

Eco Vision 2050

Formulation of Eco Vision 2050 for a sustainable Earth and society

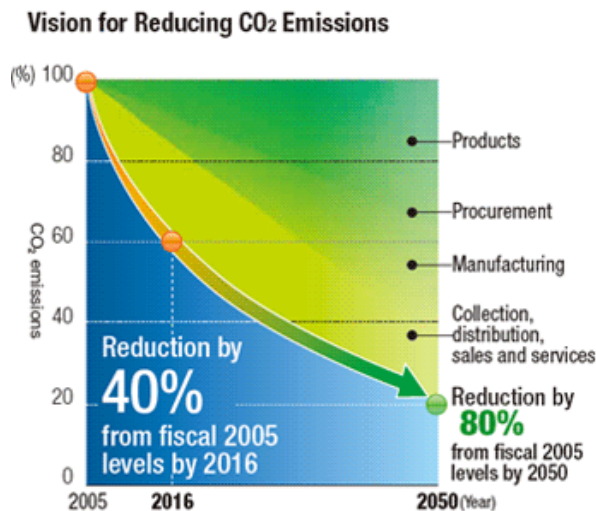
In January 2009 Konica Minolta formulated Eco Vision 2050 as its long-term environmental vision. This vision guides Konica Minolta in the right direction to achieve its future objectives and fulfill its responsibility as a global corporation by contributing to a sustainable earth and society.

Konica Minolta created the Medium-Term Environmental Plan 2016 as a milestone marker toward the goals outlined in its Eco Vision 2050.

➤ [Medium-Term Environmental Plan](#)

Eco Vision 2050

1. Reduce CO₂ emissions throughout the product life cycle by 80% by 2050, compared to 2005 levels
2. Promote recycling and effective use of Earth's limited resources
3. Work to promote restoration and preservation of biodiversity



Approach to Setting Targets for CO₂ Emissions in Eco Vision 2050

According to the Intergovernmental Panel on Climate Change (IPCC), greenhouse gas emissions in 2004 were 49 billion t-CO₂, which, divided by a world population of 6.4 billion people, amounts to 7.66 t-CO₂ per person per year. The amount of greenhouse gases that the earth can absorb naturally is thought to be 11.4 billion t-CO₂. Divided by the projected population of 9.2 billion people in 2050, this means the earth could naturally absorb 1.24 t-CO₂ per person in 2050. That is 80% less than current annual per capita emissions.

These estimates were used to determine the Eco Vision 2050 target of an 80% reduction in product lifecycle CO₂ emissions by 2050, compared to a fiscal 2005 baseline. In addition, the Medium-Term Environmental Plan 2016 uses backcasting* from this target to set a target of a 40% reduction by fiscal 2016.

* Backcasting: A way of thinking that involves defining a future action by sketching a desirable image of the future and a goal, and then looking back at the current situation from the perspective of that goal.

Basic Approach to the Environment

Konica Minolta Environmental Policy

The Konica Minolta Group aims to promote sustainable development and profitable growth. We integrate environmental, economic and social perspectives into our business strategies so that our business activities are implemented in harmony with human lives and with the environment in all aspects.

Our concept is to make steady progress toward resolution of environmental challenges based on quantitative measurement and analysis of reliable data in regard to environmental performance and impact. This basic concept is demonstrated in the following affirmation:

"Management Based On Facts"

1. Working toward a sustainable society as a global citizen

In response to the call for a sustainable society, we will conduct business activities from the perspective of on-going enhancement of performance in environmental preservation, economic growth and social responsibilities (ethics). Every one of us will enhance its knowledge and awareness on the environment, economies and societies on a global scale and act with responsibility in pursuit of a sustainable society.

2. Compliance with laws and other requirements

We will comply with legal requirements in respective countries and regions, as well as our Group standards. In addition, we will respect, in an equitable manner, expectations of our stakeholders and consensus in the international community.

3. Consideration for the environment throughout the entire life cycle of products and services

We are committed to reducing the environmental load in all stages throughout the entire life cycle of products and services, recognizing that responsibility for a product rests with its manufacture.

