



KONICA MINOLTA



Konica Minolta Environmental Report 2009



Management Philosophy

The creation of new value

Management Vision

An innovative corporation that continues to create inspiring products and services in the field of imaging
A global corporation that leads the market by advanced technologies and reliability

Corporate Message

The essentials of imaging

The message represents our wish to be acknowledged as an essential company, by offering essential products, services and solutions to our customers in the world of imaging.

Contents

Overview of the Konica Minolta Group2

Eco Vision 2050 and the Medium-Term Environmental Plan 2015

Eco Vision 20504
Medium-Term Environmental Plan 20155

Environmental Management at Konica Minolta

Environmental Management8
Targets and Results for Fiscal 200810
Environmental Impacts Resulting from Business Activities11
Environmental accounting12

Preventing Global Warming

Basic Concept / Targets and Results14
Initiatives for Products15
Initiatives at Business Sites18
Initiatives in Distribution and Sales23

Supporting a Recycling-Oriented Society

Basic Concept / Targets and Results25
Initiatives at Business Sites26
Initiatives for Products32

Reducing the Risk of Chemical Substances

Basic Concept / Targets and Results34
Initiatives for management of chemicals35
Initiatives at Business Sites36
Initiatives for Products38

Environmental Communication

Basic Concept40
Communication with Customers41
Communication with Society43

Appendix

Environmental Performance Data46

Konica Minolta Environmental Report 2009

Konica Minolta discloses information on its environmental initiatives on its website. The *Konica Minolta Environmental Report 2009* is available in PDF format, as a resource for over viewing the company's basic policies and its initiatives implemented in fiscal 2008.

Scope

This report covers the entire Konica Minolta Group, including Konica Minolta Holdings, Inc., the Group's business companies and common function companies, and its affiliates.

In this report, "Konica Minolta" refers to the Konica Minolta Group.

Period under Review

In principle, the report covers activities from April 1, 2008 to March 31, 2009. Some sections may include information on earlier initiatives or more recent activities.

In this report, "fiscal 2008" refers to the fiscal year starting April 2008 and ending March 2009.

Publication Period

October 2009 (next report: scheduled for August 2010; previous report: December 2008)

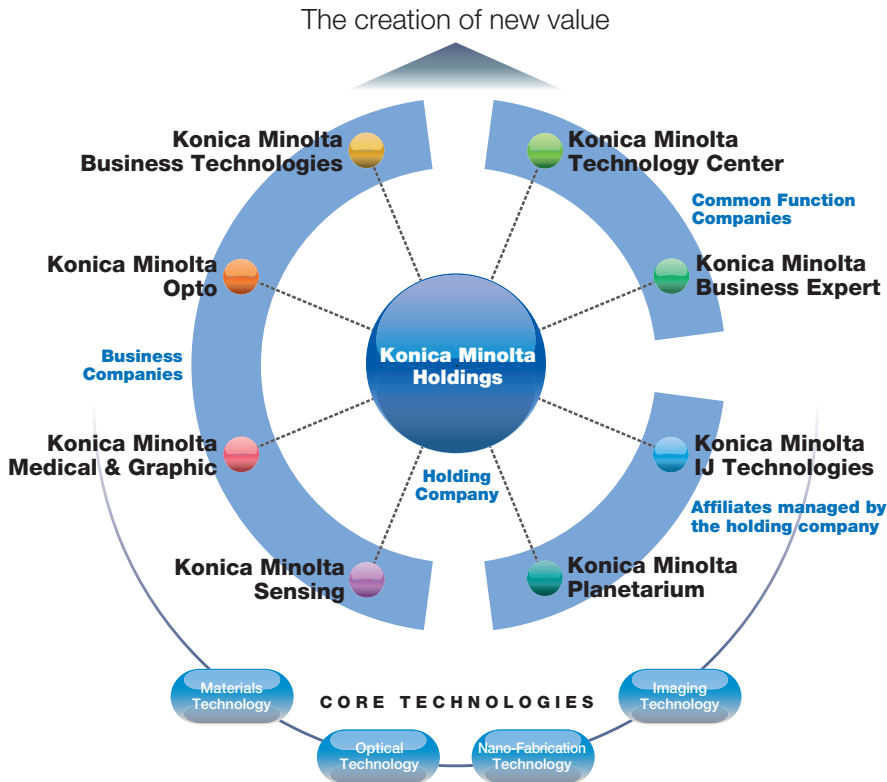
Relevant Guidelines

In making this report, Konica Minolta referenced the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines Version 3.0 and the Environmental Reporting Guidelines 2007 issued by the Ministry of the Environment (Japan).

Disclaimer

In addition to facts about past or present circumstances, this report contains description of the Group's current plans and projections for the future. These descriptions are based on information that is currently available and have been deemed reasonable based on the Group's current status. The Group's actual performance could differ from its predictions due to future changes in the business environment.

Overview of the Konica Minolta Group



The Konica Minolta Group consists of business companies and common function companies under its holding company Konica Minolta Holdings, Inc.

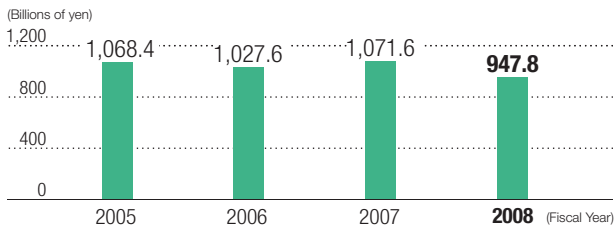
Powered by the four core technologies it has developed in the imaging field—materials, optical, nano-fabrication and imaging technology—Konica Minolta delivers a variety of products and services to customers all over the world.

Company profile

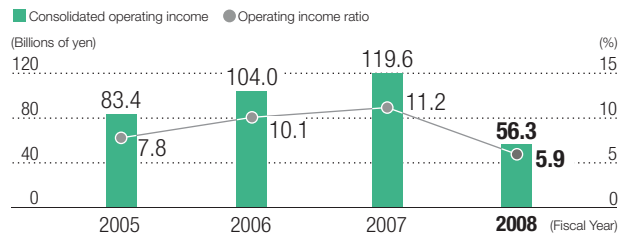
Company name Konica Minolta Holdings, Inc.
Head office 1-6-1 Marunouchi, Chiyoda-ku, Tokyo, Japan
President and CEO Masatoshi Matsuzaki

Established December 22, 1936
Paid-in capital 37,519 million yen
Fiscal year end March 31

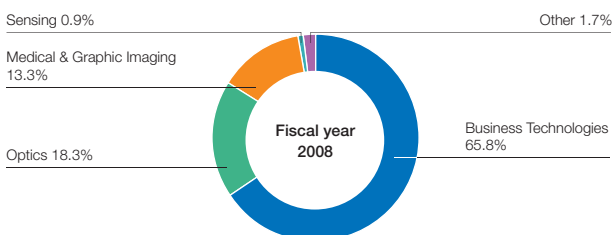
Consolidated Sales



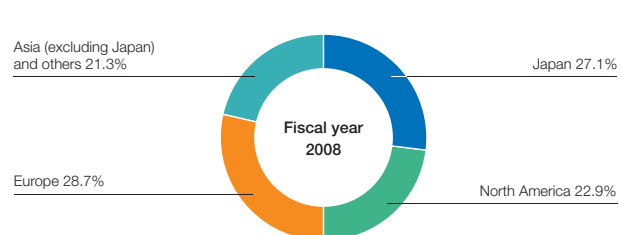
Consolidated Operating Income / Operating Income Ratio



Breakdown of Sales by Business Segment



Breakdown by Sales by Region



Overview of the Konica Minolta Group



Holding Company

● KONICA MINOLTA HOLDINGS, INC.

Responsible for planning and promotion of management strategies for the Konica Minolta Group, and for audit and administration of the Group's management.

Business Companies: Companies entrusted with the authority necessary to execute business activities in their field of expertise.

● KONICA MINOLTA BUSINESS TECHNOLOGIES, INC.

Manufactures and markets digital multi-functional peripherals (MFPs), printers, and related supplies.



● KONICA MINOLTA OPTO, INC.

Manufactures and markets optical products such as pickup lenses and electronic materials such as triacetyl cellulose (TAC) films.



● KONICA MINOLTA MEDICAL & GRAPHIC, INC.

Manufactures and markets medical and graphic imaging equipment and materials.



● KONICA MINOLTA SENSING, INC.

Manufactures and markets measuring instruments for industrial and medical applications.



Common Function Companies: Companies that perform centralized Group-wide functions.

● KONICA MINOLTA TECHNOLOGY CENTER, INC.

Conducts R&D, promotes the incubation and commercialization of new business and manages and operates intellectual property.

● KONICA MINOLTA BUSINESS EXPERT, INC.

Provides management support and administrative functions and services.

Affiliates Managed by the Holding Company: Companies that strive to cultivate business with the support of the holding company.

● KONICA MINOLTA IJ TECHNOLOGIES, INC.

Manufactures and markets inkjet print heads for industrial use and textile printers.



● KONICA MINOLTA PLANETARIUM CO.,LTD.

Manufactures, markets, and installs planetariums.



Eco Vision 2050 and the Medium-Term Environmental Plan 2015



Eco Vision 2050 — For a sustainable earth and society

● Growing Problems in the Global Environment: More Has to be Done

Global warming, dwindling energy resources, destruction of ecological systems by pollution, and many other global environmental problems have emerged and worsened over recent years. These environmental problems are critical issues that must be addressed by the current and future generations of people around the world. Therefore, people of all nations and regions as well as corporations are being called upon to reduce their impact on the environment in order to leave it in a better condition and pass it on to future generations.

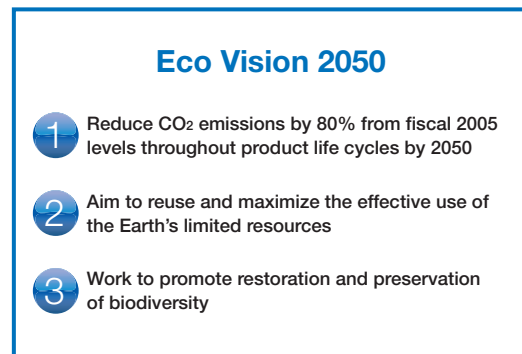
All over the world, alarms have sounded warning of the seriousness of global warming. The IPCC (Intergovernmental Panel on Climate Change) has stated that CO₂ emissions must be reduced by 50 - 85% from 2000 levels by 2050 in order to limit the rise in global temperatures to 2.0 - 2.4°C, compared with the era before industrialization. Similarly, the IEA (International Energy Agency) has proposed targets for halving the current levels of CO₂ emissions by 2050 through technological innovations.

● Environmental Activities from a Long-term Perspective: Formulation of Eco Vision 2050

From early on, the preservation of the global environment has been a core tenet of management at Konica Minolta. Based on this approach, the Group has formulated medium-term environmental plans that emphasize the prevention of global warming, support of a recycling-oriented society, and reduction of the risk of chemical substances. Konica Minolta has achieved successful results from its efforts to reduce environmental impact in terms of entire product life cycles. However, as the pace of environmental problems accelerates, Konica Minolta believes that, from a long-term perspective, the Group must redouble its efforts toward achieving more challenging goals through a broader range of approaches.

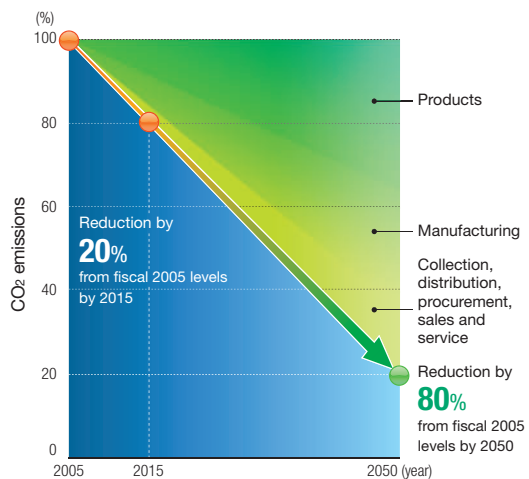
With this understanding, in January 2009 Konica Minolta formulated Eco Vision 2050 as its long-term environmental vision. This vision guides Konica Minolta in the right direction to achieve its future objectives and fulfill its responsibility as a global corporation by contributing to a sustainable earth and society. The prevention of global warming is a core part of Konica Minolta's mission as a manufacturing company. Specifically, management has set the target of reducing CO₂ emissions by 80% from fiscal 2005 levels throughout product life cycles by 2050. Moreover, Konica Minolta has taken a more aggressive posture toward issues of increasing importance, such as the effective use and reuse of limited global resources, and the restoration and preservation of biodiversity.

Technological innovation is the driving force behind efforts to attain these objectives. Konica Minolta sees the development of new technologies as a pivotal factor for achieving sustainable business development with reduced environmental impact, as well as for offering next-generation products with improved environmental performance. Technological advancements culminate in even more innovation, and through this ongoing process, Konica Minolta aims to continue contributing to environmental preservation while also supporting society and helping people lead better lives.



