

Green Marketing (distribution, sales, service, recovery, and recycling initiatives)

Konica Minolta carries out green marketing activities as its way of practicing environmentally friendly sales and services. By providing products and services that meet customers' environmental needs, such as certified Green Products and Optimized Print Services solutions, Konica Minolta helps customers and the broader society to reduce environmental impact. The Group also strives to assist customers' activities to resolve their environmental issues. It is also working on challenges it set for each region, such as efficiency-improvement measures in distribution, packaging, sales, and service and the establishment of a system to recover and recycle used products.

Initiatives and results in fiscal 2013

In fiscal 2013, Konica Minolta worked on EPEAT and promoted Green Marketing initiatives at leading sales companies worldwide with a view toward providing environmental value to customers. It also implemented supply chain measures in an effort to reduce CO₂ emissions during distribution and the use of packaging materials with a view toward cutting costs and reducing environmental impact in the supply chain.

With regard to EPEAT, 26 products in the imaging devices and products category were registered as “Gold products” in the U.S. (as of March 31, 2014). Konica Minolta has the largest number of EPEAT-rated “Gold products” in the imaging devices and products category.

To promote initiatives of main sales companies, the Group held a Global Environmental Conference attended by each company to share best practices and success stories. More Group companies also started using the environmental knowhow cultivated by Konica Minolta Inc. in an effort to contribute to the resolution of their customers' environmental challenges. Going forward, the Group will continue to enhance its initiatives to support customers' environmental activities.

With respect to distribution, the Group made priority efforts to reduce air transportation by minimizing the occurrence of quality problems, adhering to development schedules, and improving demand forecasting. Additionally, the Group worked at optimization of supply control and other supply chain management measures. These efforts resulted in the reduction of CO₂ emissions from the distribution of approximately 2,600 tons in fiscal 2013 from the previous fiscal year. Of those, the reduction attributable specifically to optimization of supply control and other supply chain management measures was as much as 1,300 tons.

However, the Group did not achieve its per-unit target for fiscal 2013 due to the unexpected need for shipment by air in response to production delays.

The Group achieved its fiscal 2013 target for reducing the use of packaging materials by working at reducing packaging by making an effort to reduce the packaging of after-sales parts such as film developing units and waste toner boxes.

Distribution initiatives

Konica Minolta aims to reduce CO₂ emissions from the distribution activities needed for each process from procurement to production and sales.

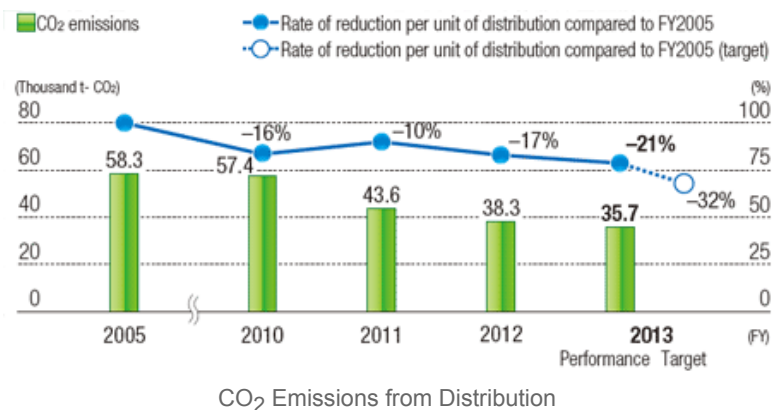
Initiatives to Reduce CO₂ Emissions from Distribution

Transporting the same weight of cargo over the same distance, an airplane emits 57 times more CO₂ than a ship (value published in the GHG Protocol).

Konica Minolta usually uses ships to transport IT devices products internationally. However, when a situation occurs where it must use an airplane, its CO₂ emissions increase as a result. That is why the Group is striving to reduce the frequency of airplane use by increasing the accuracy of its demand forecasting and improving its inventory management system.

In fiscal 2013, the Group continued to make focused efforts to reduce air transport by minimizing the occurrence of quality problems, sticking to development schedules, and improving demand forecasting. Additionally, it worked at supply chain management measures such as optimization of supply management.

During the fiscal year, an air shipment unexpectedly became necessary due to a production delay, causing the goal per unit of distribution to be missed. Still, the Group reduced its CO₂ emissions by approximately 2,600 tons from the previous year.