4. Initiatives to counter global warming

We will continuously reduce greenhouse gas emissions that derive from our business activities from the perspective of the life cycle of our products and services throughout the entire Group, recognizing that global warming is one of the most important world issues.

5. Initiatives toward a recycling-oriented society

We are always reviewing what we can do as a corporate citizen in order to create recycling-oriented society while striving for minimizing consumption of natural resources and promoting "Zero Waste Emission" activities. In addition, we will accelerate initiatives for the recovery and recycling of end-of-life products and packaging materials.

6. Prevention of chemical pollution and minimization of potential risks to the environment

We will take every countermeasure for preventing chemical pollutions, recognizing that chemical substances can impose significant impact on human health and safety and the environment. At the same time, we will continuously suppress use of chemicals and reduce discharge volume in order to minimize environmental risks.

7. Promotion of information disclosure

We will execute accountability to all the stakeholders by actively disclosing environmental information and ensuring risk communication. We will as well make every effort to accomplish our commitment to the societies. Our Environmental Policy is to be disclosed to the public.

8. Establishment of environmental objectives and targets

We establish and administer environmental objectives, targets, and management programs to translate this Environmental Policy into reality. We will continuously review such objectives, targets and programs for further improvement of our environmental performance.

April 1, 2014
Konica Minolta, Inc.
President and CEO



Shohei Yamana

Management System

Environmental Management System

Operating management system based on ISO 14001

To ensure efficient implementation of environmental management throughout the Group as a whole, Konica Minolta operates its management system based on ISO 14001, and it has established a basic policy of requiring that all Group production sites around the world work to obtain ISO 14001 certification.

To address a range of environmental issues, it is necessary to implement measures that take into account each stage in the product life cycle. To accomplish this, Konica Minolta believes that it must operate not only its manufacturing sites, but also its product development, sales and administration divisions under an integrated management system with efficient cooperation between divisions.

Based on this concept, Group companies in Japan have acquired integrated Group ISO 14001 certification as the cornerstone of the Group's environmental management.

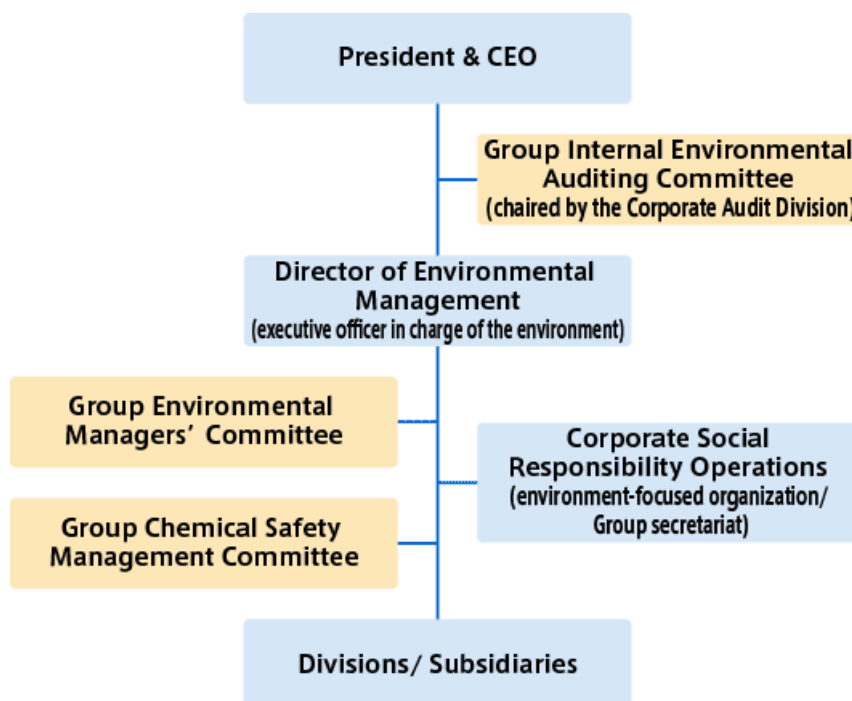
In carrying out initiatives, the Group sets key performance indicators (KPIs) and targets, assesses their degree of achievement quarterly, and works through the PDCA cycle in pursuit of continual improvement.