Medium-Term Environmental Plan 2015

Reductions in CO₂ emissions





Medium-Term Environmental Plan 2015

Konica Minolta created the Medium-Term Environmental Plan 2015 as a milestone marker toward the goals outlined in its Eco Vision 2050.

The plan comprises four fundamental objectives: preventing global warming, supporting a recycling-oriented society, reducing the risk of chemical substances, and restoring and preserving biodiversity. It also defines important measures for attaining each of these objectives and sets clear targets for each of the Group's businesses. By carrying out specific measures for each business, the Group intends to assure the achievement of the targets of the Medium-Term Environmental Plan 2015. Taking a comprehensive manufacturing viewpoint, Konica Minolta will also advance this plan by introducing the Green Factory Certification System as a new measure.

In addition to implementing such measures in existing businesses, Konica Minolta is committed to developing new products focusing on environmental and energy fields to help create a low-carbon society.

Medium-term Environmental Plan 2015

Objectives	Fiscal 2015 Targets (Base Year: Fiscal 2005*1)	Fundamental Objectives
Preventing global warming	Reduce CO ₂ emissions by 20% throughout product life cycles	
	Reduce CO ₂ emissions by 60% at the product usage stage	<ul style="list-style-type: none"> Develop new energy-saving technologies and incorporate them in products
	Reduce CO ₂ emissions by 10% per unit of sales at the product manufacturing stage	<ul style="list-style-type: none"> Improve energy efficiency by developing better production technologies
	Reduce CO ₂ emissions by 30% per unit of sales at the product distribution stage	<ul style="list-style-type: none"> Enhance distribution efficiency
Supporting a recycling-oriented society	Reduce CO ₂ emissions by 50% per unit of sales at the product sales and service stage	<ul style="list-style-type: none"> Increase efficiency in sales and services Reduce fuel consumption of Company-owned vehicles
	Reduce petroleum-based resource usage by 20% per unit of sales	<ul style="list-style-type: none"> Develop new technologies of resource conservation and incorporate them in products Reduce the volume of waste from manufacturing activities by developing new production technologies Reduce fuel consumption via more efficient sales and service activities
	Reduce packaging material usage by 25% per unit of sales	<ul style="list-style-type: none"> Decrease the volume of product packaging
	Reduce the volume of waste discharged externally from manufacturing activities by 50% per unit of sales	<ul style="list-style-type: none"> Promote zero waste activities, including the introduction of new technologies
Reducing the risk of chemical substances	Build up product recycling systems in each region and aim for a recycling rate of 90% or more	<ul style="list-style-type: none"> Optimize product collection and recycling systems
	Maintain strict management of chemical substances, including the entire supply chain*2	<ul style="list-style-type: none"> Stringently follow REACH regulations*3 Strictly manage chemical substances throughout the entire supply chain
Restoring and preserving biodiversity	Reduce atmospheric emission of volatile organic compounds (VOCs) by 75% based on an environmental impact index*4	<ul style="list-style-type: none"> Reduce VOC risk via manufacturing reforms
	Help restore and preserve biodiversity	<ul style="list-style-type: none"> Create programs for biodiversity preservation and restoration Form partnerships with relevant NGOs

Point 1
(→P6)

Point 2
(→P6)

*1 Many international frameworks use 1990 as a base year for greenhouse gas reduction targets. Konica Minolta, however, decided to use fiscal 2005 as its base year, as the result of a Group merger in 2003 and the considerable changes that have been made to its business portfolio since then.
 *2 Supply chain used here refers to the process of delivering parts to Konica Minolta from upstream material manufacturers via parts suppliers.
 *3 REACH regulations: The EU consolidated its earlier regulations concerning chemical substances, and in June 2007, enacted new regulations for the registration, evaluation, authorization and restriction of chemicals.
 *4 Environmental impact index: an index designed to measure the impact on human health and the environment, obtained by multiplying VOC emission volume by a location coefficient and hazard coefficient, which measures impact on human health and the environment.



Medium-Term Environmental Plan 2015

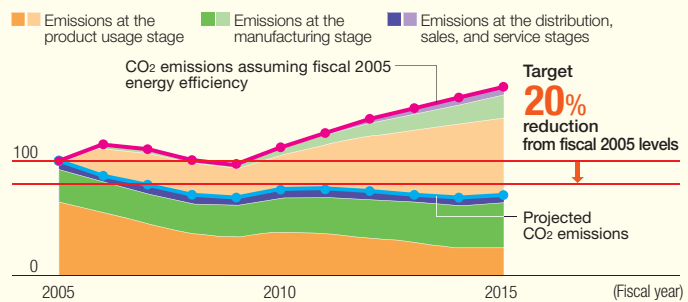
Point 1 Reducing CO₂ Emissions during Product Usage and Manufacturing

Promoting Energy-Saving via Technological Innovation

Konica Minolta is working to reduce CO₂ emissions from the standpoint of the entire product life cycle. The Group is focusing on reducing CO₂ emissions at the product usage and manufacturing stages, two major sources of CO₂ emissions.

Specifically, Konica Minolta positions energy-saving as a major theme for its business information products, a core Group business. To this end, it is developing equipment with new energy-saving technologies. The Group is also further improving energy efficiency of manufacturing processes by developing new production technologies and methods that minimize energy usage.

CO₂ Emission Projections and Targets (fiscal 2005 = 100)



Assuming energy efficiency remains at fiscal 2005 levels, total CO₂ emissions throughout a product life cycle would increase along the red line. The Group aims to reduce this by 20% from fiscal 2005 levels by fiscal 2015. By promoting initiatives of the Medium-Term Environmental Plan 2015, CO₂ emissions are estimated to follow the pattern represented by the blue line.

Point 2 Reduce Petroleum-Based Resource Usage

Increase Efficiency of Petroleum-Based Resource Usage

Petroleum is a resource that is being depleted, and from the perspective of preventing global warming, the efficient utilization of petroleum-based resources has become a crucial issue. Konica Minolta is strengthening its efforts to reduce petroleum-based resource usage in order to help create a sustainable society.

The Group plans to lower its use of petroleum-based resources in products by creating more compact, lightweight and longer-lasting products, and also by proactively using recyclable plastic materials. Konica Minolta aims to reduce the volume of waste emitted from its production process by applying new manufacturing technologies and methods. It also intends to lower the volume of fuel consumption by setting reduction targets for automobile fuel used in sales and service activities.

Point 3 Lowering the Environmental Impact of Manufacturing

Introducing the Green Factory Certification System

Konica Minolta is launching the Green Factory Certification System, a new method to comprehensively evaluate the environmental impact of production sites. This system certifies a production site as a Green Factory if it surpasses standards set in the three fields of preventing global warming, supporting a recycling society, and reducing the risk of chemical substances.

The Green Factory Certification System has two levels of targets: level 1 targets (fiscal 2011 basis) are preliminary goals representing milestones toward level 2 targets that are to be achieved by fiscal 2015. The Group is promoting activities based on guidelines that identify specific measures and numerical targets, and aims to have all of its manufacturing sites certified as Green Factories by 2015.



Medium-Term Environmental Plan 2015

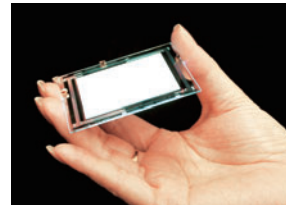
Contributing to the Environment for Future Generations

Technological Innovation in Environmental and Energy Fields

To contribute to the realization of a sustainable society, Konica Minolta will push ahead with efforts to reduce its environmental burden while relentlessly striving to develop new technologies that dramatically increase energy efficiency and new methods of generating energy.

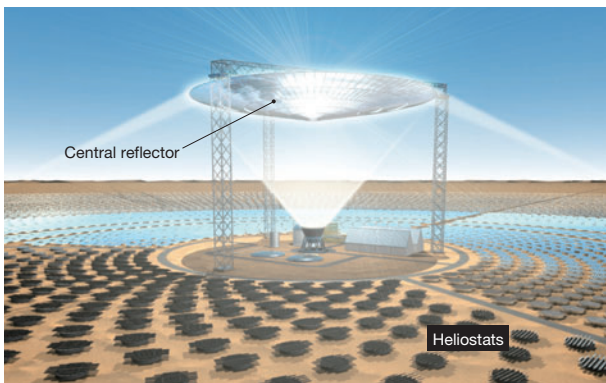
Organic electroluminescence lighting

Organic electroluminescence (EL) material, which emits light evenly from a surface, has attracted attention as an innovative, energy efficient light source that consumes very little power. By using thin plastic film substrates, Organic EL material can be curved and flexibly shaped, enabling unique lighting applications. Konica Minolta is developing this technology with the goal of commercialization in 2010.



Solar electric power generation systems

Solar energy systems are clean and are a low-cost source of energy that generate electricity using the heat of the sun. These systems reflect sunlight with mirrors that are focused on a single point, generating a high level of thermal energy. Konica Minolta is applying its proprietary technologies to develop mirrors with very high reflectivity. The Group aims to contribute to the advancement of the fields of environment and energy by developing these and other innovative technologies.



Beam down-type concentrating solar power plant (conceptual drawing)

Converting desert sunlight into infinite energy

Konica Minolta is taking part in the 100 kW beam-down solar power collection and generation pilot plant, which is being constructed in Abu Dhabi. We have developed a multiple-layer mirror that will be used as the central reflector. Using our premier optical technologies, we have delivered a prototype capable of both outstanding reflectance, which allows for efficient heat collection, and high heat resistance, which enables the system to withstand the high temperatures of accumulated sunlight.

* A next-generation solar power generation system research and development project participated in by MASDAR-ADFEC in the United Arab Emirates, and by Cosmo Oil Co., Ltd., the Tokyo Institute of Technology, Mitsui Engineering & Shipbuilding Co., Ltd., and Konica Minolta Opto, Inc. in Japan.



Environmental Management

Environmental Policy

Implementing an integrated environmental management system that ensures that corporate activities are good for both people and the environment

The Konica Minolta Group conducts all of its corporate activities in harmony with people and the environment by integrating environmental, economic and social perspectives into the Group's corporate strategy, as the Environmental Policy of the Konica Minolta Group. The Group's basic approach is to work steadily to solve environmental issues, based on securing reliable data and quantitative measurement of performance and impacts. Based on this policy and approach, the Group works to reduce the environmental impact of its products and services over their entire life cycle. The Group places particular emphasis on preventing global warming, supporting a recycling-oriented society, and reducing the risk of chemical substances.

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, 2009
Konica Minolta Holdings Inc.
President and CEO

Masatoshi Matsuzaki



Environmental Management

Organization

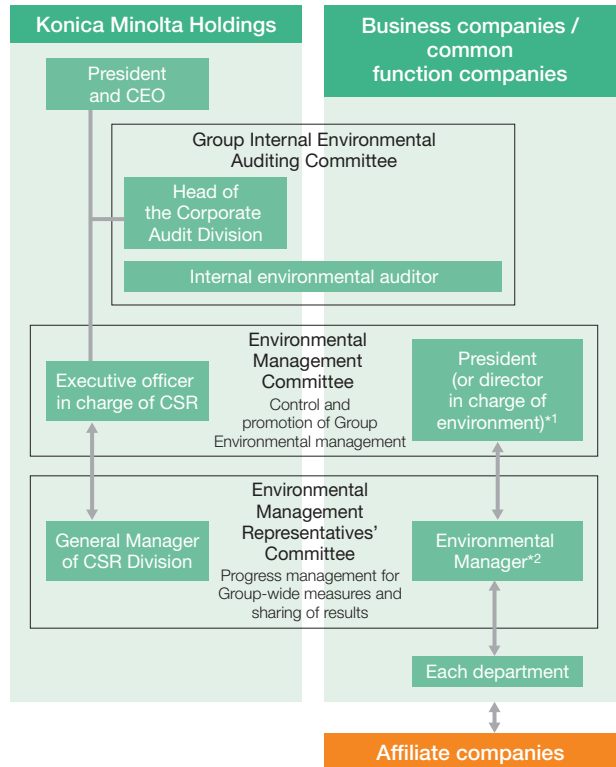
All aspects of environmental management overseen by the Executive Officer in charge of CSR

Konica Minolta Holdings, Inc. has appointed an executive officer in charge of CSR with the authority and responsibility for Group-wide environmental issues. Directors in charge of environment have also been appointed at each business company and common function company, with the authority and responsibility for environmental issues at their individual operations.

As a body for the control and promotion of Group-wide environmental management, Konica Minolta has set up the Environmental Management Committee, which is chaired by the executive officer in charge of CSR and composed of the presidents or the directors in charge of the environment from individual companies. The Committee shares knowledge regarding environmental issues and efforts at each individual company, as well as the Group's environmental policies and medium-term environmental plans. The presidents or the directors in charge of the environment take the decisions back to their respective companies and use them to implement specific initiatives.

The Group Internal Environmental Auditing Committee is chaired by the head of the Corporate Audit Division at Konica Minolta Holdings, and directs the internal environmental auditing for the entire group.

