, investors and customers—stakeholders—see corporate efforts to enhance sustainability as a source for judging business opportunities and potential risks. At the Ricoh Group, we believe that efforts to promote sustainability are indispensable to enhancing corporate value.

The Ricoh Group has embraced a new activity slogan—Driving Sustainability for Our Future. This slogan incorporates a robust determination to contribute to the realization of a sustainable society by providing new value created through business.

In our efforts to enhance sustainability, we are directing particular attention toward environmental issues, such as climate change.

Future ideal and environmental management framework

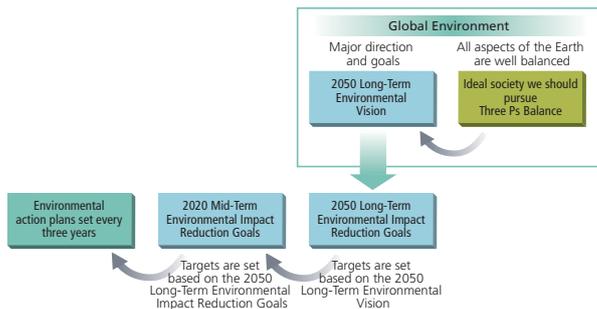
To the Ricoh Group, a sustainable society is one that pursues a Three Ps Balance—Planet (environment), People (society) and Profit (economic activities)—and reduces the environmental impact of society to a level that the Earth's self-recovery capabilities can manage.

This future ideal requires high targets, viewed from the long term, and consistent efforts to reach stated goals.

In setting environmental goals, we apply the back-casting method, through which the ultimate goals are envisioned first and target values are then determined as mileposts along the journey to these goals. Specifically, we drew up our 2050 Long-Term Environmental Vision from the Three Ps Balance approach to realize an ideal society and then established Mid- and Long-Term Environmental Impact Reduction Goals, followed by detailed environmental action plans for every three years.

These environmental action plans lay out measures and goals for activities to reduce the environmental impact exerted on our planet and activities to protect the biodiversity that boosts the Earth's own recovery capabilities, with the aim of achieving our ultimate goals. [▶ WEB 1, 2, 3](#)

• Setting goals using the back-casting method



• Ricoh Group Mid- and Long-Term Environmental Impact Reduction Goals

Energy conservation and prevention of global warming	Reduce the total lifecycle CO ₂ emissions by the Ricoh Group by 30% by 2020 and by 87.5% by 2050 from the 2000 level
Resource conservation and recycling	<ol style="list-style-type: none"> 1. Reduce the new input of resources by 25% by 2020 and by 87.5% by 2050 from the 2007 level 2. Reduce the use of or replace the major materials of products that are at high risk of depletion (e.g., crude oil, copper and chromium) by 2050
Pollution prevention	Minimize risks of chemical substances throughout the product lifecycle by 2020 in compliance with the Strategic Approach to International Chemicals Management (SAICM) *Revised in March 2012

▶ WEB 1 Three Ps Balance: www.ricoh.com/environment/management/earth.html
 ▶ WEB 2 Long-Term Environmental Vision and Goals: www.ricoh.com/environment/management/vision.html
 ▶ WEB 3 Mid- and Long-Term Environmental Impact Reduction Goals: www.ricoh.com/environment/strategy/target.html

Our definition of sustainable environmental management

The Ricoh Group’s environmental conservation efforts have progressed through three stages: passive, proactive, and now responsible. During the first stage, we coped with social pressures by adhering to environmental laws and regulations. During the proactive stage, while continuing to fulfill external (legal and social) requirements, we voluntarily set our own goals based on our sense of mission as a global corporate citizen. In 1998, we

pioneered the concept of sustainable environmental management—the responsible stage.

This concept is not just a business strategy designed to strike a balance between activities that generate profits with greener practices. Rather, it signifies our commitment to generate profits through environmental conservation activities, integrate these activities with business pursuits, and thereby continuously promote environmental conservation as part of our business processes.

► WEB 4

• **Three stages in environmental conservation activities (from the passive, to proactive to responsible stage)**



Measures to mitigate climate change

The Synthesis Report of the IPCC*¹ Fifth Assessment Report, released in 2014, contains a statement to the effect that the primary cause of global warming is, with extremely high confidence, greenhouse gas emissions from man-made sources. To the Ricoh Group, measures to mitigate climate change are an important part of business, and we undertake activities based on issues of materiality, setting top priority areas within a materiality matrix to guide us in our efforts. ➔ p. 18

Specifically, we identify risks exerted by climate change in our business activities as well as opportunities derived through responses to climate change, and we then tackle issues over the entire lifecycle of our operations. In procurement, we seek to reduce input of new resources through product-oriented 3R—reduce, reuse, recycle—activities and limit greenhouse gases that accompany the mining and processing of raw materials. In manufacturing, we apply innovations in production processes, and in sales and logistics, we practice eco-friendly driving and are implementing more efficient distribution methods. In product use, we develop and provide high-performance, energy-efficient products that address heightened energy-saving requirements from customers and satisfy increasingly tougher standards and regulations, and we create solutions, such as paperless conferences, and present new workstyles that translate into new reduced environmental impact.

In addition, we enthusiastically endorse external initiatives to solve problems associated with climate change and to realize a low-carbon society. In September 2014, coinciding with the UN Climate Summit, we endorsed the Initiative to Support the

World Bank Group’s Carbon Pricing as well as The Trillion Tonne Communiqué, spearheaded by CLG,*² a U.K. corporate group.