Organization

All aspects of environmental management overseen by the Executive Officer in charge of environmental affairs

Konica Minolta, Inc. has appointed an executive officer in charge of environmental affairs with the authority and responsibility for Group-wide environmental issues.

Furthermore, Konica Minolta has established a Group Environmental Managers' Committee headed by the General Manager of the Corporate Social Responsibility Operations as an organization for oversight of the environmental target implementation plan for the whole Group. The committee meets on a quarterly basis in principle, and in addition to promoting the environmental target implementation plan, it monitors progress and manages information concerning environmental issues across the Group.



Organization of Group environmental management

Environmental Audits

At Konica Minolta, the Group Internal Environmental Auditing Committee, which is chaired by the head of the Corporate Audit Division, directs the internal environmental auditing for the entire Group.

In addition, internal environmental audits are carried out at least once a year to confirm proper functioning of the management system and to assess compliance. In this way, the Group ensures that all its organizations are fully compliant.

Compliance with Environmental Regulations

Strengthening the global compliance system

As environmental problems such as global warming and the depletion of energy resources increase in scope to encompass entire regions, and indeed, the entire planet, government policies and regulations at the regional and national levels around the world are being reconsidered and strengthened in order to ensure sustainable growth.

As a global business enterprise, Konica Minolta is strengthening its global compliance system to ensure that all of its production sites and sales offices comply with all legal regulations.

In fiscal 2013, the Group strengthened its European environmental organizations' compliance support for sales companies in Europe. It also promoted regulation compliance at production sites and sales companies in each region (e.g. chemical substance regulations, regulations on chemicals contained in products, and recovery/recycling regulations in each country) through a system centered on environmental organizations in Europe, North America, China, and Japan.

Furthermore, the Group conducted compliance assessments of all Group production sites and confirmed the status of compliance at sales offices. No serious violations were found with regard to environment-related laws and regulations.

Strengthening the compliance system in China

As part of its efforts to strengthen its global compliance management system, Konica Minolta is working hard to assure adherence to environmental as well as health and safety regulations in China's quickly evolving regulatory environment.

The Group established an environmental umbrella organization in Konica Minolta Business Solutions (China) Co., Ltd., a sales company in China, in fiscal 2012.

The Group is making efforts in China, focused on this organization, to enhance the monitoring of trends in environmental laws and regulations related to products, comply with certification schemes, and acquire environmental labels. It is also continuing to implement compliance assessments of and regular legal review meetings at production sites.

Medium-Term Environmental Plan

Medium-Term Environmental Plan 2016

Konica Minolta has carried out various measures under the Medium-Term Environmental Plan 2015, which the company established as a milestone toward achievement of the long-term goals set out in its Eco Vision 2050. Already in fiscal 2013, more than half of the fiscal 2015 targets—the final goals of the plan—had been achieved, and it was anticipated that the remaining targets would also be achieved. Accordingly, the Group established the Medium-Term Environmental Plan 2016 for the period from fiscal 2014 to 2016 and started initiatives with the target year of fiscal 2016. Moving toward the goal of reducing CO₂ emissions throughout the product life cycle by 80% by 2050, which is a goal under Eco Vision 2050, the Group has set an overall goal for fiscal 2016 of reducing CO₂ emissions throughout the product life cycle by 40% in that fiscal year by reducing environmental impact through business operations.

› [Eco Vision 2050](#)

Overall goal for fiscal 2016:

Reduce CO₂ emissions throughout the product life cycle by 40% in fiscal 2016 compared to fiscal 2005

The Group anticipates making the following CO₂ reductions in each of the scopes listed below as it heads toward achievement of this goal.

