



For the Global Environment

Konica Minolta established Eco Vision 2050, a set of long-term goals that looks all the way out to the year 2050, focusing on the three aims of preventing global warming, promoting resource recycling, and preserving biodiversity. Governing the Group's current efforts to achieve Eco Vision 2050 is the Medium-Term Environmental Plan 2015, which establishes major objectives and specific goals to be implemented by the target year of fiscal 2015. At the same time, Konica Minolta has committed itself to the "Three Green Activities" that will help it reach its goals for fiscal 2015. In line with the Group's commitment to "Giving Shape to Ideas," Konica Minolta is determined to create environmental innovation at each stage in its business processes, from product development to production, distribution, sales and service, and collection and recycling. This effort will contribute to reducing its environmental impact while also bringing costs down and promoting sales to customers concerned about the environment.



Fiscal 2012 Achievements

- Konica Minolta's commitment to creating green products brought the share of products certified as Green Products Plus to 27% of total sales. These products have industry-leading environmental performance. [p. 17](#)
- The Group achieved nearly all targets for fiscal 2012, including the target for product lifecycle CO₂ emissions, as it focused on the Three Green Activities and made progress in other areas, as well. [p. 23](#)

Share of sales for Green Products Plus:

27%

Reduction in CO₂ emissions throughout the product life cycle:

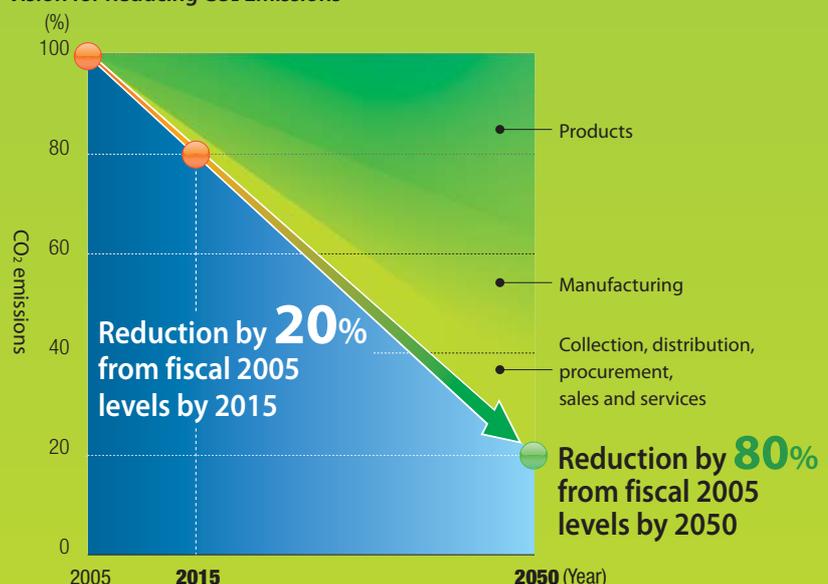
50% from fiscal 2005 levels

Konica Minolta's Long-Term Environmental Targets

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.

Vision for Reducing CO₂ Emissions



Eco Vision 2050

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

Medium-Term Environmental Plan 2015 (Base Year: Fiscal 2005)

Objectives	Product Development	Manufacturing	Distribution, Sales and Service	Collection and Recycling
 Preventing global warming	 CO ₂ emissions throughout product life cycle: Reduce by 20%			
	CO ₂ emissions from product usage: Reduce by 60%	CO ₂ emissions from manufacturing: Reduce by 10% (per unit of sales)	CO ₂ emissions from distribution: Reduce by 30% (per unit of sales)	CO ₂ emissions from sales and service: Reduce by 50% (per unit of sales)
 Supporting a recycling-oriented society	 Petroleum-based resource usage: Reduce by 20% (per unit of sales)			
	Amount of resources such as plastic used in products	Waste such as resin scraps and solvent generated in production	Fuel consumption of sales and service vehicles	
		•Waste discharged externally¹ from manufacturing: Reduce by 50% (per unit of sales)	•Packaging materials usage: Reduce by 25% (per unit of sales)	•Product recycling: Build up product recycling systems in each region and aim for a recycling rate of 90% or more
 Reducing the risk of chemical substances	•Chemical substance management: Maintain strict management of chemical substances, including the entire supply chain ²	•Atmospheric emissions of volatile organic compounds (VOCs): Reduce by 75% (in terms of environmental impact index ³)		
 Restoring and preserving biodiversity	 Help restore and preserve biodiversity			

- 1 **Waste discharged externally:** The amount of waste disposed of outside Konica Minolta facilities, comprising the total amount of waste generated through production activities, minus the amount recycled and reduced internally.
- 2 **Supply chain:** In this case, the process by which raw materials from upstream companies pass through component manufacturers and are delivered to Konica Minolta
- 3 **Environmental impact index:** An index unique to Konica Minolta designed to measure impact on the environment, obtained by multiplying VOC emission volume by a hazard factor (impact on human health and environmental impact) and a location factor.