Group Environmental Management System



*1 Control and promotion of Environmental management at each company
 *2 Implementation and management of Environmental activities at each company

Management System

Operating environmental 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 adopts as its basic policy that all Group production sites around the world 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 multi-site ISO 14001 certification so that the entire Group can be managed under a single ISO certification.

In conducting activities, the Group sets numerical targets and periodically evaluates attainment. The evaluation results are reported back to each site to enable continuous improvement. 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.



Fiscal 2008 Targets and Results

Konica Minolta has set general targets on various environmental issues under three major themes—preventing global warming, supporting a recycling-oriented society, and reducing the risk of chemical substances. With the keywords “global,” “worldwide,” and “life cycle,” the Group is undertaking challenging initiatives to meet these targets.

The following items are reports on the targets and results for fiscal 2008 under these three themes. From fiscal 2005 to fiscal 2008, the Group worked to achieve the planned targets each year in accordance with the medium-term environmental plan for fiscal 2010. With the establishment of the Eco Vision 2050 plan in fiscal 2009, the Group will embark on the Medium-Term Environmental Plan 2015 which is scheduled for completion in 2015.

Fiscal 2008 Targets and Results

	Targets	Results	Target achieved
Preventing Global Warming	Reduce CO ₂ emissions over the product life cycle by 18% compared with fiscal 2000 (957,000 t-CO ₂)	853,000 t-CO ₂ (Reduce CO ₂ emissions by 27% compared with fiscal 2000)	○
	Reduce CO ₂ emissions from all Group production and R&D sites in Japan to 296,000 t-CO ₂	269,000 t-CO ₂	○
	Reduce CO ₂ emissions from production sites in the U.S., Europe and Asia to 101,000 t-CO ₂	81,000 t-CO ₂	○
	Reduce CO ₂ emissions during distribution to 34,000 t-CO ₂	31,000 t-CO ₂	○
	Reduce CO ₂ emissions during product usage to 526,000 t-CO ₂	472,000 t-CO ₂	○
Supporting a recycling-oriented society	Reduce emissions of waste from worldwide production sites by 17% compared with fiscal 2000 (259,000 t)	22,100 t (Reduce emissions of waste by 29% compared with fiscal 2000)	○
	Maintain zero emission Level 2 at all Group production sites in Japan	Maintained zero emission Level 2 at all Group production sites in Japan	○
	Achieve zero emission Level 1 at all production sites in America, Europe, and Asia	Achieved zero emission Level 1 at all production sites except one new production site. Achieved zero emission Level 2 at three product sites	○
Reducing the risk of chemical substances	Reduce total atmospheric emissions of VOCs (risk conversion) by 90% compared with fiscal 2000	Reduce total atmospheric emissions of VOCs by 92% compared with fiscal 2000	○
	Establish a system for management of chemicals in products to comply with REACH regulations	[Chemicals] Completion of pre-registration [Equipment products] Establishment of a data management system	○

* See below for details

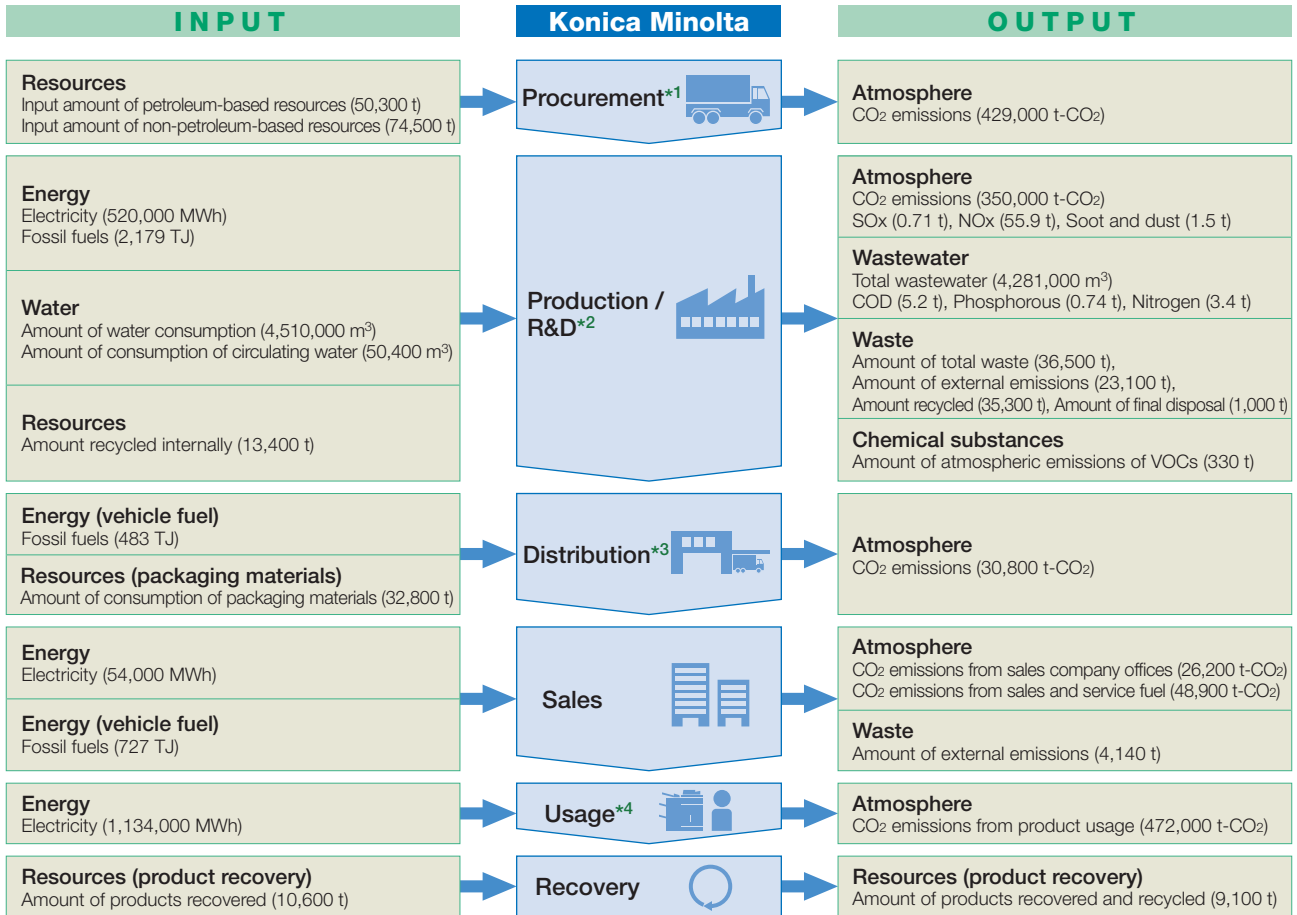
- Targets and Results: Preventing Global Warming (See page 14)
- Targets and Results: Supporting a Recycling-Oriented Society (See page 25)
- Targets and Results: Reducing the Risk of Chemical Substances (See page 34)



Environmental Impacts Resulting from Business Activities

Konica Minolta measures the amount of energy and resources used in all its business activities, as well as the amount of greenhouse gases emitted and the amount of waste produced, at each stage of a product's life cycle. These results are analyzed and used to facilitate concrete approaches to improvement.

Overall Picture of Environmental Impact



*1 Input amount of resources refers to the input amount of materials for the major products released in fiscal 2008 (not including parts for maintenance). CO₂ emissions from procurement is the amount of CO₂ emitted by suppliers when manufacturing the items procured.

*2 The figures of atmospheric pollutants and water pollutants are total values for factories that are legally required to measure emissions. The figure for amount of atmospheric emissions of VOCs is the total value for sites subject to reduction targets stipulated in the Medium-Term Environmental Plan.

*3 The calculation of fuel consumption amount and CO₂ emissions amount uses the GHG protocol for international distribution and the basic units of the Energy Saving Law for distribution in Japan.

*4 Energy consumption during product usage is calculated based on MIF inferred from the product lifetime.

Refer to page 46 for the following environmental performance data.

INPUT	OUTPUT			
Energy, Water ● Total energy inputs ● Energy use by type ● Total water inputs	Atmosphere ● CO ₂ emissions ● SO _x discharged ● NO _x discharged ● Soot and dust discharged	Wastewater ● Total wastewater ● COD discharged ● Phosphorus discharged ● Nitrogen discharged	Waste ● Waste Flows ● Total waste volume ● Total volume of recycled resources ● Total volume of final disposal (Landfill waste) ● Percentage recycled or reused / Percentage of final disposal	PRTR substances ● Atmospheric emissions of PRTR substances ● Substances Controlled by PRTR Regulations



Environmental accounting

Implementation of environmental accounting

Implementing Group consolidated accounting on a global basis

Environmental accounting is a method for quantitatively assessing the cost and benefit of a range of environmental measures. Konica Minolta uses environmental accounting for rational decision making when planning and implementing effective environmental measures.

An environmental accounting manager is appointed at each Group company and the Group carries out consolidated environmental accounting globally, from research and development to production and sales. In addition, the companies establish their own environmental budget system to manage the environmental costs for the next fiscal year, including investments and expenses. Konica Minolta will continue to undertake effective environmental measures based on this environmental accounting approach.

Results of Environmental Investment and Expense in Fiscal 2008

The amount invested in fiscal 2008 was 69% less than fiscal 2007, at about ¥1.2 billion. Of this amount, 72% was capital investment towards reducing the amount of VOCs emitted into the atmosphere and for energy saving (both are costs within the business domain). Expenses were 8% less than in fiscal 2007, at about ¥14.9 billion, of which 40% was for resource saving in production and products and the cost of reuse and recycling (costs within the business domain - resource recycling, and up/downstream costs). In addition, significant costs went into the development of new products that make a contribution to the environment, while research and development costs accounted for 24%.

Considered by business segment, in the Business Technologies business, the environmental impact of products usage and recovery of used products is significant, therefore, environmental costs consist mainly of research and development costs and up/downstream costs. On the other hand, in the optics business, the environmental impact of production is significant, and so environmental costs are concentrated in costs within the business domain.

In the fiscal 2009 budget, the amount of investment is 35% higher than fiscal 2008, at about ¥1.6 billion, while costs are 16% lower than fiscal 2008 at ¥12.6 billion.

Environmental Accounting: Results for Fiscal 2008 and Budget for Fiscal 2009

(Unit: ¥1 million)

Types of Environmental Conservation Activities	Major Initiatives	FY 2008 Results			FY 2009 Budget	
		Investment	Expenditures	Economic Effects	Investment	Expenditures
1. Costs within business area		866	4,430	13,986	416	3,731
1) Pollution prevention	Reduced VOC emissions and managed chemical substances in the optics business	417	2,345	53	124	1,894
2) Global warming prevention	Promoted energy conservation	354	556	403	206	557
3) Recycling	Restricted use of solvents and plastics, and recovered silver from waste in the optics business	95	1,529	13,529	86	1,280
2. Up / downstream costs	Collected and recycled products, and recovered silver from collected products in the Business Technologies business	1	4,553	2,275	7	2,813
3. Management activity costs	Maintained and promoted environmental ISO standards	38	1,338	0	39	1,361
4. R&D costs	Conducted R&D on energy-saving adaptations for business information products and new products that contribute to the environment	166	3,556	79	1,133	4,056
5. Social activity costs	Conducted nature conservation activities	0	94	0	0	94
6. Environmental damage costs	Restored contaminated soil	140	907	0	35	509
7. Other costs		0	0	0	0	0
Total		1,210	14,876	16,340	1,630	12,565



Environmental accounting

Fiscal 2008 Results: Environmental Conservation Effect

Stages	Types of Benefit	Effects
Production	Water use reduced (1,000 t)*1	739
	Electricity reduced (1,000 MWh)*1	20
	Natural gas reduced (1,000 m ³)*1	3,335
	Heavy oil reduced (1,000 l)*1	134
	Harmful chemical substances reduced (t)*1	61
	Materials reduced (1,000 t)*1	71
	External recycling and reuse of waste (1,000 t)*2	22
Sales	Packaging reduced (t)*1	37
	Recycling and reuse of materials from used products (1,000 t)*2	9
Usage	CO ₂ emissions reduced (1,000 t-CO ₂)*3	21

*1 The environmental conservation effects are calculated as the difference with the environmental impact produced before the activity was implemented.

*2 The environmental conservation effects are calculated as the volume recycled and reused as a result of the activity specified.

*3 The environmental conservation effects are calculated as the difference in the CO₂ emissions produced by the use of a previous version of the product.

Fiscal 2008 Results: Impact of End User Usage

Stages	Types of Benefit	Effects
Usage	Consumer electricity consumption reduced (1,000 MWh)	55.5
	Consumer electricity bills reduced (¥1 million)	800

Scope of fiscal 2008 results

10 Group companies, including the holding company, business companies, and common function companies

Konica Minolta Holdings, Inc.
 Konica Minolta Business Technologies, Inc.
 Konica Minolta Opto, Inc.
 Konica Minolta Photo Imaging, Inc.
 Konica Minolta Medical & Graphic, Inc.
 Konica Minolta Sensing, Inc.
 Konica Minolta Technology Center, Inc.
 Konica Minolta Business Expert, Inc.
 Konica Minolta IJ Technologies, Inc.
 Konica Minolta Planetarium Co., Ltd.