Anticipated reductions in each scope (fiscal 2016):

Scopes 1 and 2 (development, production, sales and service):

Reduction by 8% gross from fiscal 2005 (11% per unit of sales)

Energy use: Reduction by 12% gross from fiscal 2005 (14% per unit of sales)

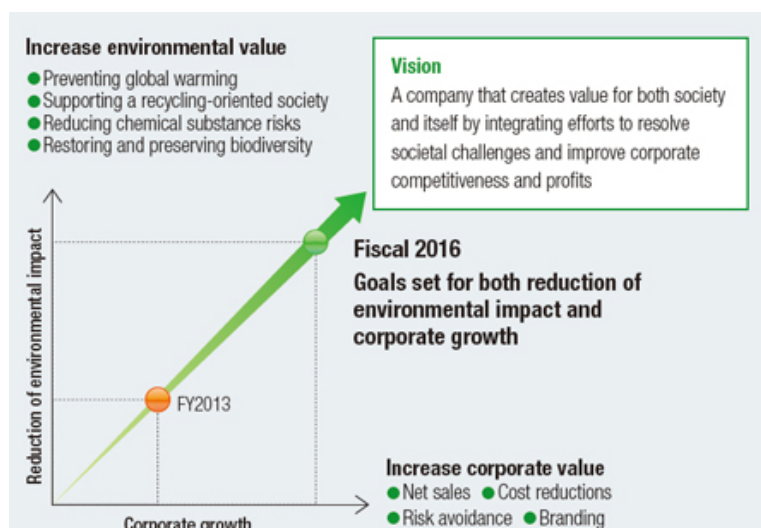
Scope 3 (procurement, distribution, product use):

Reduction by 50% gross from fiscal 2005 (52% per unit of sales)

Concept Behind the Medium-Term Environmental Plan 2016: Creating Shared Value (CSV)

When formulating the new plan, the Group moved its CSR a step forward, basing the plan on the concept of “creating shared value” (CSV). CSV is the approach that sustainable companies in the 21st century will be expected to embrace, where the enterprise creates value for both society and itself by integrating efforts to resolve societal challenges and improve corporate competitiveness and profits.

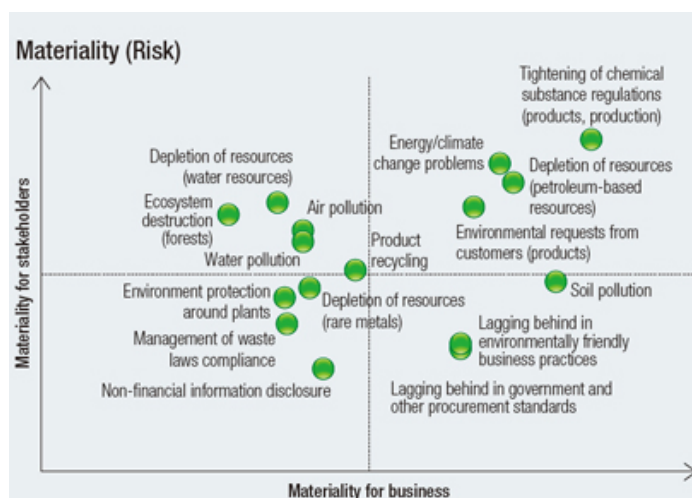
Based on this concept, the Medium-Term Environmental Plan 2016 establishes targets for both environmental impact reduction and corporate growth.



Materiality (Identifying Important Issues from Risks and Opportunities)

When formulating the Medium-Term Environmental Plan 2016, Konica Minolta conducted a materiality analysis from the perspective of risks and opportunities, incorporating the opinions of a third-party specialized institution, in order to identify important issues that affect both the environment and the company.

Specifically, it identified material risks and opportunities by selecting various issues related to the environment and assessing their impact on the interests of stakeholders including customers, shareholders and investors, suppliers, the international community, local communities, and employees, as well as their impact on the Group's business.



Important Themes and Issues

The material risks and opportunities identified through the materiality analysis were incorporated into the Medium-Term Environmental Plan 2016 as important themes and issues.

Konica Minolta's Three Green Activities—one for each phase of the lifecycle—Green Products (planning and development), Green Factories (procurement and production), and Green Marketing (distribution, sales and service, and collection and recycling) were singled out as key themes. Key issues were established for each theme from the perspective of risks and opportunities.