Note: Until now, Konica Minolta set its targets based on unit of sales as an index for assessing environmental impact reduction outcomes. However, such an index no longer reflects reduction outcomes appropriately due to exchange rate fluctuations and falling prices. Accordingly, for fiscal 2013 a switch has been made to unit of production, or another index that best suits each target, which is not influenced by these factors, to enable appropriate assessment of environmental impact reduction outcomes.

Planning and Development
Green Products Certification System
 Creating and Providing Environmentally Responsible Products

Three Green Activities

Sales and Services
Green Marketing Activities
 Practicing Environmentally Responsible Sales and Services

Production
Green Factory Certification System
 Realizing Environmentally Responsible Production Sites



Three Green Activities

Green Products Certification System

Konica Minolta has introduced a Green Products Certification System, its own unique system for evaluating and certifying products with superior environmental performance. The system aims to create environmental value suited to different businesses and product characteristics with the purpose of helping customers and society at large to reduce environmental impact. Since the system went into full operation in July 2011, 47 products in fiscal 2011 and 28 in fiscal 2012 have been certified. Moreover, the share of sales accounted for by products certified as Green Products Plus, which have industry-leading environmental performance, reached 27% in fiscal 2012. Starting in fiscal 2013, the Group is

adding new standards for creating environmental value for the customer in an effort to help customers and the broader society to reduce environmental impact even further.

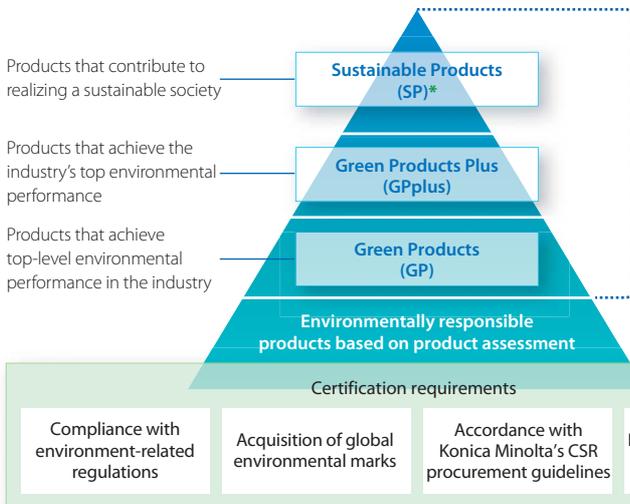


green products

Target of Sales Ratio Setting for Green Products

	Fiscal 2012 Target	Fiscal 2012 Achievement	Fiscal 2015 Target
Sustainable Products (SP)	-	-	1 product
Green Products Plus (GPplus)	15%	27%	30%
Total of Green Products	20%	31%	50%

Green Products Certification System



Certification standards (excerpts)

Preventing global warming

- Reduce CO₂ emissions from product usage
- Reduce CO₂ emissions throughout product life cycle

Supporting a recycling-oriented society

- Reduce petroleum-based resource usage
- Make products smaller and lighter
- Increase the operating life of products
- Promote the use of re-used and recycled materials
- Promote the use of plant-based materials
- Reduce rare metals usage

Reducing the risks from chemical substances

- Restrict the use of hazardous chemical substances

Restoring and preserving biodiversity

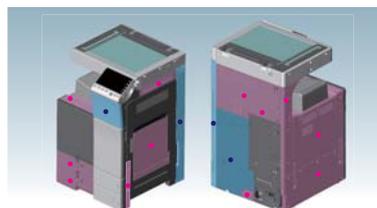
- Use biological resources in a sustainable manner

Manufacturing process innovation

*Sustainable Products (SP) certification standards require that the product not only embody superior environmental performance not typically achieved by earlier products, but also incorporate original technology. While seeking to reduce the environmental impact of all of its products, by setting a very challenging certification level, Konica Minolta aims to promote innovation and contribute more proactively to sustainability.