22 Japanese affiliates

Konica Minolta Information System Co., Ltd.
 Konica Minolta Supplies Manufacturing Co., Ltd.
 Konica Minolta Supplies Manufacturing Kansai Co., Ltd.
 Toyohashi Precision Products Co., Ltd.
 Konica Minolta Electronics Co., Ltd.
 Konica Minolta Business Solutions Japan Co., Ltd.
 Konica Minolta Printing Solutions Japan Co., Ltd.
 Konica Minolta Software Laboratory Co., Ltd.
 Konica Minolta Opto Products Co., Ltd.
 Konica Minolta Components Co., Ltd.
 Konica Minolta Opto Device Co., Ltd.
 Konica Minolta Glass Tech. Co., Ltd.
 Konica Minolta Repro Co., Ltd.
 Konica Minolta Technoproducts Co., Ltd.
 Konica Minolta Healthcare Co., Ltd.
 Konica Minolta Graphic Imaging Japan Co., Ltd.

Konica Minolta ID System Co., Ltd.
 Konica Minolta Chemical Co., Ltd.
 Konica Minolta Technosearch Co., Ltd.
 Konica Minolta Engineering Co., Ltd.
 Konica Minolta Logistics Co., Ltd.
 Konica Minolta Sogo Service Co., Ltd.

22 affiliates outside Japan

Konica Minolta Business Technologies (Dongguan) Ltd.
 Konica Minolta Business Technologies (Wuxi) Co., Ltd.
 Konica Minolta Business Technologies Manufacturing (HK) Ltd.
 Konica Minolta Business Solutions(China) Co., Ltd.
 Konica Minolta Supplies Manufacturing U.S.A., Inc.
 Konica Minolta Business Solutions U.S.A., Inc.
 Konica Minolta Business Solutions Europe GmbH
 Konica Minolta Business Solutions Deutschland GmbH
 Konica Minolta Business Solutions (UK) Ltd.
 Konica Minolta Supplies Manufacturing France S.A.S.
 Konica Minolta Business Solutions France S.A.S.
 Konica Minolta Business Solutions Australia Pty. Ltd.
 Konica Minolta Opto (Dalian) Co., Ltd.
 Konica Minolta Optical Products (Shanghai) Co., Ltd.
 Konica Minolta Opto (Shanghai) Co., Ltd.
 Konica Minolta Glass Tech (M) Sdn. Bhd.
 American Litho Inc.
 Konica Minolta Graphic Imaging U.S.A., Inc.
 Konica Minolta Medical Imaging U.S.A., Inc.
 Konica Minolta Sensing Americas, Inc.
 Konica Minolta Sensing Europe B.V.
 Konica Minolta Sensing Singapore, Pte. Ltd.

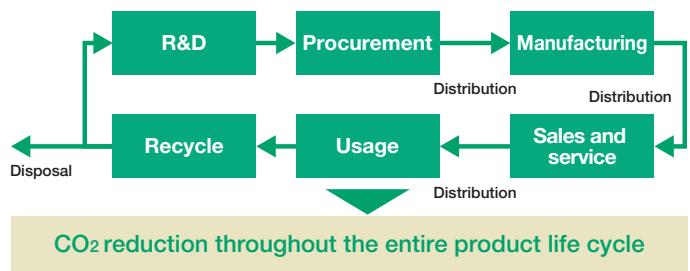


Basic Concept / Targets and Results

Basic Concept

Recognizing that the prevention of global warming is an important responsibility of a manufacturer, Konica Minolta is taking steps to reduce CO₂ emissions throughout the entire product life cycle. In order to achieve CO₂ reduction targets for all stages of the product life cycle, the company has set targets in four areas: emissions from production and R&D sites in Japan, emissions from production sites in the U.S., Europe, and Asia (excluding Japan), emissions during distribution, and emissions during product usage. Measures have been implemented in each of these areas.

Reduction of CO₂ Emissions throughout the Product Life Cycle



Targets and Results for Fiscal 2008 (CO₂ emissions throughout the product life cycle)

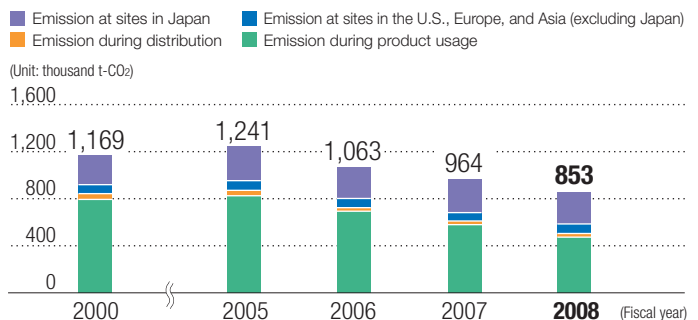
Achieving its fiscal year targets for reduction in CO₂ emissions throughout the product life cycle

In order to achieve the fiscal 2008 target of an 18% reduction in CO₂ emissions compared to fiscal 2000 throughout the product life cycle, Konica Minolta needed to reduce CO₂ emissions to as much as 957,000 tons. In fact, the Group succeeded in reducing CO₂ emissions throughout the product life cycle to 853,000 tons, achieving a 27% decrease compared to fiscal 2000. Moreover, all targets set for the four areas mentioned above were achieved.

More information on the target areas is available at the following links:

- CO₂ emissions during product usage (See page 15)
- CO₂ emissions from production sites (See page 18)
- CO₂ emissions during distribution (See page 23)

Changes in Product Life Cycle CO₂ Emissions



Targets and Results for Fiscal 2008

Targets	Results	Target achieved
Reduce CO ₂ emissions over the product life cycle by 18% compared with fiscal 2000 (957,000 t-CO ₂)	853,000 t-CO ₂ (Reduce CO ₂ emissions by 27% compared with fiscal 2000)	○
Reduce CO ₂ emissions from all Group production and R&D sites in Japan to 296,000 t-CO ₂	269,000 t-CO ₂	○
Reduce CO ₂ emissions from production sites in the U.S., Europe and Asia to 101,000 t-CO ₂	81,000 t-CO ₂	○
Reduce CO ₂ emissions during distribution to 34,000 t-CO ₂	31,000 t-CO ₂	○
Reduce CO ₂ emissions during product usage to 526,000 t-CO ₂	472,000 t-CO ₂	○

Future Targets

In addition, targets have been set for sales and services

Based on the Medium-Term Environmental Plan 2015, Konica Minolta will work to further reduce CO₂ emissions starting in fiscal 2009. In addition to the established targets for reducing CO₂ emissions in the areas of production, distribution, and product usage, targets have also been set for the sales and service stages. By expanding targeted areas, the Group is further strengthening its initiatives for the prevention of global warming.



Initiatives for Products

Fiscal 2008 Targets and Results (CO₂ Emissions during Product Usage)

Achievement of reduction targets by incorporating energy-saving technologies into products

In response to the fiscal 2008 target of reducing CO₂ emissions during product usage to 526,000 tons, Konica Minolta was able to reduce CO₂ emissions in this area to 472,000 tons. This was achieved through the provision of products with energy-saving technologies.

For example, Konica Minolta Business Technologies, Inc., a core business company in the Group, has developed and released color multi-functional peripherals (MFPs) that boast substantial energy-saving performance. The MFPs feature numerous unique technologies, including a toner with a lower fusing temperature, and IH fusing technology that reduces power consumption during standby mode.

While the drop in the number of MFPs operating in the market due to the recession also led to the reduction of CO₂ emissions, the energy-saving technologies played a major role in the reduction of CO₂ emissions.

Energy-saving Product Design

Working to reduce CO₂ emissions by introducing the LCA method to each product group

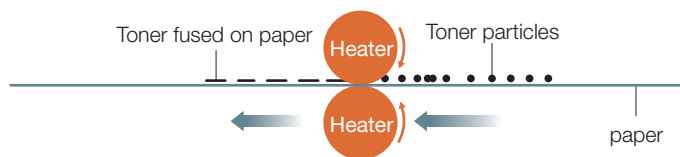
Konica Minolta is effectively reducing CO₂ emissions by employing the Life Cycle Assessment (LCA) method. Data is collected on CO₂ emissions throughout the life cycle of products for each of its wide-ranging product groups, and an assessment is conducted to determine which processes have the higher emission rates. Based on the assessment, appropriate measures are then implemented in each process.

Example 1: Multi-Functional Peripherals (MFPs)

During an MFP's life cycle, the end-user operating stage accounts for a major portion of its total CO₂ emissions. When copying or printing text and images output by the MFP, heat is necessary to fuse the toner on the paper. The energy required in the fusing process represents a significant percentage* of the energy utilized by the MFP during the end-user operating stage. As a result, Konica Minolta has focused its efforts on ways to save energy during the fusing process.

* Represents about 60% of the end-user operating stage energy consumption for the bizhub C652.

Fusing Mechanism



Color MFP bizhub C652



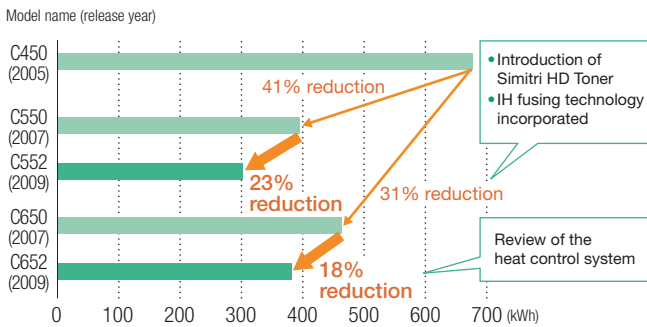
Initiatives for Products

● Color MFP bizhub C652

Launched in March 2009, the bizhub C652 is a high-speed color MFP. The bizhub C552 was released at the same time. Both models offer high-resolution printing combined with energy-saving performance and have been certified under the International Energy Star program.



Comparison of Energy-Saving Performance with Previous Models



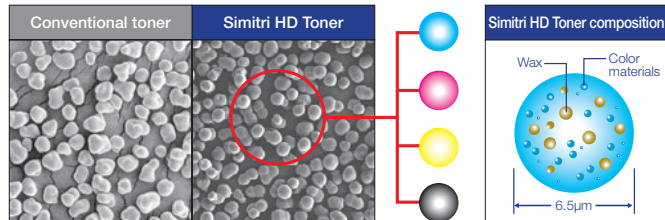
	Black & white printing speed*1	Color printing speed*1	Annual electrical consumption*2
bizhub C450	45ppm	35ppm	671kWh
bizhub C550	55ppm	45ppm	393kWh
bizhub C552	55ppm	45ppm	303kWh
bizhub C650	65ppm	50ppm	462kWh
bizhub C652	65ppm	50ppm	379kWh

*1 Landscape letter or A4 size

*2 Figures were calculated by converting the Typical Electricity Consumption (TEC) value, obtained by the measurement method as stipulated by the International Energy Star Program over a 52-week (one year) period.

Simitri HD Toner Fuses at a Lower Temperature

Simitri HD Toner is a proprietary polymerized toner developed by Konica Minolta. Polymerization is a method of toner manufacturing that greatly reduces environmental impact during production when compared to conventional toner manufacturing methods. The toner particles are smaller than regular toner particles, so less toner is required for the same print jobs. In addition, the toner is fused at a lower temperature. All of these features contribute to reducing the amount of energy used.



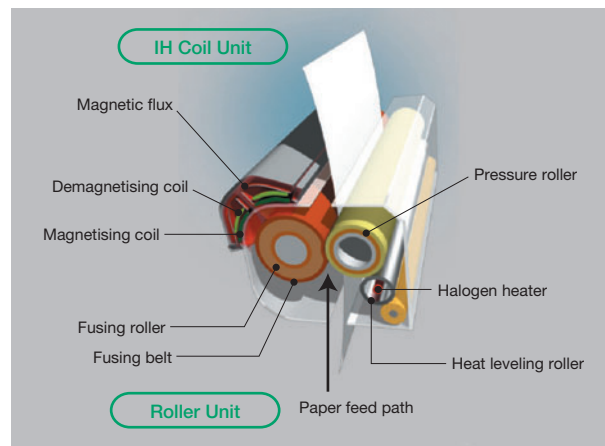
Toner particles of a uniform shape and size are used

Using IH Technology to Create an Energy-Efficient Fusing Unit

Before printing can begin, the fusing roller must be heated to a certain temperature. If the standby temperature is kept high, then the roller can be heated quickly to the proper fusing point. However, this means that a significant amount of energy is consumed during the standby mode. Reducing this energy consumption is key to making an energy-saving MFP.