Promoting a Modal Shift

Konica Minolta has been promoting a modal shift for the long-distance transportation of products and parts, switching from aircraft and trucks to ships, railways and other means that emit less CO₂.

Improving Distribution Routes and Systems

Konica Minolta is reducing CO₂ emissions from its distribution processes by proactively restructuring its logistics facilities around the world.

In June 2008, for example, the company consolidated two logistics centers for business information products, one in Germany and the other in the Netherlands, at a new location in Emmerich, Germany, to serve all of Europe. Through such restructurings, the company aims to shorten the overall transport distance in its logistics operations Group-wide, while expanding the scope of direct customer delivery areas.

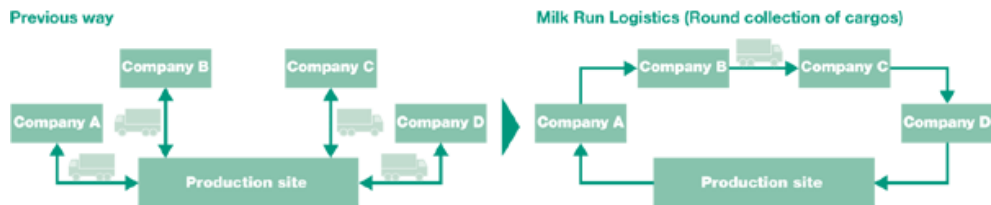
› [News release: Konica Minolta Opens a New European Distribution Center for its Office Equipment](#)

Milk Run Logistics (Round collection of cargos)

The term "milk run" originally came from the milk collecting system of dairy producers who visited dairy farms to collect milk in a single vehicle. In the manufacturing industry, it refers to a collection method in which a single vehicle is used to make rounds picking up goods from various suppliers instead of requesting each supplier to deliver goods individually.

Konica Minolta is using milk run logistics in Wuxi City in Jiangsu, China. This helps to reduce CO₂ emissions by shortening the total driving mileage of the trucks.

In addition, the Group is also reducing waste by using re-usable boxes instead of cartons to transport the parts.

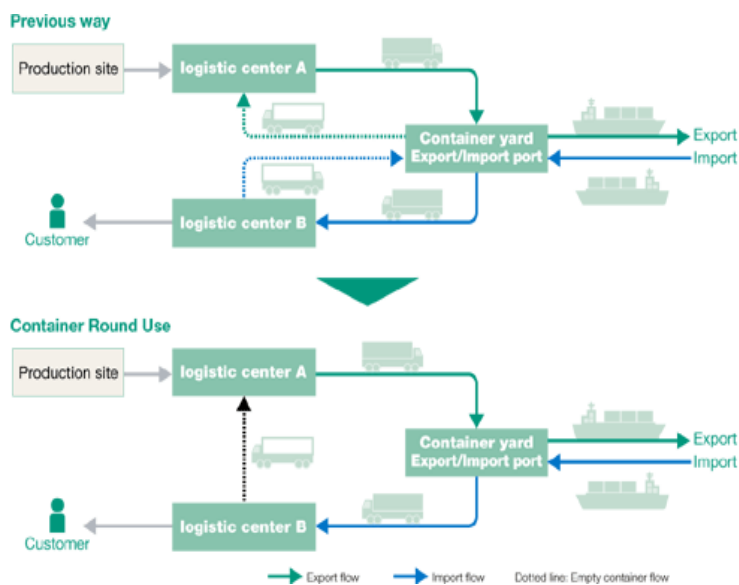


Container Round Use

Container Round Use is a concept in which the devanned container is used for export without returning it to the shipping company. By omitting the process of returning the devanned empty container and getting the new empty container for vaning, the concept contributes to both reducing CO₂ emissions and saving transportation cost.

Konica Minolta is implementing the Container Round Use system in the most effective manner by managing and controlling the shipping schedule with shipping companies and handling the containers that belong to the same shipping companies with minimum loss.

Further, the company is contributing to the reduction of CO₂ emissions by arranging a joint delivery combining finished products and parts, and sub-assembled units from overseas' manufacturing sites, that were previously transported individually.