Example: Using Originally Developed Recycled Material in Products

Konica Minolta uses recycled material in products in an effort to make effective use of resources. The bizhub C554e series of color MFPs, for example, uses two kinds of recycled material in 20 locations that make up nearly 40% of the outer casing. One of those materials,



● Recycled PET/PC plastic ● Recycled PC-ABS plastic

recycled PC¹/PET², is a mixed recycled material made using Konica Minolta's original chemical processing technology. The material was developed by evenly mixing materials from recovered one-gallon water cooler jugs and plastic drinking bottles to create a material that has the required strength and fire-retardant properties to meet safety standards and that can be mold injected.

1 PC: Polycarbonate, a type of thermoplastic resin

2 PET: Polyethylene terephthalate, a type of polyester



Examples of Green Products Certified in Fiscal 2012

In fiscal 2012, 28 models were certified as Green Products. Of those, 20 models, including the four products below, were certified as Green Products Plus.

bizhub C554e Color MFP

- More than 39% reduction of power consumption (TEC¹) (compared to our previous model).
- Uses originally developed, fire-resistant, recycled PC/PET.
- Industry-top-class quietness² when operated.



REGIUS ΣII Desktop CR

- Power consumption when in use has been cut by 20%, and 30% on standby (compared to previous model).
- The world's lightest³ cassette CR system, at 28kg.



BD/DVD/CD-compatible plastic single objective lens for optical disks

- The industry's first BD/DVD/CD-compatible plastic single objective lens for optical disks using diffraction optics technology. The use of petroleum-based resources has been reduced by 79% (compared to our previous model).
- Smaller size made possible by reducing approximately 45% off the total length and outside diameter (compared to our previous model).



LED lighting Symfos LED-Tasklight A6KH-200, A6KH-300

- Achieves industry-best level of power consumption efficiency for a surface-emitting lighting using a light guide plate
- Glare and multiple shadows, issues typical of LED lighting, have been reduced to achieve lighting friendly to eyes

¹ TEC: Typical Energy Consumption, a measure of energy consumption established by the International Energy Star Program. ² as of the May 2013 launch ³ as of the June 2012 launch

Green Factory Certification System

Konica Minolta has operated its original Green Factory Certification System for comprehensive evaluation of the environmental activities of its production sites since 2010. The purpose of this system is to bring costs down and reduce environmental impact by developing activities in line with each business's production strategy. The certification requirements in this system include not only the achievement of targets but also the degree of attainment for some 250 guidelines related to the implementation process.

In fiscal 2011, all business units* achieved Level 1 certification as planned. In fiscal 2012, five business units (two in China and

three in Japan) became the first to attain Level 2.

In fiscal 2012, this initiative accounted for significant reductions in environmental impact. Compared to a fiscal 2005 baseline, CO₂ emissions were down about 100,000 tons and waste discharged externally was down about 10,000 tons.



* A single business unit is an organization engaged in the same production activities even across different locations. A single location may include several business units.

Green Factory Certification Standards

Objectives Management	indicators		Level 1	Level 2
Preventing global warming	CO ₂ emissions (per unit of production ¹)		12% reduction ²	20% reduction ²
Supporting a recycling-oriented society	Zero waste activities	Waste discharged externally (per unit of sales)	30% reduction ²	50% reduction ²
		Final disposal rate of total waste	0.5% or less	0.5% or less
	Petroleum-based resource waste (per unit of sales)		30% reduction ²	50% reduction ²
Reducing the risks of chemical substances	Atmospheric emissions of volatile organic compounds (VOCs)		Achievement of fiscal 2011 targets for each site in accordance with Medium-Term Environmental Plan 2015	Achievement of fiscal 2015 targets for each site in accordance with Medium-Term Environmental Plan 2015
	Guidelines for managing soil contamination risk		-	Consistent with guidelines
Restoring and preserving biodiversity	Guidelines for biodiversity preservation (consideration of water resources and wastewater, and proper management of greenery at factories)		-	Consistent with guidelines
Guideline-based activities	Achievement rate of implemented items		70% or more	90% or more

¹ Per unit of production: Environmental impact in terms of production output or production volume.

² The base year is fiscal 2005. Based on this (base year) figure, standards tailored to factory characteristics are established.

Green Marketing Activities

Konica Minolta carries out green marketing activities as its way of practicing environmentally friendly sales and services. The objectives of these activities are to bring costs down and reduce environmental impact by rolling out efficiency-boosting measures in distribution, packaging, sales, and service. Konica Minolta also aims to provide optimization solutions that help customers reduce their environmental impact.

Specifically, Konica Minolta has introduced various initiatives in these areas in accordance with its Medium-Term Environmental Plan 2015 to reduce CO₂ emissions from

distribution, the amount of packaging, and the amount of fuel used by company vehicles, and to recover used products and reuse their materials. Similarly, in order to facilitate the reduction of the environmental impact when customers use its products, Konica Minolta seeks to promote their adoption of its Green Products and offers Optimized Print Services (OPS)* solutions that help customers minimize cost of ownership and lower environmental impact, while improving workflow efficiency.