Konica Minolta provides a solution with its induction heating (IH) technology. This technology has been applied as the means to rapidly heat the fusing unit of its MFPs*3. By rapidly heating the surface of the fusing roller, a low standby temperature can be quickly increased to printing temperature. This greatly reduces power consumption during standby mode.

* Applies to some bizhub MFPs





Initiatives for Products

Example 2: Medical X-ray Imaging Devices

● DRYPRO MODEL 873

Konica Minolta is also working to reduce the energy consumption of its digital X-ray imaging devices, which are used for processing images from X-ray machines, CT scanners, MRIs, and endoscopes, needed for patient diagnosis.

The medical dry laser imager DRYPRO 873 offers power consumption that is 36% less than a conventional model, along with 1.5-times the processing capacity. The power consumption was reduced by reworking the heating methods in development processes. By separately controlling and optimizing the heating in three specific processes, which were previously performed at the same temperature for conventional models, the heat needed to develop one film image was reduced.



DRYPRO MODEL 873

Thermal capacity reduction technology of medical dry imager DRYPRO 873

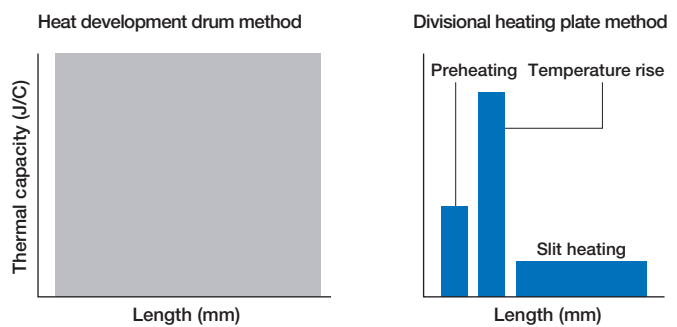
The medical dry imager is a digital X-ray imaging system for creating a latent image on a film by means of a laser exposure, and thermally developing the image by maintaining temperature of 120 degrees C or more for 10 seconds, thereby obtaining a visible image. This temperature holding unit is called a “heat development unit” and its prime function is to provide and maintain highly accurate and constant thermal energy so that the film emulsion can accelerate a uniform chemical reaction.

In the heat development drum method employed by conventional models, a film is closely bonded to a rotating large-diameter heat drum, then heated and conveyed. Therefore, throughout the development process, from the rise of film temperature to the completion of development, a constant amount of heat is applied to the film. On the other hand, in the divided heating plate system used with the DRYPRO 873, the heating process is divided into process parts (preheating, temperature rise, development) according to the direction of conveyance so that each process unit can be independently regulated. A significant feature is to optimize the amount of heat according to the characteristics necessary for each process unit.

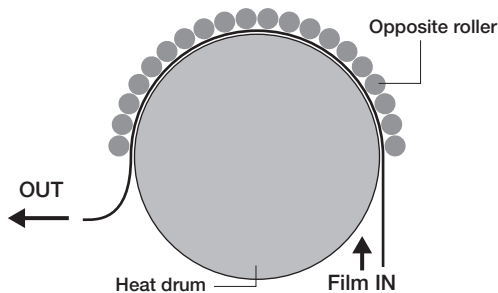
First of all, we made a simulation and verified it by using a prototype machine to observe the effect of temperature changes in each section on the density. Based on the results, we determined the thermal capacity of each section so that the “degree of influence on the density × thermal load during film processing / thermal capacity” becomes equal to that of conventional models. This has enabled a reduction of thermal capacity in the preheating and slit heating sections, where temperature changes do not significantly affect density.

In addition, improved thermal insulation properties have enable the effective use of the energy generated in the heat development process, thereby contributing to the reduction of power consumption.

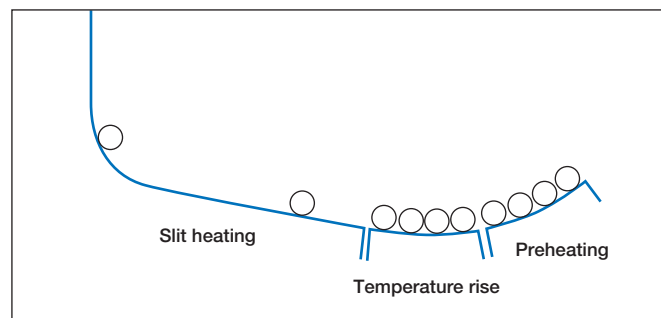
Comparison concept drawing of the thermal capacity



Conventional heat development method that uses a heat drum



Divisional heating plate method





Initiatives at Business Sites

Fiscal 2008 Targets and Results (CO₂ Emissions at production sites)

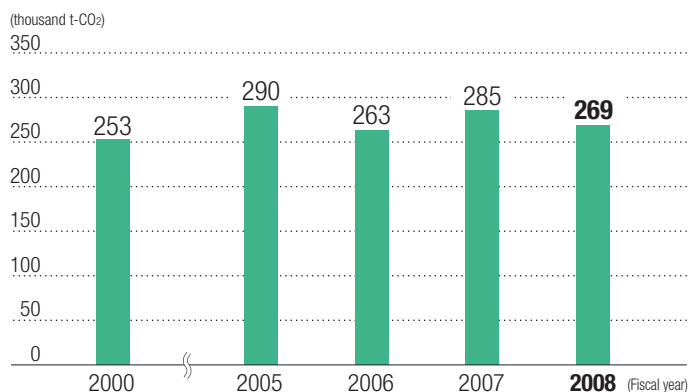
Konica Minolta achieved its CO₂ reduction targets at each Group business company through improvements in production efficiency and other measures

Japan

In fiscal 2008, CO₂ emissions from production and R&D sites in Japan were reduced 5.4% compared to the previous fiscal year to 269,000 tons (6.3% above the fiscal 2000 level). As a result, the Group attained its fiscal year target of reducing CO₂ emissions to below 296,000 tons at all production and R&D sites in Japan. This achievement is attributable to the use of the latest energy conservation technologies in the construction of new sites, and efforts to save energy by increasing production efficiency at each business company.

* See page 21 "New Building at Osakasayama Site Receives Award as an Environmentally Sound Structure."

CO₂ Emissions from Production and R&D Sites in Japan



Note: Figures are based on usage results of all sites.

For the emissions coefficient for electricity and natural gas, figures are derived from the results each supplier released for the fiscal year (or the most recent figures available when results have yet to be released). Regarding other fossil fuels, coefficients were used based on Japan's Law Concerning the Promotion of Measures to Cope with Global Warming.

The United States, Europe and Asia

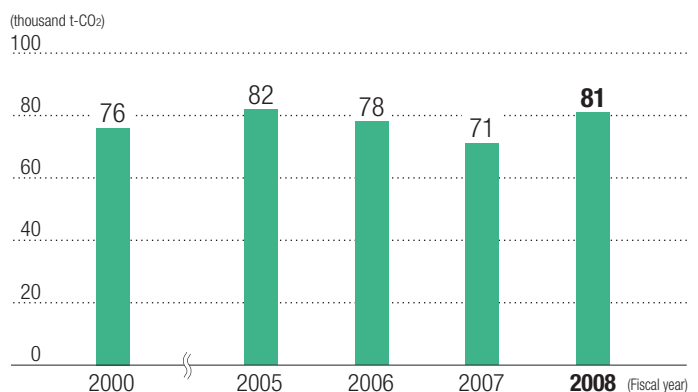
In fiscal 2008, CO₂ emissions from Konica Minolta bases in the U.S., Europe, and Asia totaled 81,000 tons, coming in well below the Group's target of 96,000 tons for the fiscal year, but representing an increase of 12.7% compared with the previous fiscal year (and 5.5% above fiscal 2000 levels).

This increase is mainly attributable to the construction and expansion of hard disk glass substrate production facilities launched in February 2008 at the Group's site in Malacca, Malaysia, as well as to increased production at other sites.

To reduce CO₂ emissions under these circumstances, Konica Minolta focused on the overseas deployment of its Energy Conservation Support Program. The program supports the implementation of measures to reduce energy usage at each site through a detailed analysis and assessment of energy usage by internal experts.

* See page 19 "Energy Conservation Support Program."

CO₂ Emissions Production Bases in the U.S., Europe, and Asia (excluding Japan)



Note: Figures are based on usage results of all sites.

For the emissions coefficient for electricity, figures are those disclosed by each respective country in accordance with the Greenhouse Gas (GHG) Protocol (or the most recent figures available when results have yet to be released). Regarding natural gas and other fossil fuels, coefficients disclosed to GHG Protocol were used.



Initiatives at Business Sites

Reduction in CO₂ Emissions

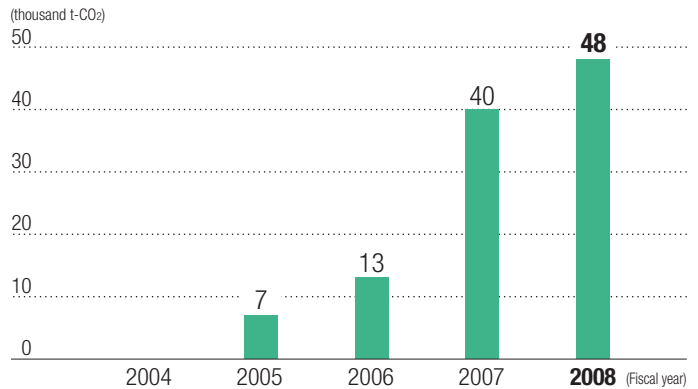
In order to improve production efficiency at each business company, Konica Minolta sets targets for each business to develop and adopt more efficient manufacturing technologies based on basic production units*¹. As a result, CO₂ reduction equivalents*² amounted to 52,000 tons in fiscal 2008.

To determine effective energy conservation measures, the company plans to expand the scope of material flow cost accounting (MFCA), which helps simulate energy loss, as a method to precisely measure energy usage patterns in each process. Since future expansion of facilities and production may lead to greater CO₂ emissions, Konica Minolta is preparing to obtain emissions rights as a backup measure to supplement its thorough energy conservation initiatives.

*¹ A basic production unit represents the amount of environmental impact per volume of production.

*² CO₂ reduction equivalent is calculated as the difference between actual CO₂ emissions and the volume of CO₂ emissions, assuming production levels in fiscal 2004 using basic production units.

Reduction in CO₂ Emissions



Energy Conservation of Facilities and Equipment

Konica Minolta has introduced a variety of measures to help reduce CO₂ emissions at its production sites.

Energy Conservation Support Program

Konica Minolta has implemented the Energy Conservation Support Program to reduce CO₂ emissions at its production sites.

The program dispatches internal experts in plant engineering, production line design and energy management to production sites. They check diverse matters, including the status of energy management, utility facilities such as air conditioners or boilers, production equipment, and specifications of equipment and systems. These experts then propose measures adapted to each site for conserving energy usage. The experts and staff at the sites use these proposals to simulate the energy saving effect and draw up plans to implement the ideas.

Initially the program was deployed in Japan, but it expanded its scope to other countries, starting with two sites in China during fiscal 2007. In fiscal 2008, with two more sites in China and one site in the US, the program has been implemented at five sites in total.

The fiscal target [of 1,800 tons] has yet to be met due to the fact that full-fledged implementation of these measures did not begin until the second half of fiscal 2008. The Group is continuing to work on completing the tasks set out in the measures and increasing the number of production sites covered under the program.



Konica Minolta Business Technologies (Wuxi) Co., Ltd.



Konica Minolta Opto (Dalian) Co., Ltd.



Initiatives at Business Sites

Greenery on Rooftops and Walls (Green Curtain)

At its buildings all over Japan, Konica Minolta is adding greenery to the rooftops and walls, as a “Green Curtain.” This initiative will result in CO₂ absorption through photosynthesis, and have a cooling effect on the buildings through natural shading and transpiration (by which plants release moisture vapor into the air). In short, it will help prevent global warming and lower the heat island effect.

The company’s three business offices in the Tokai region erected Green Curtains of goya (a bitter melon from Okinawa) and Japanese morning glory on the walls of their office buildings. This reduced temperatures by approximately 2°C during strong daylight, saving the equivalent amount of electricity used by air conditioners to achieve the same effect. Goya were harvested from the Green Curtain and given away to employees and people living in the area, with a message of hope for environmental sustainability.



Greenery on rooftops at the Itami Site



A Green Curtain of morning glory at the Mikawa Site



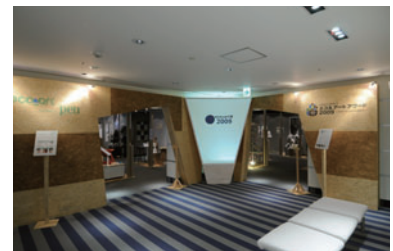
Using Green Electricity

Located in Tokyo, the Konica Minolta Plaza is the Group’s venue for providing the public with various types of information, including environmental, cultural, and artistic exhibits. As of March 2008, Konica Minolta Plaza uses only electricity procured through the green power certification system to cover the electrical requirements of all its exhibitions.