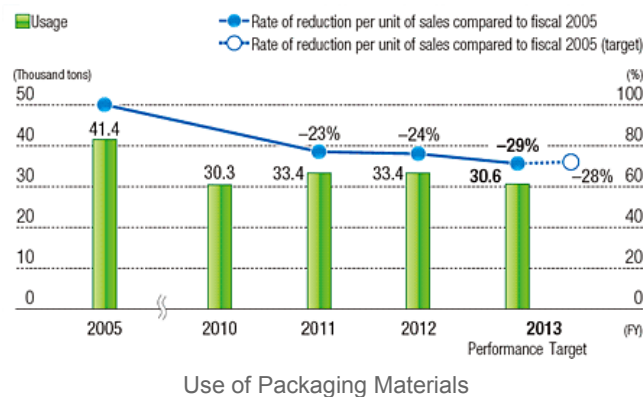
Reduction of use of packaging materials

Reduce Packaging Materials Usage

Redesigning packaging and making packing boxes returnable

Konica Minolta is focusing on its office equipment, which accounts for more than 90% of its usage of packaging materials, in its efforts to reduce that usage. It has reduced mass by improving the shape of packaging and made other efforts such as reusing toner cases that are used to send toner between production sites and making packing boxes for service parts at sales companies returnable.

In fiscal 2013, the Group pursued reductions in packaging especially for after-purchase service parts such as image development units and used toner cartridges, which resulted in an approximate 2,800-ton reduction from the previous year, achieving the reduction target per unit of sales.



Activities at Sales Companies

Rolling Out Packaging Material Reductions for Toner Bottles Worldwide

Konica Minolta has achieved cost reductions and environmental impact reduction by improving how it packages bottles of toner for MFPs. A device designed at the Mizuho site in Aichi Prefecture has made it possible to automate the work of packing boxes, which used to be done by hand. This device is now used around the world, including at a toner filling plant in France since 2011 and at a toner filling plant in the US since 2012. The Group also reconsidered the size of packaging and the method of packing at the time of shipment, which enabled it to achieve a reduction of about 28% in the annual usage of packaging materials. Going forward, the Group will adopt these latter measures at toner plants in Japan and aim to roll them out worldwide.



Automated toner bottle packaging

Recycling Center for Used Packaging Materials

In fiscal 2007, Konica Minolta Business Solutions (UK) Ltd. created a recycling center called “Greenhub” at its main warehouse in an effort to zero out used packaging material from MFPs sent to landfill.

At the center, the company sorts the packaging materials into cardboard, foamed polystyrene, and film, then crushes and compacts the materials, and finally sells them to a local recycling operator. Recycling is made easy by disposing of the materials in this way, and the effort will also reduce the environmental impact that accompanies waste transportation.



Foamed polystyrene crusher

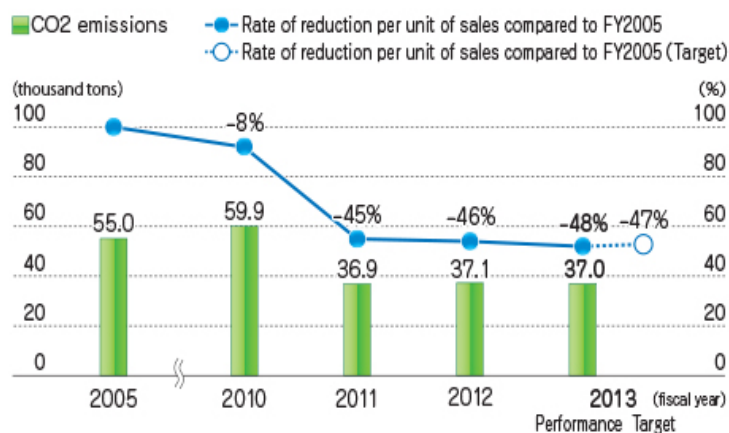
Sales and service initiatives

Initiatives to Reduce CO₂ Emissions in Sales and Services

Promoting the management and reduction of CO₂ emissions from business vehicles

Konica Minolta promotes the management and reduction of CO₂ emissions from the business vehicles operated by its sales companies around the world. The Group is promoting measures such as reducing the amount of travel through more efficient sales and service activities, introducing eco-friendly vehicles with low emissions of CO₂, and eco-driving to reduce energy consumption.

The continuation of these efforts in fiscal 2013 resulted in the reduction of CO₂ emissions by approximately 100 tons compared to the previous year and the achievement of the Group's target in terms of emissions per unit of sales.