* **Optimized Print Services (OPS):** Konica Minolta's consultancy-based services that support the optimization of the printing and documentation environments in corporate offices.  p. 5

Example1: Konica Minolta Wins Hong Kong Green Award

Konica Minolta Business Solutions (HK) Ltd., a sales company in Hong Kong, has developed business-based environmentally friendly activities. The company sells MFPs certified with the Hong Kong Green Label for incorporating numerous environmental technologies, collects and recycles used MFPs, and also proposes OPS to streamline the arrangement of MFPs to help customers save energy and paper.

Furthermore, the company conducts environmental education activities through the Emerald Education Program for children together with the local environmental NGO, Green Sense.  p. 38

In recognition of these activities, the company won a Green Management Bronze Award (Corporate) in the Hong Kong Green Awards 2012 organized by the Hong Kong Green Council.



Example2: Promoting Eco-Driving and an Energy-saving Work Style

Konica Minolta Business Solutions Japan Co., Ltd., a sales company in Japan, has installed a vehicle operation management system in all company-owned vehicles. This system constantly gathers and stores data about the way company-owned cars are being used, such as the rate of sudden acceleration and deceleration, driving time, fuel consumption, and so on. Using the data, drivers of company vehicles are encouraged to implement eco-driving more rigorously to improve mileage and reduce the environmental impact of vehicle use by, for example, cutting down on idling.

Additionally, a system to graph and deliver real-time data on electricity use was installed in the head office building in February 2013 to promote an energy-saving work style. The system measures power consumption on each floor, and displays it graphically on the company intranet, and sends out emails if a designated power amount is exceeded, helping employees to stay focused on saving energy. Also, the main

reception area now features an electronic sign displaying power usage in real time, where it is visible to visitors and facility users alike.



Example of on-screen power usage display

Progress on the Medium-Term Environmental Plan



Preventing Global Warming

As part of its effort to reduce CO₂ emissions throughout the entire product lifecycle, Konica Minolta has set CO₂ reduction targets for each stage, including product usage, manufacturing, distribution, and sales and services. Building on the results of reduction efforts implemented in previous years, in fiscal 2012 Konica Minolta set its reduction targets to make them even more challenging than the goals set for fiscal 2015. These efforts brought lifecycle emissions in fiscal 2012 down to 50% of what they were in fiscal 2005.

In the area of product usage, Konica Minolta is focusing on its Business Technologies Business, which accounts for over 90% of the total CO₂ emissions from product usage, and is pursuing the development of energy-saving product technologies. In fiscal 2012, it strengthened its lineup of products with high energy-saving features, mainly color MFPs, with the release of the bizhub C554 series and bizhub C554e series, both of which can save substantially more energy than previous models.

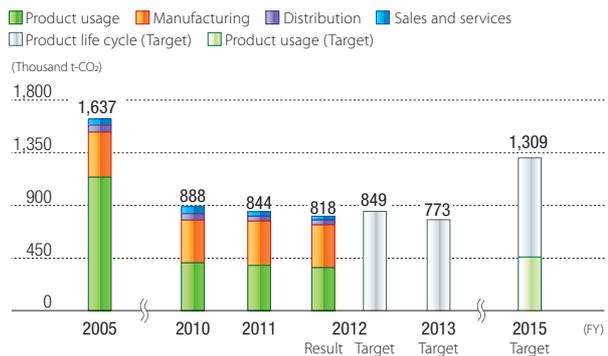
The Group is also striving to improve energy efficiency in manufacturing using its Green Factory Certification System. After all business units achieved Level 1 certification in fiscal 2011, five of them went on to earn Level 2 certification in fiscal

2012 by making even more rigorous efforts to reduce environmental impact. **p. 18**

To reduce CO₂ emissions from distribution, Konica Minolta made efforts to reduce the use of air transport, which included minimizing quality problems, keeping to development schedules, and improving demand forecasts.

In sales and service, the Group strove to manage and reduce CO₂ emissions from the use of sales vehicles at sales companies worldwide and worked to reduce power consumption in offices.

CO₂ Emissions Across Product Life Cycle



Example1: bizhub C554e: Color MFP with One of the World's Lowest Power Consumption Levels

The bizhub C554e color MFP boasts one of the world's lowest power consumption levels. Power consumption during use has been reduced by adopting LED for the scanner light source and further improving the induction heating (IH) fusing technology to increase heating efficiency. Moreover, standby power consumption was cut to a third that of the previous model by implementing finely tuned electricity saving measures during sleep mode. Incorporation of these diverse

environmental technologies resulted in a reduction in power consumption of about 39% compared to the previous model¹ (based on TEC²).