Green power is electricity made from renewable energy sources such as wind and biomass. In addition to the electricity itself, it is beneficial in terms of “environmental added value,” which embodies the advantages of green power including reductions in CO₂ emissions and fossil fuel usage. The green power certification system represents this environmental added value in the form of certificates. With these green power certificates, Konica Minolta is recognized as having used green electricity, by purchasing the environmental added-value portion in addition to the regular electricity supplied by power companies.

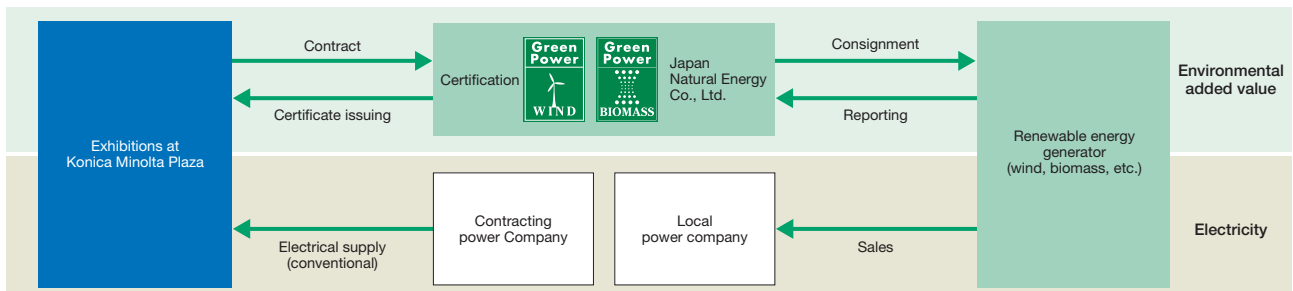
In fiscal 2008, the Konica Minolta Plaza used approximately 71,000 kWh of electricity for its exhibits. About 90% of this amount was biomass electricity that came almost completely from power stations in Iwate and Tokyo. The remaining 10% came from a wind turbine power facility in Chiba.

The electricity used at the General Meeting of Shareholders was also provided by green power.



Konica Minolta Plaza

Green Power Certification System





Initiatives at Business Sites

TOPICS

New Building at Osakasayama Site Receives Award as an Environmentally Sound Structure

In April 2008, Konica Minolta Opto, Inc. completed the construction of a new building at the Osakasayama Site in Osaka, Japan. It won the second annual Osaka Sustainable Building Special Award for fiscal 2009, which is awarded by the Osaka prefectural government. Konica Minolta uses the latest energy conservation technologies when designing and constructing the new building. The new building at Osakasayama Site has the following environmentally friendly features:

- Best-in-class energy-saving transformers and air conditioners to reduce CO₂ emissions
- Enhanced insulation with sandwich wall insulation panels and double-pane insulating glass in windows that trap air for an extra insulation layer
- Greenery on the roof to counter heat-island effects
- A courtyard on the top floor to let natural light into the building, reducing the electric energy to use for lights



New building at Osakasayama Site



Natural light enters from the courtyard on the top floor



Initiatives at Business Sites

Efforts to Conserve Energy in Offices

All employees engage in environmental activities based on ISO 14001 standards

Environmental Activities Based on ISO 14001 Standards

All Konica Minolta employees take part in environmental activities under an environmental management system based on ISO 14001 standards.

Employees strive to understand the impact the company's business activities have on the environment in office settings as well as at production facilities. The employees also aim to continuously improve their daily activities to lessen their impact on the environment, by periodically reviewing plans to achieve and maintain compliance with ISO mandated requirements.

Team Minus 6%

"Team Minus 6%" is the nickname of a national campaign waged in Japan to fight global warming by achieving the 6% reduction commitment stipulated in the Kyoto Protocol. In support of the campaign's objective, Konica Minolta has enrolled as a member of "Team Minus 6%" and is taking the following measures.



1) In-house measures

1. Recommended air conditioning settings of 28 degree C in summer, and 20 degree C in winter
2. Efficient operation of elevators
3. Energy-saving on office lighting and OA equipment
4. Promotion of idling stops

2) Activities at home

Encouraging employees to act on the "Team Minus 6%" campaign even at home.

3) Activities outside the Company

Encouraging active participation in related campaigns and other events organized outside the Company (mainly via the Corporate Communication & Brand Management Departments).

TOPICS

Participation in "lightdown" campaign

Konica Minolta has participated in the "Lightdown" campaign advocated by the Ministry of the Environment of Japan since fiscal 2005. On June 21, 2008, the Group turned off lights for its rooftop signs in Hokkaido, Sendai, Tokyo and Nagoya, and at the Konica Minolta Plaza exhibition space in Tokyo. This initiative reduced approximately 1,450 kWh of electrical power, thereby contributing to the reduction of CO₂ emissions.



Initiatives in Distribution and Sales

Fiscal 2008 Targets and Results (CO₂ Emissions during distribution)

Achievement of reduction targets through the efforts of many sites within the Group around the world

In response to the fiscal 2008 target of reducing CO₂ emissions in its distribution activities to 34,000 tons, Konica Minolta was able to reduce CO₂ emissions in this area to 31,000 tons.

As a part of its supply chain management (SCM)* initiatives, Konica Minolta decided to reduce the use of aircraft, which emit a relatively large amount of CO₂, and promote ships and railways for its transportation needs. The Group is reducing CO₂ emissions in its distribution processes by proactively restructuring its distribution bases around the world and increasing efficiency of logistics.

* Supply chain management (SCM) is a concept for the optimal management of supply chains, i.e., the processes—for example, procurement, production, distribution and sales—through which products and services are provided to customers.

Efforts in Distribution and Sales to Reduce CO₂ Emissions

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

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.

When transporting its business information products internationally, the company normally uses marine transportation, but on occasion air transportation was necessary. Through efforts to increase demand forecasting accuracy and to review inventory management systems, Konica Minolta aims to reduce the frequency of air transportation use and reduce inventories.

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.

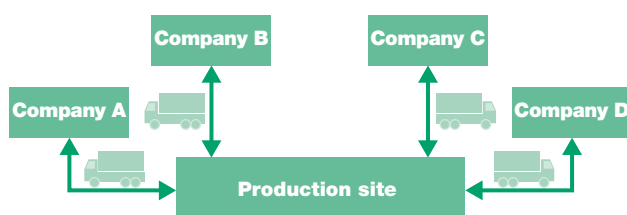
Milk Run Logistics (Round collection of cargos)

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 supplier instead of requesting each supplier to deliver goods individually.

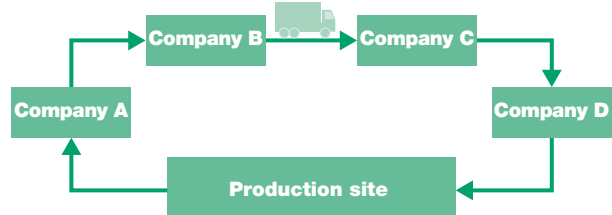
Konica Minolta is using the milk run logistics in Wuxi City in Jiangsu, China. It contributes to reducing CO₂ emissions by shortening the total driving mileage of the trucks.

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

Previous way



Milk Run Logistics (Round collection of cargos)





Initiatives in Distribution and Sales

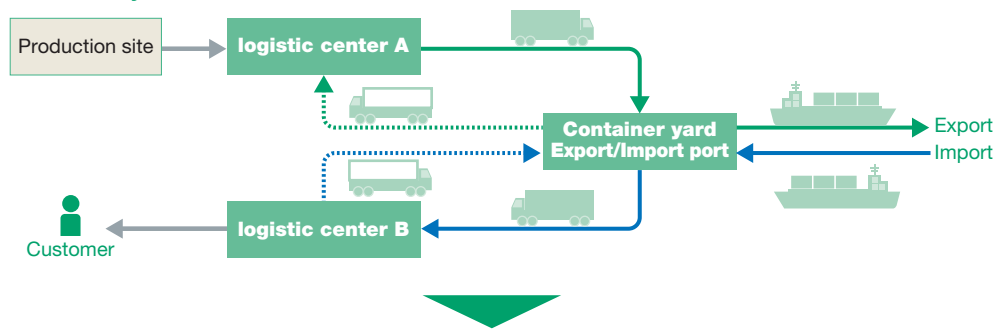
Container Round Use

Container Round Use is a concept in which the devanned container is used for export without returning it to the shipping company. Since the container belongs to the shipping company, it works only among the same shipping company's containers. By omitting the process of returning the devanned empty container and getting the new empty container for vanning, the Container Round Use concept contributes to both reducing CO₂ emissions and saving transportation cost.

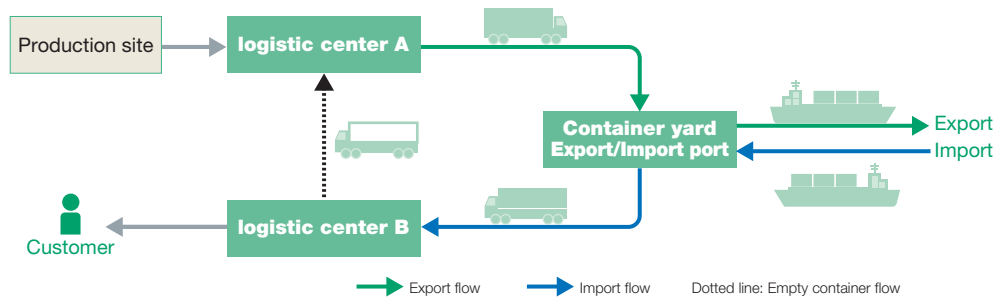
Konica Minolta Logistics Co., Ltd. is implementing the Container Round Use system in the most effective manner by managing and controlling the shipping schedule with shipping companies and handling the containers that belong to the same shipping companies with minimum loss.

Konica Minolta Logistics is also arranging a joint delivery combining the main body of products, parts for production/after service and sub-assembled units for both overseas' manufacturing and sales subsidiaries that were previously transported individually which is also contributing to reduce CO₂ emissions.

Previous way



Container Round Use



Introducing Eco Cars and Promoting Eco Driving

At its sales offices around the world, Konica Minolta uses eco cars that emit relatively low amounts of CO₂ and atmospheric pollutants while promoting eco driving to lessen energy consumption. Konica Minolta Business Solutions Japan Co., Ltd., an office equipment sales company, has introduced electric cars for a portion of its service fleet used by engineers to visit customer locations for product maintenance. In October 2007, the company began replacing its motorcycles with electric-assisted bicycles, introducing 27 such bicycles at the beginning of fiscal 2009.

Konica Minolta Logistics is also arranging a joint delivery combining the main body of products, parts for production/after service and sub-assembled units for both overseas' manufacturing and sales subsidiaries that were previously transported individually which is also contributing to reduce CO₂ emissions.



Electric-powered vehicles



Basic Concept / Targets and Results

Basic Concept

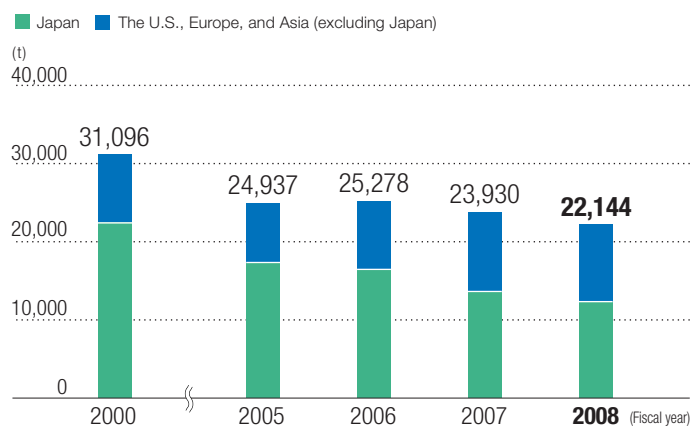
Konica Minolta conducts zero waste activities aimed at minimizing final disposal (landfill waste) through recycling, and reducing the total amount of waste in order to contribute to achieving a recycling-oriented society. The Group sets target values for reducing waste at all production sites worldwide, as well as targets for each site for achievement of zero waste activities that have two levels of attainment criteria. In addition, from the perspective of the product life cycle, Konica Minolta is pursuing design for reduction materials, implementation of resource-saving packaging materials, and collection of the used products.

Targets and Results for Fiscal 2008

Achieving fiscal year targets for reduction of waste at all production sites worldwide

In order to achieve the fiscal 2008 target of a 17% reduction of waste compared to fiscal 2000 at production sites worldwide, Konica Minolta needed to reduce the amount of waste to as much as 25,900 tons. In fact, the Group succeeded in reducing the amount to 22,100 tons, achieving a 29% decrease compared to fiscal 2000. Zero waste activities are also progressing according to plan, with one site each in China and France and two sites in the U.S. achieving Level 1 in fiscal 2008. As a result, all production sites except for Konica Minolta Glass Tech Malaysia Co., Ltd., which began full operation from March 2008, achieved Level 1. Furthermore, all production sites in Japan maintained the higher standards of Level 2, while three locations in China achieved Level 2 for the first time.