CO₂ Emissions from Sales and Service

› Standards for Calculating Environmental Data

Rolling out Business-based Environmentally Friendly Activities

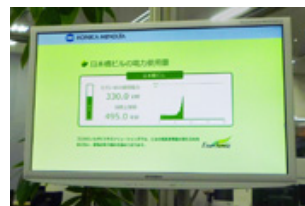
Konica Minolta Business Solutions (HK) Ltd., a sales company in Hong Kong, has developed business-based environmentally friendly activities. The company sells MFPs certified with the Hong Kong Green Label for incorporating numerous environmental technologies such as a new synthesis method for toner with low environmental impact. The company also reduces the disposal of electrical equipment by collecting and recycling used MFPs. Additionally, it encourages energy savings and the conservation of paper resources through the provision of Optimized Print Services (OPS) to customers in an effort to resolve social challenges. Furthermore, with respect to environmental education, the company has been helping to build awareness of energy conservation by holding an annual Konica Minolta Concert since fiscal 2010 and engaging in environmental protection education for students together with a local NGO.



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

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.

Adoption of Renewable Energy

Sales companies in Belgium and the U.S. have adopted renewable energy. Konica Minolta Business Solutions (Belgium) N.V./S.A. has been generating electricity with a photovoltaic installation on the roof of its building since 2010. It uses this renewable energy to power its offices and showrooms. Meanwhile, Konica Minolta Business Solutions, U.S.A., Inc. built a photovoltaic installation in the parking lot of its head office in 2013 to generate electricity to power its offices. The combined electricity generated using renewable energy in fiscal 2013 for these two companies was 401 MWh.

Konica Minolta is committed to environmental management based on the concept of Creating Shared Value (CSV), which aims for business growth and the resolution of social challenges. The Group sees renewable energy as one means of achieving both CO2 reductions and business growth. It plans to increase its annual generation of electricity using renewable energy to 1,000 MWh by fiscal 2016 (approximately 2.5 times the fiscal 2013 level).



Photovoltaic installation on the roof of the company building (Belgium)



Photovoltaic installation in the company parking lot (U.S.)

Efforts with customers to reduce environmental impact

Helping Customers Reduce Their Environmental Impact

Providing Environmental Knowhow to Promote Customers' Environmental Management

In addition to efforts to reduce environmental impact associated with its own business operations, Konica Minolta has started initiatives to help customers reduce their environmental impact.

The objectives of these initiatives are to balance the resolution of environmental challenges with increasing customers' competitiveness and profits and to pursue sustainable growth by helping customers' reduce their environmental impact and cut costs. Konica Minolta does this by providing the environmental knowhow it has cultivated over many years of working on its Three Green Activities—Green Products, Green Factories, and Green Marketing—and offering solutions to reduce environmental impact in the office through environmentally friendly products.

The Group intends to carry out these activities close to customers around the world on a global scale. It is also furthering collaboration with partner companies, in order to meet customers' wide-ranging environmental requests.

Through these efforts, Konica Minolta will create shared value with customers and pursue sustainable growth together with them.

Product recycling

Initiatives for Recycling Office Equipment

With the aim of establishing a system for recycling used products and enhancing the recycling rate worldwide, Konica Minolta has implemented its product recycling efforts focusing on its office equipment and consumable supplies.

In fiscal 2013, it is continuing to market re-manufactured MFPs worldwide and is also expanding the reuse of parts and recycling of materials.

Machines collected in Japan in fiscal 2013

- Estimated collection rate: 66%
- Recycling rate: 98% (by weight)

Promoting Reuse and Recycling of Parts

Konica Minolta collects used MFPs within Japan through its nationwide sales companies and JBMIA* replacement centers. Disassembly and sorting of the MFPs collected is outsourced to contractors in seven locations nationwide.

These contractors carry out disassembly by hand instead of using mechanical processing, achieving a high recycling rate.

The dismantled parts are sorted into metal, plastic, and others. Reusable parts are cleaned, inspected and reused. Other parts are sent to be recycled by companies that can process them as feedstock for recyclable materials or fuel.

* JBMIA: Japan Business Machine and Information System Industries Association



OMT Co., Ltd.



Toyohashi Precision Products Co., Ltd

Recovery and Recycling Printer Cartridges

Konica Minolta has established a system for free-of-charge recovery and recycling of used toner cartridges for laser printers in 18 European countries, the U.S. and Japan. In North America and Europe, this system is called the Clean Planet Program.