¹ previous model: bizhub C552DS
² TEC: Typical Energy Consumption, a measure of energy consumption established by the International Energy Star Program.



Example2: Production Lines Reorganized to Cut Emissions

Konica Minolta Technoproducts Co., Ltd., which produces medical diagnostic imaging devices, has achieved a substantial reduction in CO₂ emissions at its Sayama location by reorganizing its production lines to reduce production area and optimize lighting and air conditioning. Konica Minolta Opto Products Co., Ltd., which is the mother plant for

production of optical devices such as pickup lenses for optical disks, cross-deployed measures for reducing CO₂ emissions that it had found effective to Konica Minolta Opto (Dalian) Co., Ltd. in China. Thanks to these efforts, these three companies became the first in the Group to attain Level 2 Green Factory certification in fiscal 2012.

Supporting a Recycling-Oriented Society

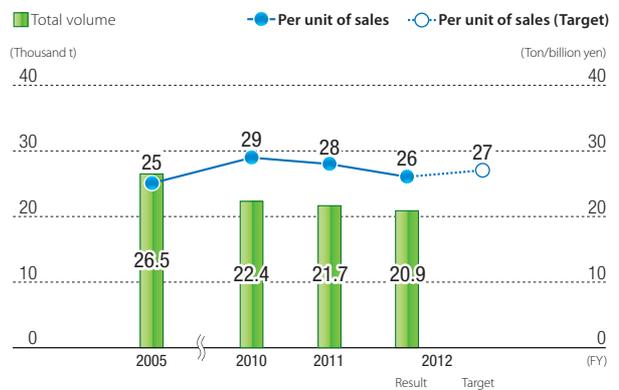
Konica Minolta is reducing the use of petroleum-based resources via initiatives targeting each of the following phases of the product lifecycle: development, production, and sales and service. The Group is emphasizing the reduction of resources used in products, especially plastic material—which accounts for over 60% of total petroleum-based resources consumed. In its Business Technologies Business, the company is aggressively using recycled materials, releasing the bizhub C554 series and bizhub C554e series, both of which contain a good balance of two environmentally friendly plastics: a recycled PC/PET developed in-house and a plant-derived bioplastic. [p. 17](#)

The Group is reducing the amount of waste discharged externally from manufacturing by improving production efficiency and increasing the percentage of internal recycling at each business unit in accordance with its Green Factory Certification System. [p. 18](#)

In terms of reducing packaging materials usage and

promoting product recycling, the Group focused on the Business Technologies Business, which accounts for more than 90% of usage, in slimming down, reusing, and conducting studies on recycling packaging materials.

Waste Discharged Externally from Manufacturing*



* The target for fiscal 2013 was changed from "per unit of sales" to "per unit of production."

Example1: Resources Conserved through Development of Thinner TAC Film

In the area of performance materials, Konica Minolta has drawn on its strengths in manufacturing technology to make thinner and thinner TAC film, which protects polarizers in liquid crystal displays. This has contributed to the conservation of resources while also helping to make IT devices lighter. Until recently Konica Minolta sold a high-quality, thin-film product with a thickness of 40 μm. It has now become the first in the

industry to develop a super-thin TAC film with a thickness of only 25 μm for the mobile market, launching mass production in November 2012.

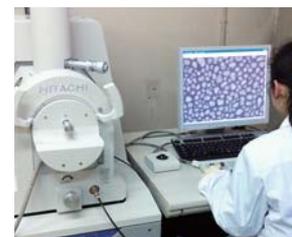


TAC film for LCD polarizers

Example2: Developing Recycling Technology for the Rare Earth, Cerium Oxide

There are only a few supplier countries of rare earth materials worldwide, leading to concern about risks such as limited supply and rising costs. Also, rare elements must be used efficiently to realize sustainable human societies. Cerium oxide is a rare earth element used as a polishing material for glass. There has been a need to reclaim cerium oxide from waste liquid left after polishing, but the challenge was how to remove the glass particles. Building on the advanced materials technology gained in the development of films and toners, Konica Minolta has successfully developed recycling technology able to extract high-purity cerium oxide from polishing waste. The recycling rate for the polishing process overall