In terms of Green Products (planning and development), the Group will create the environmentally advanced products demanded by customers and society and comply with government procurement standards and environmental labeling requirements, in order to gain sales opportunities, further reduce environmental impact, and avoid risk by reliably complying with product-related laws and regulations.

With respect to Green Factories (procurement and production), the Group will establish production technologies and methods that translate into cost competitiveness, promote cost reductions through cooperation with suppliers, further reduce environmental impact, and avoid risk by reliably complying with production-related laws and regulations.

In terms of Green Marketing (distribution, sales and service, and collection and recycling), the Group will promote cost reductions and further reduce environmental impact through supply chain optimization coupled with distribution efficiency improvement and packaging material reduction. Furthermore, it will respond to customers' environmental requests, reduce environmental impact through ICT services, and plan and implement optimal product collection and recycling means, in order to facilitate the reduction of environmental impact for more customers.



Alongside these Three Green Activities, Konica Minolta also sets specific targets in the areas of both corporate value and environmental value.

Medium-Term Environmental Plan 2016

Important Theme	Important issues	Fiscal 2016 goals	
		Corporate value	Environmental value
Green Products (planning and development)	(1)Creating and providing the green products demanded by customers and society	<Sales> <ul style="list-style-type: none"> • Sales of Green Products: 640 billion yen(Share of sales: 58%) <Cost reductions> <ul style="list-style-type: none"> • Reduce cost of product materials <Branding> <ul style="list-style-type: none"> • Increase society's and customers' brand recognition 	<Preventing global warming> <ul style="list-style-type: none"> • CO₂ reduction during product use: 97 thousand tons • CO₂ reduction at suppliers: 100 thousand tons <Supporting a recycling-oriented society> <ul style="list-style-type: none"> • Resources used effectively: 42 thousand tons <Reducing chemical substance risks> <ul style="list-style-type: none"> • Control emissions
	(2)Conforming with government procurement standards and environmental label requirements	<Sales> <ul style="list-style-type: none"> • Zero lost sales opportunities 	<Environment overall> <ul style="list-style-type: none"> • Reduce environmental impact by conforming with standards and label requirements
	(3)Dependably complying with product-related laws and regulations	<Risk avoidance> <ul style="list-style-type: none"> • Zero effect on sales 	<Reducing chemical substance risks>

			<ul style="list-style-type: none"> Reduce hazardous chemical substance risk by conforming with laws and regulations
Green Factories (procurement and production)	(1)Green Factory operations that translate into cost competitiveness	<p><Cost reductions></p> <ul style="list-style-type: none"> Reduce costs of energy and materials (reduce loss) 	<p><Preventing global warming></p> <ul style="list-style-type: none"> CO₂ reduction during production: 20 thousand tons <p><Supporting a recycling-oriented society></p> <ul style="list-style-type: none"> Resources used effectively: 4 hundred tons <p><Restoring and preserving biodiversity></p> <ul style="list-style-type: none"> Sustainable use of water resources
	(2)Cooperation with suppliers that translates into cost competitiveness	<p><Cost reductions></p> <ul style="list-style-type: none"> Reduce costs of energy and materials (reduce loss) 	<p><Preventing global warming></p> <ul style="list-style-type: none"> CO₂ reduction on supplier side: 2 thousand tons <p><Supporting a recycling-oriented society></p> <ul style="list-style-type: none"> Resources used effectively: 6 hundred tons
	(3)Dependably complying with production-related laws and regulations	<p><Risk avoidance></p> <ul style="list-style-type: none"> Zero effect on production 	<p><Environment overall></p> <ul style="list-style-type: none"> Reduce environmental impact by conforming with laws and regulations
Green Marketing (distribution,sales and service,and collection and recycling)	(1)Customer-focused response to environmental requests	<p><Sales></p> <ul style="list-style-type: none"> Seize sales opportunities; zero lost sales opportunities <p><Branding></p> <ul style="list-style-type: none"> Increase society's and customers'brand recognition 	<p><Environment overall></p> <ul style="list-style-type: none"> Reduce environmental impact by responding to customer requests
	(2)Sales promotion of ICT services and reduction of environmental impact	<p><Sales></p> <ul style="list-style-type: none"> Promote sales of ICT services, which reduce customers'environmental impact 	<p><Preventing global warming></p> <ul style="list-style-type: none"> CO₂ reduction on customer side: 42 thousand tons <p><Supporting a recycling-oriented society></p>