Changes in Waste Volume at Production Sites*



* The figures exclude emissions from R&D sites.

Targets and Results for Fiscal 2008

Targets	Results	Target achieved
Reduce emissions of waste from worldwide production sites by 17% compared with fiscal 2000 (259,000 t)	22,100 t (Reduce emissions of waste by 29% compared with fiscal 2000)	○
Maintain zero emission Level 2 at all Group production sites in Japan	Maintained zero emission Level 2 at all Group production sites in Japan	○
Achieve zero emission Level 1 at all production sites in America, Europe, and Asia	Achieved zero emission Level 1 at all production sites except one new production site Achieved zero emission Level 2 at three product sites	○

Future Targets

Taking initiative to reduce petroleum-based resource usage as a top priority issue

From fiscal 2009 going forward, Konica Minolta will augment its efforts to reduce petroleum-based resource usage as a matter of the highest priority in accordance with the Medium-Term Environmental Plan 2015. As a fast depleting resource, petroleum in particular is in need of more efficient utilization, especially in light of preventing global warming. The Group will continue to set challenging target values for reductions in the amount of waste emitted by its sites. In addition, Konica Minolta will strengthen its efforts to reduce packaging materials and to collect and recycle used products, expanding the scope of its activities in order to contribute to the development of a recycling-oriented society.



Initiatives at Business Sites

Zero waste activities

Working to reduce waste with consideration to economic efficiency

Basic Policy

Konica Minolta conducts zero waste activities aimed at minimizing final disposal (landfill waste) through recycling and reducing the total amount of waste.

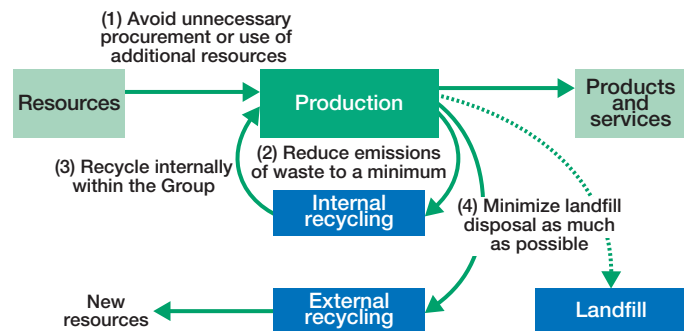
The basic policy of Konica Minolta's zero waste activities is to reduce the environmental impact of the company at the same time as accomplishing reductions in costs. This is because the company understands that activities which fail to take profitability into account cannot be maintained.

In accordance with this policy, the attainment criteria for the zero waste activities are set at two levels, Level 1 and Level 2. At Level 1, targets are set for reductions in final disposal (landfill waste) by recycling, as well as reductions in costs. Level 2 requires reduction in the amount of waste including resources recycled, per unit of sales.

In order to meet these criteria, the Group focuses its efforts on (1) thoroughly examining the necessity of purchasing in advance, thereby eliminating in wasteful resources and expenses, (2) finding efficient uses for resources that have been purchased in order to reduce emissions of waste to a minimum, (3) finding ways to recycle waste internally, thereby reducing the volume of waste disposed of, and (4) seeking ways to recycle waste that must be disposed of externally so that landfill volume is kept to a minimum.

In fiscal 2008, the annual saving results of the zero waste activities was 3.9 billion yen.

The Zero Waste Activities



Criteria of the Konica Minolta Group's Zero Waste Activities

A site must achieve the target values listed below and maintain them for three months or more. After an audit by environmental specialists, the executive officer in charge of CSR conducts an onsite inspection to confirm the achievements and determines whether the standards have been met.

Level 1 criteria are as follows:

- **Recycling rate: 90% or higher**
- **Final disposal rate: 0.5% or lower (5% or lower including secondary residues)**
* Except for waste that a Konica Minolta site cannot decide how to dispose of on its own because of administrative guidance and laws and regulations
- **Cost reductions: Reductions of 90% or more (in relation to benchmarks) in total recycling cost paid to outside parties, or profit on sales of recycled materials and the benefits from zero waste activities exceed the total recycling cost paid to outside parties**

Level 2 criteria are as follows:

- **Level 1 criteria is achieved**
- **Volume of waste discharged externally per unit of sales (in relation to benchmarks): Reduction of 30% or more**



Initiatives at Business Sites

Central Management of Waste Treatment Information

Central management of waste treatment information for appropriate processing

At its production sites, Konica Minolta centrally manages all information concerning waste, including information on internal recycling, and valuable resources. Managed items include the volume of waste generated and the methods of reutilization, as well as information on disposal contractors and disposal costs. This data is analyzed and used to facilitate reutilization of waste and to achieve reductions in processing costs.

In addition, to ensure that waste is processed properly, the company conducts thorough risk management concerning its disposal contractors. In order to select reliable contractors, the company's production sites in Japan have set standardized rules for selecting contractors, involving a preliminary assessment and examination of the results of onsite inspections. Furthermore, the assessments and their results are immediately shared through an intranet system that enables efficient management. Moreover, similar rules for contractor selection are gradually being introduced at production sites outside Japan.

From fiscal 2006, Konica Minolta implemented a comprehensive system for managing data on waste to ensure legal compliance and consistent management of quantitative results. The system was initially deployed at domestic production sites and then at sales locations from fiscal 2008.

Through these mechanisms, the company is ensuring effective governance of waste and recycling.

Zero Waste Activities

Achieving Level 11 at all but production sites except one new production site

In fiscal 2008, Level 1 was achieved at four sites: Konica Minolta Supplies Manufacturing France S.A.S., Konica Minolta Supplies Manufacturing U.S.A., Inc., Konica Minolta Opto (Dalian), Co., Ltd., and American Litho Inc. As a result, Level 1 has been achieved at all production sites with the exception of Konica Minolta Glass Tech Malaysia Co., Ltd., which began full operations from March 2008. Nevertheless, this company sends sludge produced by glass polishing to a cement company for reuse in cement, and met its targets for rates of reutilization and final landfill disposal.

In addition, Level 22 was achieved at three sites: Konica Minolta Business Technologies (Wuxi) Co., Ltd., Konica Minolta Business Technologies (Dongguan) Co., Ltd., and Konica Minolta Optical Products (Shanghai), Co., Ltd.

As a whole, in fiscal 2008 the total volume of waste emitted from Konica Minolta's worldwide production sites amounted to 22,140 tons, a reduction of 29% compared with fiscal 2000. However, compared with the previous fiscal year, the reutilization rate fell to 95.6% and the final landfill disposal rate increased to 3.8%. These results are attributed to a delay in establishing a reutilization route for glass abrasive sludge at Konica Minolta Glass Tech Malaysia until December 2008. In fiscal 2009, the reutilization rate and final landfill disposal rate are expected to improve to 98.9% and 0.5%, respectively.



Initiatives at Business Sites

Sites Achieving Zero Waste Targets in Fiscal 2008

Sites that achieved Level 1

Konica Minolta Supplies Manufacturing France S.A.S.

The company's main product is toner for multi-functional peripherals (MFPs) and printers. Emissions from manufacturing processes include waste toner and cardboard.

The company improved reutilization by securing a recycling route for waste toner that was previously sent to landfill. In addition, waste and costs were reduced by improving the production efficiency of filling containers with toner.



Konica Minolta Supplies Manufacturing France S.A.S.



Toner for MFPs

Voice

We focused on efforts in the field of polymerized toner fillers, with an eye toward bolstering that business in Europe. By achieving our goals, we were able to make a contribution to the Group.



Ricardo Barba

Konica Minolta Supplies Manufacturing U.S.A., Inc.

The company's main product is toner for MFPs and printers, and the emissions from the manufacturing process include waste toner and cardboard.

Waste emissions and costs were reduced by improving the production efficiency of filling containers with toner, as well as by reusing cardboard pallets used in the inbound delivery of toners for shipping final toner products, and securing a contractor to buy large cardboard boxes for reuse.



Konica Minolta Supplies Manufacturing U.S.A., Inc.



Reused cardboard pallets

Voice

We had a difficult time cutting costs, which is one of the conditions for achieving Level 1 criteria. We managed to achieve it by introducing successful examples from other Group companies to our company.



Barry Boomhower



Koichi Takenaka



Initiatives at Business Sites

Konica Minolta Opto (Dalian), Co., Ltd.

The company produces optical lenses and assembles optical units, and the waste it produces includes glass abrasive sludge.

The company improved its reutilization rate by securing a contractor to buy glass abrasive sludge that was previously sent to landfill. In addition, each division rigorously separated general waste that had been sent to landfill to increase the number of items that could be reutilized, thereby reducing the amount of waste for landfill.



Konica Minolta Opto (Dalian), Co., Ltd.



Disposal containers for material separation

Voice

We believe that having all employees understand the importance of “production activities that are in harmony with the global environment” and carrying out such activities has been a major accomplishment. In the future, we will be pushing for even higher goals.



Kun Sun

American Litho Inc.

The company produces analog and digital printing plates and CTP* used for newspaper and commercial printing, as well as the reagents used with them.

The company promoted recycling by carrying out rigorous separation of waste materials. Transportation costs were reduced by introducing a compression machine. In addition, waste emissions and costs were reduced by reusing solvents recovered from the drying process for cleaning.

* CTP: Computer To Plate. When preparing a plate for printing, digital data is output directly to a CTP digital plate without using film.



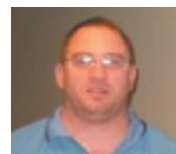
American Litho Inc.



CTP

Voice

Together with establishing a weight management system for waste, we made special efforts to encourage employees who do not have settled recycling habits to understand the purpose behind these activities. Through the achievement of Level 1 criteria, we were able to greatly improve the environmental consciousness of our employees.



Cory Kirkbride



Initiatives at Business Sites

Sites which achieved Level 2

Konica Minolta Business Technologies (Wuxi) Co., Ltd.

The company's main products are business information products including multi-functional peripherals (MFPs). Emissions from manufacturing processes include waste cardboard and plastic.

By replacing the cardboard boxes of procured components with returnable containers, the company reduced the amount of waste cardboard. In addition, the mill ends that result from molding plastic components are used to make dustbins which are used within the company, thereby reducing the amount of waste plastic that leaves the site. Moreover, dustbins are donated to Wuxi City and other organizations as part of the company's social contribution.



Konica Minolta Business Technologies (Wuxi) Co., Ltd.



Dustbins made from plastic mill ends are donated to an old people's home in Wuxi

Voice

We developed and implemented 10 initiatives with the cooperation of all departments, and achieved Level 2 zero emissions criteria. Through these activities, we learned the importance of making compatible the reduction of environmental load and cost reductions.



Xiaoming Qian

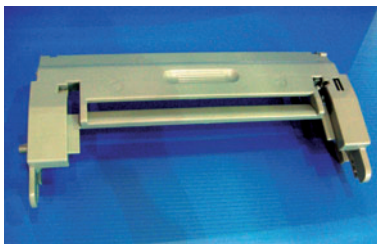
Konica Minolta Business Technologies (Dongguan) Co., Ltd.

The company's main products are business information products including multi-functional peripherals (MFPs) and laser printers. Emissions from manufacturing processes include waste cardboard and plastic.

By replacing the cardboard boxes of procured components with returnable containers, the company reduced the amount of waste cardboard. In addition, the mill ends that result from molding plastic components are reused for molding, thereby reducing the amount of waste plastic that leaves the site.



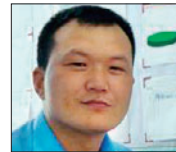
Konica Minolta Business Technologies (Dongguan) Ltd.



Cartridge cover made from plastic mill ends (Dongguan)

Voice

We pushed forward to attain the goals of achieving Level 1 in 2006 and Level 2 in 2008. Sustained improvement is an on-going concern, and through these activities we are aiming for even further environmental improvements and cost reductions.



Duanjun Zhang



Initiatives at Business Sites

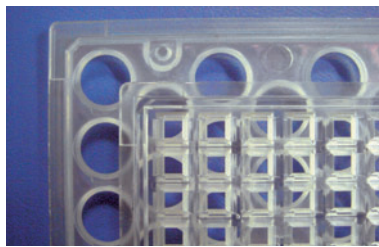
Konica Minolta Optical Products (Shanghai) Co., Ltd.

The company's main products are micro lens units for mobile phones and optical lens units. Emissions from manufacturing processes include waste plastic and washing effluent for lenses.

The plastic mill ends produced in manufacturing micro lenses are processed into trays used for vapor deposition of lenses and other items, thereby reducing the amount of waste. In addition, the method of washing the lenses was revised in order to make effective use of the cleaning fluid, thereby reducing the amount of waste emitted externally.



Konica Minolta Optical Products (Shanghai) Co., Ltd.



Trays used for vapor deposition of lenses made from plastic mill ends

Voice

As members of society, we realize that we have a responsibility to find ways to co-exist with our global environment. With the achievement of Level 2 criteria, we are renewing our resolve to enhance our environmental activities while further contributing to the reduction of costs and the development of a recycling society.