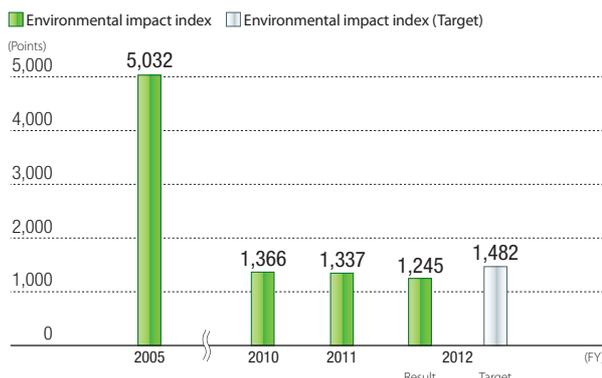
now exceeds 90%, thanks to the new recovery and recycling of cerium oxide also from the waste liquid left over from washing products after polishing. Konica Minolta is currently installing this system at lens and HDD glass substrate production sites in and outside Japan, and it will also sell the recycling technology to contribute to the broader industrial world.



Reducing the Risk of Chemical Substances

Konica Minolta is committed to strict management of chemical substances throughout the supply chain. In fiscal 2012, it selected substances of very high concern (SVHC) under the REACH Regulation for reduction, conducted a study of alternatives, and established reduction management plans for different applications and fields. The Group also requests suppliers to manage substances contained in products, and it practices management in compliance with the revised RoHS directive. Since 1993 Konica Minolta made efforts to reduce the emissions of volatile organic compounds (VOCs) from its production sites, focusing on those VOCs that it determined to have a high risk in terms of hazard and volume of use. In fiscal 2012, the Group achieved the targets for all its businesses by carrying out measures under its Green Factory Certification System.

Reduction of Atmospheric VOC Emissions (Risk-Adjusted) *



* The target for fiscal 2013 was changed from "total points" to "total points per unit of production."

- 1 REACH regulations:** Regulations enacted by the EU in June 2007 concerning the registration, evaluation, authorization and restriction of chemicals, to consolidate existing regulations concerning chemical substances.
- 2 RoHS Directive:** Regulations enacted by the EU in July 2006 prohibiting the use of specified hazardous substances in electrical and electronic equipment.

Restoring and Preserving Biodiversity

Konica Minolta has been implementing various initiatives, mainly at its production sites, to restore and preserve biodiversity. The Group has made meeting the standards of its Guidelines for Biodiversity Preservation a requirement for attaining Level 2 certification under the Green Factory Certification System, which specifically requires consideration of water resources, consideration of wastewater, and proper management of greenery at factories.

As part of these initiatives, the Group is conducting



ecosystem impact assessment tests based on bioassays using Whole Effluent Toxicity (WET)* testing to verify the impact of wastewater on the surrounding ecosystems. In fiscal 2011, four plants in Japan that emit wastewater from manufacturing processes into public water areas carried out the tests. In fiscal 2012, a plant in Malaysia also carried out the testing, verifying that there was no negative impact on algae and other test organisms. Testing will be carried out in the future as needed, such as when there is a change in production processes.

* **Whole Effluent Toxicity (WET):** A method that assesses the aggregate toxic effect of wastewater on aquatic life rather than the volume of individual chemical substances. Unlike conventional effluent management methods, it enables holistic assessment of the effect of an effluent, detecting the impact caused by any non-regulated chemical substance or the combined impact of multiple substances.

Guidelines for Biodiversity Preservation (excerpts)

Category	Items for monitoring
Consideration of water resources	Reduction targets are set for total water intake, or for water used on site, and reduction measures are implemented.
Consideration of wastewater	Checks are in place to determine the impact of wastewater emitted into public water areas on ecosystems, such as aquatic habitats.
Proper management of greenery at factories	Invasive alien species that are likely to have a negative impact on ecosystems are not planted or sown on the factory's premises.

Environmental Data Summary

Fiscal 2012 Targets and Results

Self-assessment ☆☆☆: Achievement more than 100% ☆☆: Achievement more than 80% and less than 100% ☆: Achievement less than 80%