Going forward, we will reinforce our efforts to provide energy-saving products and solutions and activities to reduce our own greenhouse gas emissions. We will strive to grow our businesses while tackling environmental management aimed at reaching our Mid- and Long-Term Environmental Impact Reduction Goals.

*¹ IPCC: Intergovernmental Panel on Climate Change
 *² CLG: Corporate Leaders’ Group on Climate Change
 *³ Actual results of fiscal 2001
 *⁴ Equivalent to results forecast for fiscal 2021

Mid-Term Environmental Impact Reduction Goals: Energy conservation and prevention of global warming

The Ricoh Group is pushing activities aimed at reducing total lifecycle CO₂ emissions by 30% from the 2000 level by 2020. In fiscal 2015, emissions were down 35.8%, compared with the base year—2000—but the amount was 1.9% higher than in fiscal 2014. The cause of this slight year-on-year increase was a larger volume of laser printers sold and a higher CO₂ emission intensity in Japan. Nevertheless, we were able to squeeze the inevitable increase, mainly through the development of energy-saving products that curb emissions when the products are in use, and we are still on a favorable track to reaching our mid-term goal.

• **Change in lifecycle CO₂ emissions**



► WEB 4 Three stages in environmental conservation activities: www.ricoh.com/environment/vision/3steps.html

Environmental action plan leads to enhanced corporate value

Under the 18th Environmental Action Plan (April 2014 to March 2017), we have set out measures and goals in five areas, comprising four pillars, to reduce environmental impact—1) energy conservation and prevention of global warming, 2) resource conservation and recycling, 3) pollution prevention and 4) biodiversity conservation to boost the Earth’s

self-recovery capability—built upon a basis for environmental management that underpins efficient and effective execution of various activities.

Strategic priorities under the 18th Environmental Action Plan are to reduce environmental impact exerted by our customers, enhance cooperation with stakeholders, and expand environment-related businesses. Progress made in fiscal 2015 is highlighted below. [▶ WEB 1](#)

• Progress on strategic priorities under the 18th Environmental Action Plan

Reduce environmental impact exerted by our customers	<ul style="list-style-type: none"> Reduced CO₂ emissions by 374,000 tons (equivalent to 1.2 times the total amount of CO₂ emitted from Ricoh Group factories around the world) in fiscal 2014 through the provision of videoconferencing systems, paperless solutions, and other products/services Excellent energy-saving performance recognized with winning the annual award for energy-saving features of color MFPs for the second straight year Developed technologies, including a complete solid-state dye-sensitized solar cell and energy-generating rubber, appropriate for new products and solutions that reduce environmental impact
Enhance cooperation with stakeholders	<ul style="list-style-type: none"> As a member of Japan Climate Leaders’ Partnership (Japan-CLP), offered policy suggestions and exchanged opinions with policy-makers regarding climate change issues Announced endorsement of Initiative to Support the World Bank Group’s Carbon Pricing Conducted environment-inclusive CSR self-assessment survey encompassing 560 suppliers for the Group’s production sites in China (response rate: 100%). Confirmed that there are no material risks relating to environmental management systems or control systems for chemical substances
Expand environmental businesses	<ul style="list-style-type: none"> Advised customers to try carbon offset printing services, paperless solutions and other environmentally conscious options Acquired “Gold Rating” in supplier sustainability survey conducted by EcoVadis,* thereby meeting customer request for performance assessment validation Worked to achieve global optimization of reuse/recycling businesses. Increased sales of recycled copiers

* EcoVadis: A sustainability rating company for global supply chains, based in France, EcoVadis assesses suppliers from 99 countries and across 150 business sectors on corporate policies, initiatives and achievements in CSR management and provides customers with its findings.

Environmental business development: Building a global resource-recirculating business model

In 1994, Ricoh formulated the Comet Circle™, a concept to support the realization of a sustainable society. It looks beyond the domains of the Ricoh Group, making and marketing products, and embraces the idea of reducing environmental impact over the entire product lifecycle, including associated upstream and downstream processes. The key to mitigating environmental impact throughout the lifecycle of products is the establishment and effective application of a resource-recirculating process into product manufacturing.

Under the 18th Environmental Action Plan, we are working toward global optimization of our reuse/recycling businesses, which have already taken root in regions worldwide, particularly in developed countries. As part of this effort, we launched a recycled MFP business in China in August 2015. The start of this business marks a first for an MFP manufacturer, and we had to obtain permission from the General Administration of Quality Supervision, Inspection and Quarantine of the People’s Republic of China (AQSIQ) to import used MFPs and recondition them for sale.

Used MFPs destined for reconditioning at a plant in Fuzhou, Fujian Province, will come from around the world, including Japan, specifically, the RICOH Eco Business Development Center, a newly opened facility in Gotemba, Shizuoka Prefecture. [▶ p. 29](#)

Currently, we sell around 60,000 recycled MFPs a year on a global basis. In three years, buoyed by a projected annual volume of 10,000 units in China, global sales could reach 80,000 units.

This approach to reinforcing our reuse/recycling businesses will not only grow operations but also spur progress toward the Mid-Term Environmental Impact Reduction Goals through reduced input of new resources. [▶ WEB 2](#)

• Resource-recirculating process

Regional recirculation*



- Use of recycled copiers in undeveloped areas in each region
- Comprehensive use of recycled parts

Global circulation



- Supply recycled copiers in regions where needed, to meet the needs of global supply and demand

* Four areas: Japan, the Americas, Europe, and Asia Pacific & China