		<ul style="list-style-type: none"> Resources used effectively on customer side: 2 thousand tons
(3)Supply chain optimization and linked environmental initiatives	<p><Cost reductions></p> <ul style="list-style-type: none"> Reduce cost of distribution and packaging 	<p><Preventing global warming></p> <ul style="list-style-type: none"> CO₂ reduction during distribution: 4 thousand tons <p><Supporting a recycling-oriented society></p> <ul style="list-style-type: none"> Resources used effectively: 7 hundred tons
(4)3R initiatives for products	<p><Risk avoidance></p> <ul style="list-style-type: none"> Reinforce 3R initiatives 	<p><Supporting a recycling-oriented society></p> <ul style="list-style-type: none"> Use resources effectively through product 3R initiatives

2013 Targets and Results

In fiscal 2013, Konica Minolta worked at achieving annual targets based on the Medium-term Environmental Plan 2015.

2013 Targets and Results

Self-assessment

***: Achievement more than 100%

** : Achievement more than 80% and less than 100%

*: Achievement less than 80%

Objectives	Fiscal 2013 Targets (Base Year: Fiscal 2005)		Fiscal 2013 Results	Achievement
Preventing global warming	CO ₂ emissions throughout product life cycle	-51%	-54.5%	***
	CO ₂ emissions from product usage	-69%	-69.9%	***
	CO ₂ emissions from manufacturing (per unit of production)	-28%	-22.7%	**
	CO ₂ emissions from distribution (per unit of distribution)	-32%	-21.3%	**
	CO ₂ emissions from sales and service (per unit of sales)	-47%	-48.1%	***
Supporting a recycling-oriented society	Petroleum-based resource usage (per unit)	-27%	-31.0%	***
	Packaging materials usage (per unit of sales)	-28%	-28.8%	***
	Waste discharged externally from manufacturing (per unit of production)	-42%	-45.2%	***
	Product recycling: Build product recycling systems in each region and aim for a recycling rate of 90% or more	<ul style="list-style-type: none"> ● Materialization of next-period scenarios for re-manufactured MFPs ● Implementation of packaging reduction measures 	<ul style="list-style-type: none"> ● Investigated materialization of next-period scenarios for re-manufactured MFPs but did not roll out ● Finished implementing 22 measures to reduce packaging for after-sales parts 	**

Reducing the risk of chemical substances	Chemical substance management: Maintain strict management of chemical substances, including the entire supply chain	<ul style="list-style-type: none"> Development and application of a system for hazardous substances reduction management Development of a system for complying with the revised RoHS Directive 	<ul style="list-style-type: none"> Developed and started applying internal standards for hazardous substances reduction management, including compliance with voluntary standards Established a plan for complying with RoHS Directive revisions and phthalate regulations Finished developing a system for complying with RoHS2 	***
	Atmospheric emissions of volatile organic compounds (VOCs) (in terms of environmental impact index; per unit of production)	-92%	-94.0%	***
Restoring and preserving biodiversity	Help restore and preserve biodiversity	Pursue compliance with the Green Factory Biodiversity Guidelines	Complied with the Biodiversity Guidelines at the three units that achieved Level 2 Green Factory certification	***

Note: As of fiscal 2013, the Group has achieved more than half of the fiscal 2015 targets set out in the Medium-Term Environmental Plan 2015 and anticipates achieving the remaining targets. The Medium-Term Environmental Plan 2016 calls for the continued pursuit of the fiscal 2015 targets and also establishes more rigorous fiscal 2016 targets.