Objectives	Fiscal 2012 Targets (Base Year: Fiscal 2005)		Fiscal 2012 Results and Key Measures		Achievement
Preventing global warming	CO ₂ emissions throughout product life cycle	-48.1%	-50.0%		☆☆☆
	CO ₂ emissions from product usage	-67.7%	-67.7%	GP Marketed products with high energy-saving performance	☆☆☆
	CO ₂ emissions from manufacturing (per unit of sales)	+32.5%	+27.7%	GF Improved energy efficiency in production	☆☆☆
	CO ₂ emissions from distribution (per unit of sales)	-4.4%	-13.7%	GM Reduced air freight	☆☆☆
	CO ₂ emissions from sales and service (per unit of sales)	-15.2%	-11.4%	GM Increased efficiency in sales and services GM Introduced eco-cars and eco-driving	☆☆
Supporting a recycling-oriented society	Petroleum-based resource usage (per unit of sales)	+15.7%	+10.3%	GP Reduced resources used in products GF Reduced waste in production GM Introduced eco-cars and eco-driving	☆☆☆
	Packaging materials usage (per unit of sales)	+9.7%	+6.1%	GM Reduced packaging through improved design GM Made packing boxes returnable between production facilities	☆☆☆
	Waste discharged externally ¹ from manufacturing (per unit of sales)	+8.1%	+3.3%	GF Improved production efficiency and promoted internal recycling	☆☆☆
	Product recycling : • Market re-manufactured MFPs worldwide • Investigate packaging and parts reuse			GM Creation of next-period scenarios for reconditioned copiers GM Investigation of additional packaging reduction measures	☆☆☆
Reducing the risk of chemical substances	Chemical substance management : • Plan alternatives to materials targeted for reduction • Respond to RoHS ² self-declaration of conformance			GP Initiative plan for substances targeted for reduction GP Measures for the RoHS Self-Declaration	☆☆☆
	Atmospheric emissions of volatile organic compounds (VOCs) (environmental impact index ³)	-70.5%	-75.3%	GF Implementation of the VOC reduction plan	☆☆☆
Restoring and preserving biodiversity	• Pursue compliance with the Guidelines for Biodiversity Preservation • Deploy the ecosystem impact assessment • Establish the procurement standards for paper and prepare global deployment			GF Undertake activities according to the guidelines for biodiversity preservation GF Deploy the ecosystem impact assessment outside Japan GM Prepare global deployment of the procurement standards for paper	☆☆☆

GP Activity under Green Products Certification System
GF Activity under Green Factory Certification System
GM Green Marketing activities



Fiscal 2012 Targets and Results / Fiscal 2013 Targets

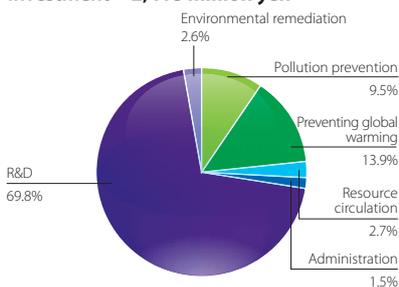
- Waste discharged externally:** Volume discharged outside Konica Minolta sites, obtained by subtracting the internally recycled and reduced volumes from the total waste generated in production processes.
- RoHS Directive:** Regulations enacted by the EU in July 2006 prohibiting the use of specified hazardous substances in electrical and electronic equipment.
- Environmental impact index:** An index unique to Konica Minolta designed to measure impact on the environment, obtained by multiplying VOC emission volume by a hazard factor (impact on human health and environmental impact) and a location factor.

Environmental Accounting

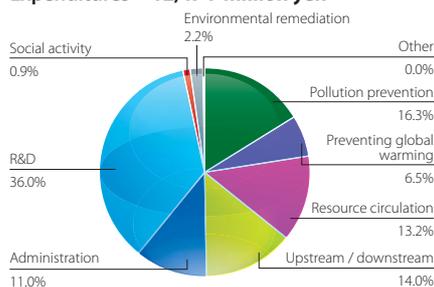
Konica Minolta has implemented global-scale, consolidated environmental accounting in order to quantitatively assess the costs of environmental preservation in business operations and the benefits obtained from those activities. Investments in fiscal 2012 totaled approximately 2.4 billion yen, an 83% increase year

on year. The increase mainly resulted from investment in equipment for production technology development in the field of performance materials. Expenditures totaled approximately 12.5 billion yen, virtually unchanged from the previous year.