In the U.S., this free-of-charge recovery system has been expanded to include used toner bottles for MFPs.

 [To the Clean Planet Program in the U.S.](#)

 [To the Clean Planet Program in Europe](#)



Clean Planet Program website (Europe)

Recovery and Recycling of Used MFPs and Laser Printers

To facilitate the recovery and recycling of used products, Konica Minolta has established systems in each area that are suited to the regulations and markets of respective countries around the world.

In Japan, the company has received approval from the Ministry of the Environment to recover MFPs, copiers, and printers sold in Japan based on a special system for wide-area treatment of industrial waste.

Konica Minolta operates a fee-based recovery program for collecting and recycling used laser printers and copiers from corporate clients. At this time, the program does not handle used equipment disposed of by individual customers, as such equipment is classified as general waste. Outside Japan, Konica Minolta is undertaking recycling programs tailored for specific countries and their markets. In Europe, the company has adopted measures in conformity with the EU directive on the disposal of waste electrical and electronic equipment (WEEE).

Carbon offsetting

What is Carbon Offsetting?

Global warming is a huge environmental challenge that requires a worldwide response. Konica Minolta has set out a long-term environmental vision (the Eco Vision 2050), engages in group-wide initiatives to tackle environmental problems, and makes active efforts to reduce emissions of greenhouse gases, including carbon dioxide (CO₂). In order to drive further progress, the Group is also carrying out carbon offsetting initiatives.



Carbon offsetting is a method of combating global warming through emission reductions and/or sequestration made in another location to offset or compensate for all or a part of the CO₂ and other greenhouse gases emitted from a company's business operations that simply cannot be reduced. Products, services, and events that make use of the carbon offsetting scheme are increasing year by year. It is gaining attention as a means for citizens, companies, local governments, and others to proactively contribute to the fight against global warming.

Carbon Offsets from Disaster-affected Regions

Konica Minolta is implementing a carbon offsetting initiative using Offset Credits (J-VER)^{*} from Japan's Ministry of the Environment as part of its support for areas afflicted by the Great East Japan Earthquake. The Group aims to promote both support for the afflicted areas and the fight against global warming by procuring emissions credits created through J-VER projects in the regions that were worst affected by the Great East Japan Earthquake (i.e., the three prefectures of Iwate, Miyagi, and Fukushima). The credits were applied to the two planetariums run directly by Konica Minolta: the Konica Minolta Planetarium "Manten" in Sunshine City and the Konica Minolta Planetarium "Tenku" in TOKYO SKYTREE TOWN®.

^{*} Offset Credits (J-VER): Credits created through voluntary greenhouse gas emission reduction and/or sequestration projects in Japan. The credits are certified after being validated/verified by a third party based on the Ministry of the Environment's Offset Credit Scheme (J-VER).

Konica Minolta's Carbon Offset Record

	Facility	Emission Credits	Carbon Offset Period	Source of Offset Greenhouse Gas Emission	Amount of Carbon Offset
	Konica Minolta Planetarium "Manten" in Sunshine City	J-VER (Tree thinning project in Sumita Town, Iwate Prefecture)	March 1, 2014 -	(1) Planetarium screening facility, all electricity usage connected to the screening venue (2) CO ₂ emissions connected to the transport of visitors to the planetariums to enjoy the shows [*]	Annually: 1,117 tons-CO ₂
	Konica Minolta Planetarium "Tenku" in TOKYO SKYTREE TOWN®	CER (Coal mine methane recovery and effective use of energy project in Liaoning Province, China)			

^{*} One-way transport by train from within the greater Kanto metropolitan area (Saitama City, Chiba City, the special wards of Tokyo, Yokohama City, and Kawasaki City)

What is a Carbon Offset Certification Label from the Ministry of the Environment?

Carbon offset programs that are recognized by the Carbon Offset Scheme as being conducted appropriately based on the Ministry of the Environment's carbon offset certification standards can use this label.

This label demonstrates that an offset program has maintained a certain level of reliability. (Certification number acquired by Konica Minolta: CO₂-0072)

See the Ministry of the Environment's website for detailed information about the Carbon Offset Scheme.

 [To the Ministry of the Environment's Carbon Offset Scheme](#)



<http://www.jcs.go.jp/e/>