Fiscal 2014 Targets

Important theme	Important issues	Fiscal 2014 targets	
		Corporate value	Environmental value
Green Products (planning and development)	(1) Creating and providing the green products demanded by customers and society	<p>Sales</p> <ul style="list-style-type: none"> • Sales of Green Products: 540 billion yen (Share of sales: 54%) <p>Cost reductions</p> <ul style="list-style-type: none"> • Reduce cost of product materials <p>Branding</p> <ul style="list-style-type: none"> • Increase society's and customers' brand recognition 	<p>Preventing global warming</p> <ul style="list-style-type: none"> • CO₂ reduction during product use: 50 thousand tons <p>Supporting a recycling-oriented society</p> <ul style="list-style-type: none"> • Resources used effectively: 24 thousand tons <p>Reducing chemical substance risks</p> <ul style="list-style-type: none"> • Reliable handle emissions
	(2) Conforming with government procurement standards and environmental label requirements	<p>Sales</p> <ul style="list-style-type: none"> • Zero lost sales opportunities 	<p>Environment overall</p> <ul style="list-style-type: none"> • Reduce environmental impact by conforming with standards and label requirements
	(3) Dependably complying with product-related laws and regulations	<p>Risk avoidance</p> <ul style="list-style-type: none"> • Zero effect on sales 	<p>Reducing chemical substance risks</p> <ul style="list-style-type: none"> • Reduce hazardous chemical substance risk by conforming with laws and regulations
Green Factories (procurement and production)	(1) Green Factory operations that translate into cost competitiveness	<p>Cost reductions</p> <ul style="list-style-type: none"> • Reduce costs of energy and materials (reduce loss) 	<p>Preventing global warming</p> <ul style="list-style-type: none"> • CO₂ reduction during production: 1.7 thousand tons <p>Supporting a recycling-oriented society</p> <ul style="list-style-type: none"> • Resources used effectively: 0.18 thousand tons <p>Restoring and preserving biodiversity</p> <ul style="list-style-type: none"> • Sustainable use of water resources
	(2) Cooperation with suppliers that translates into cost competitiveness	<p>Cost reductions</p> <ul style="list-style-type: none"> • Reduce costs of energy and materials (reduce loss) 	<p>Preventing global warming</p> <ul style="list-style-type: none"> • CO₂ reduction on supplier side: 1 thousand tons <p>Supporting a recycling-oriented society</p>

			<ul style="list-style-type: none"> Resources used effectively: 0.3 thousand tons
	(3) Dependably complying with production-related laws and regulations	<p>Risk avoidance</p> <ul style="list-style-type: none"> Zero effect on production 	<p>Environment overall</p> <ul style="list-style-type: none"> Reduce environmental impact by conforming with laws and regulations
Green Marketing (distribution, sales and service, and collection and recycling)	(1) Customer-focused response to environmental requests	<p>Sales</p> <ul style="list-style-type: none"> Seize sales opportunities; zero lost sales opportunities <p>Branding</p> <ul style="list-style-type: none"> Increase society's and customers' brand recognition 	<p>Environment overall</p> <ul style="list-style-type: none"> Reduce environmental impact by responding to customer requests
	(2) Sales promotion of ICT services and reduction of environmental impact	<p>Sales</p> <ul style="list-style-type: none"> Promote sales of ICT services, which reduce customers' environmental impact 	<p>Environment overall</p> <ul style="list-style-type: none"> Quantitative assessment of the environmental impact reduction effects through the use of ICT services by customers
	(3) Supply chain optimization and linked environmental initiatives	<p>Cost reductions</p> <ul style="list-style-type: none"> Reduce cost of distribution and packaging 	<p>Preventing global warming</p> <ul style="list-style-type: none"> CO₂ reduction during distribution: 0.4 thousand tons <p>Supporting a recycling-oriented society</p> <ul style="list-style-type: none"> Resources used effectively: 0.3 thousand tons
	(4) 3R initiatives for products	<p>Risk avoidance</p> <ul style="list-style-type: none"> Reinforce 3R initiatives 	<p>Supporting a recycling-oriented society</p> <ul style="list-style-type: none"> Use resources effectively through product 3R initiatives