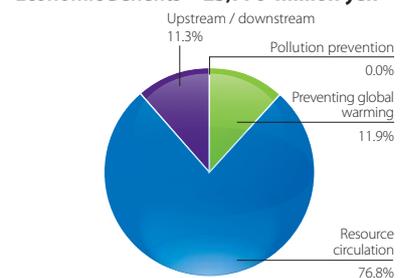
Investment 2,418 million yen



Expenditures 12,474 million yen

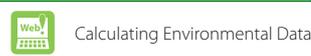


Economic Benefits 23,776 million yen

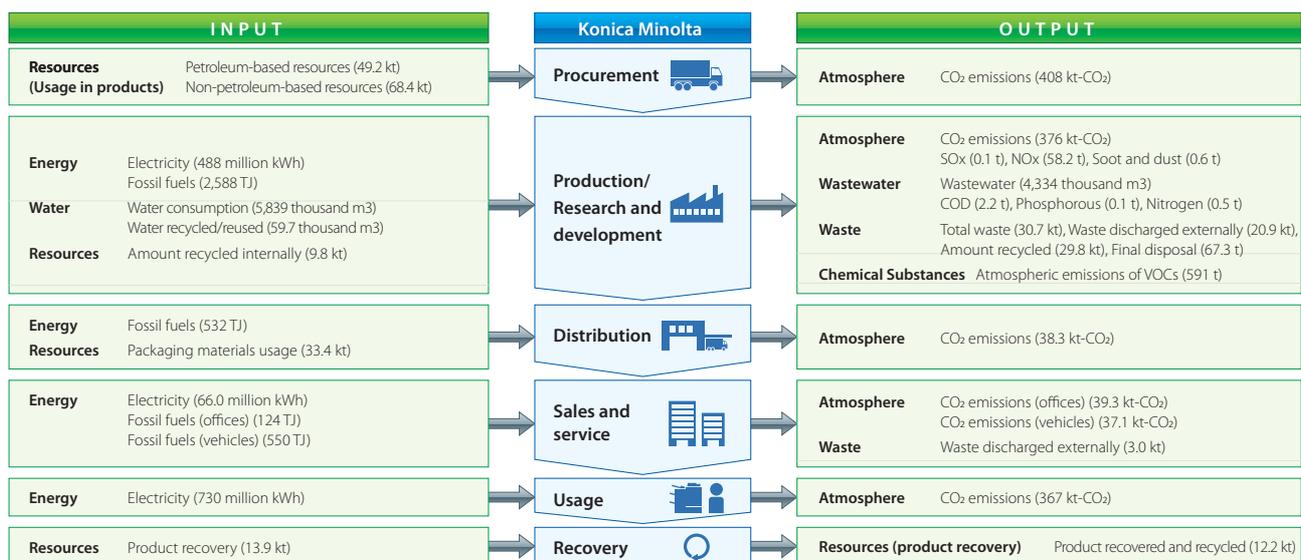


* Percentages do not necessarily total to 100 because of rounding.

Environmental Impacts Resulting from Business Activities



Overall Picture of Environmental Impact



Calculating CO₂ Emissions Across the Entire Supply Chain



Konica Minolta has calculated the entire CO₂ emissions associated with the Group's activities across its entire supply chain, from upstream to downstream of its operations, based generally on the standards of the GHG Protocol, the international standard. The calculation showed that CO₂ emissions throughout the supply chain were approximately 1.507 million tons.

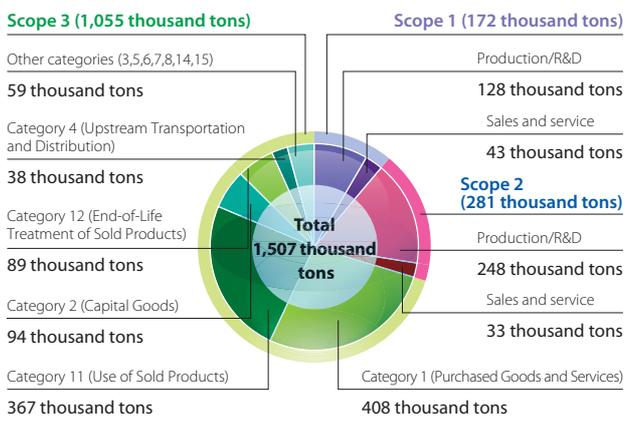
Emissions from the Group's activities—that is, direct emissions from fuel use (Scope 1) plus indirect emissions from consumption of purchased electricity, heat or steam (Scope 2)—total approximately 453 thousand tons, or about 30% of all emissions. Other indirect emissions (Scope 3) associated with the Group's activities totaled approximately 1.055 million tons, accounting for about 70%.

Categories within Scope 3 with high emissions were purchased goods and services (27.1%) and use of sold products (24.3%). These categories are within the scope of its previous calculations, but the Group has now discovered new challenges, including the need to set emissions reduction targets for purchased goods and services and to thoroughly manage appropriate measures. Konica Minolta will share information with relevant stakeholders in the future based on

these calculation results and move forward with CO₂ emissions management and reduction activities throughout the supply chain.

* **GHG Protocol:** Guidelines for calculating and reporting greenhouse gas (GHG) emissions

Overall Picture of CO₂ Emissions Across the Entire Supply Chain of Konica Minolta



* Figures do not necessarily match total because of rounding.