Yun Zhuang



Initiatives for Products

Product Design to Save Resources

Konica Minolta is conserving resources by making its products more compact and lightweight, and by implementing recycling-oriented design

Making products lighter and more compact reduces the amount of raw materials used and saves energy during manufacturing. It also contributes significantly to reducing environmental impacts when products are disposed.

By further developing its core technologies, Konica Minolta is working aggressively to develop new products that are more compact and lightweight with improved performance, employing new methods that place fewer burdens on the environment. In addition, the company is pursuing product design that considers recycling from the standpoint of effective resource utilization.

Example 1: Digital X-ray Imaging Device

The REGIUS MODEL 110 X-ray digitizer for the health clinic market features a compact design 71% lighter than the previous model.

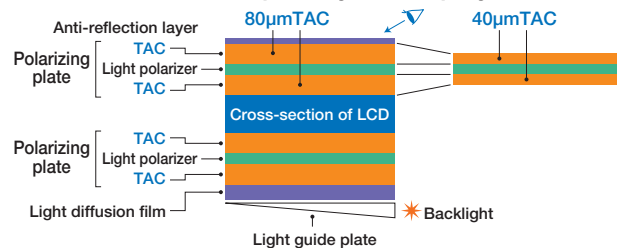


REGIUS MODEL 110 X-ray digitizer

Example 2: TAC Film (Protective Film for Polarizing Plates)

TAC (triacetyl cellulose) film is used for protecting the polarizing plates of liquid crystal displays. The company developed a thin film type with half the thickness of previous films, thereby reducing the materials and resources used by half.

Cross section of a liquid crystal display



Example 3: Textile Printer

The company is developing a digital inkjet textile printer for the color printing of fabrics using dyes and other materials. The printer is designed to have a low environmental impact.

In contrast to conventional screen printing, this printing system does not require the production of plates or mixing of printing paste, thereby achieving quick turnaround for production of small, mixed lots. Since no plates are produced, only the necessary amount of ink is used, and because washing and disposal of plates is not required, the amount of resources used and the amounts of waste produced are substantially reduced.



Nassenger V textile printer

Example 4: A MFP Designed for Recyclability

The company created its Manual for Recyclability Design to facilitate the easy removal of parts and resources that can be recycled from disposed MFPs. This recyclability design is being standardized throughout the company.

For example, for all MFP models the types of plastics used for the outer casing parts are limited to two, thereby achieving a closed material recycle.

In addition, the company is recycling the plastic used for printer exteriors, which are required to possess high-quality appearance, strength, and flame resistance. Konica Minolta has installed a special crusher for plastic components at its recycling site, and by enhancing its system for eliminating foreign material, a high level of purity in recycled plastics can be achieved.



Outer casing plastic part of an MFP



Initiatives for Products

Reuse and Recycling of Business Information Products

Recovery and Recycling Printer Cartridges

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



Clean Planet Program site (Europe)

Recovery and Recycling of Used MFPs and Printers

To facilitate the recovery and recycling of used products, Konica Minolta has established systems 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).

Procurement of Copy Paper

Procuring Copy Paper in Consideration of Forest Resource Conservation

Konica Minolta Business Solutions Co., Ltd., a sales company of information technology equipment in Japan, has established the PPC Paper Purchase Standards, which have been implemented since 2007. The Standards stipulate that copy paper to be supplied to customers should be procured taking into account the impact of forest destruction and degradation on living environments of animals, plants, and people.



Basic Concept / Targets and Results

Basic Concept

There is international agreement on the need to take steps to minimize the adverse effects on human health and the environment when companies manufacture or use chemical substances. Beginning with the REACH regulations* in Europe, a movement is now underway, in Japan and the U.S. as well, to revise regulations of chemicals, which requires companies to manage chemical substances at a higher standard. Taking the lead in making these changes, the entire Konica Minolta Group is working to reduce its use of harmful chemicals or to eliminate them completely. The Group is focused on executing advanced evaluation of chemical risks, reducing the emission of harmful substances into the atmosphere, eliminating hazardous substances from production processes and products, and improving safety management for workers and product users.

* REACH regulations: The EU consolidated its earlier regulations concerning chemical substances, and in June 2007, enacted new regulations for the registration, evaluation, authorization and restriction of chemicals.

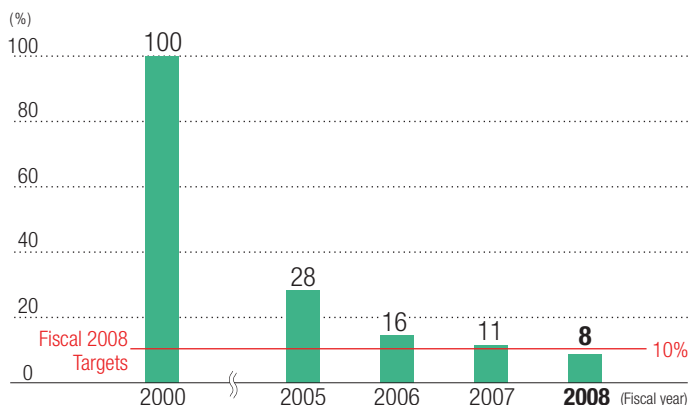
Targets and Results for Fiscal 2008

Achieving its fiscal year targets for total atmospheric VOC emissions and REACH compliance

In response to the fiscal 2008 target of 90% reduction in total atmospheric emissions of volatile organic compounds (VOCs) compared to fiscal 2000 (calculated based on risk conversion), Konica Minolta achieved a 92% reduction. Furthermore, the Group made on-schedule progress towards completing its management system of chemical-containing products in compliance with REACH regulations.

* Reduction of atmospheric emissions of harmful substances (See page 36.)

Changes in Total Atmospheric Emissions of VOCs (Compared to Fiscal 2000 Level and Based on Risk Conversion)



Targets and Results for Fiscal 2008

Targets	Results	Target achieved
Reduce total atmospheric emissions of VOCs (risk conversion) by 90% compared with fiscal 2000	Reduce total atmospheric emissions of VOCs by 92% compared with fiscal 2000	○
Establish a system for management of chemicals in products to comply with REACH regulations	[Chemicals] Completion of pre-registration [Equipment products] Establishment of a data management system	○

Future Targets

Expanding the scope of reduction to substances that pose risks to ecosystems

From fiscal 2009 going forward, Konica Minolta will expand the scope of reductions in atmospheric emissions of harmful substances from substances that pose a direct risk to human health to include substances that pose an environmental risk as well. The Group will take further steps to reduce chemical risks with the view of achieving the Medium-Term Environmental Plan 2015.



Initiatives for Management of Chemicals

Advanced Evaluation of Chemical Risks

Using its unique safety verification system to achieve the appropriate management of chemicals

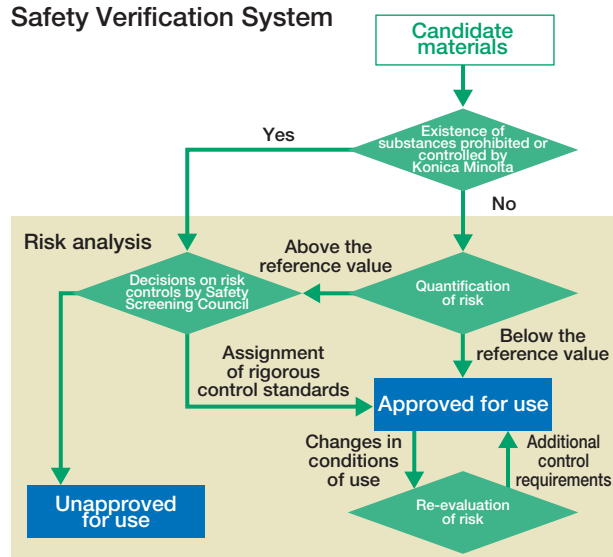
Konica Minolta has established the Safety Verification System for the advanced investigation of risk management relate to the adoption of new chemicals. When the Group cannot avoid using a chemical that poses a high degree of risk, the safety screening meeting is convened to establish rigorous requirements of control.

In fiscal 2007, Konica Minolta revised the evaluation scheme of the system so that it now includes the exposure format in use, in addition to the specific hazards of the chemical substance and the amount of chemical used. This approach was further reinforced in fiscal 2008. The exposure risk was classified into four categories, ranging from the case that is used under rigorous safety controls (at production centers and the like) to the case where an unspecified number of people is using the chemicals and safety controls cannot be guaranteed. The safety requirements for chemicals were re-established accordingly.

Furthermore, in fiscal 2008, Konica Minolta developed an assessment tool that enables autonomous risk management to be performed for each production process. The system was revised to make it possible to reevaluate the risk of a given chemical after it has been introduced into a process, according to changes in the amounts used and the conditions of use.

These revisions have enabled greater rational risk assessment that considers product safety, environmental protection, and occupational safety.

Safety Verification System



Establishing Systems for Chemical Management

Management systems for properly controlling chemical substances

The regulations governing chemicals around the world are being strengthened including the European REACH regulations*1. In order to respond promptly and effectively to the requirements of these regulations, Konica Minolta has established a system for managing chemical data and is working to put the means for full compliance into place.

In addition, Konica Minolta introduced a system in fiscal 2007 for central management of the composition and hazards of chemicals (such as solvents used in manufacturing) and chemical products (such as toner and ink). The system also organizes the MSDS (material safety data sheets). The Group is revising its environmental labeling and MSDS, starting with those countries that introduce GHS*2 legislation.

In preparation for tighter regulation of products such as copiers and printers, Konica Minolta is updating its system for confirming controls on harmful substances in products. The revised system is scheduled to start operation in the second half of fiscal 2009.

*1 REACH regulations: The EU consolidated its earlier regulations concerning chemical substances and in June 2007, enacted new regulations for the registration, evaluation, authorization and restriction of chemicals.

*2 GHS: Globally Harmonized System for the classification and labeling of chemicals



Initiatives at Business Sites

Reduction of Atmospheric Emissions of Harmful Substances

Establishing risk management indicators and reducing VOCs

With respect to the chemical substances used in the factories, since 1993, Konica Minolta has set a target for the reduction of total atmospheric emissions of volatile organic compounds (VOCs), prioritizing several types of VOCs that are deemed particularly risky in terms of hazard and amount used. The Group completely eliminated the use of particularly hazardous substances (benzene, formaldehyde, chloroform and so on) by fiscal 2004. Furthermore, starting from fiscal 2005, Konica Minolta has developed its initiatives to reduce the use of chemicals based on its unique risk management indicators*1.

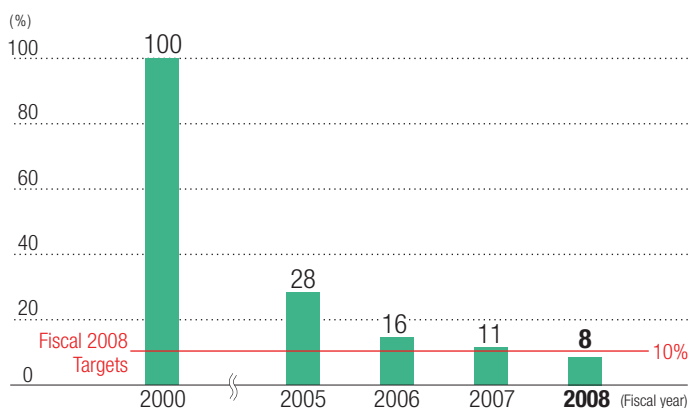
The various Group companies introduced alternative technologies and adopted measures to prevent evaporation and to improve manufacturing processes. Their steady and continuous efforts resulted in reductions of VOCs that significantly exceeded the target in fiscal 2008.

In order to continue reducing risk, from fiscal 2009, Konica Minolta has revised its risk management indicators and has set new targets. Specifically, the Group will expand the scope of reductions of VOCs, in addition to the conventional substances that pose a direct risk to human health and a risk of atmospheric pollution, to substances that pose a risk to ecosystems and an indirect impact on the environment. Additionally, Konica Minolta has set coefficients of degree of hazard of substances according to the direct of indirect impact, to one time, 10 times and 100 times. Multiplying this by a location coefficient that takes into account the location of the factory and the amount of emissions allows to the Group companies calculate the environmental impact indicator*2 of a given substance.

*1 Risk management indicator: An indicator of the impact of VOCs released into the atmosphere based on the sum of the risk of direct impact on human health and the risk of atmospheric pollution.

*2 Environmental impact indicator = \sum (Degree of hazard coefficient x Location coefficient x Emissions [t])
Location coefficient: Outside the industrial estate 5, inside the industrial estate 1

Changes in Total Atmospheric Emissions of VOCs (Compared to Fiscal 2000 level and Based of Risk Conversion)



Countermeasures against Contamination of Soil and Groundwater

Regular inspections and further purification to prevent the spread of contamination

We survey our sites in Japan that have a history of using chemical substances, which may have caused soil or groundwater contamination. If any contamination of soil or groundwater is found at our sites, we implement regular inspections for more reliable management, so as to prevent identified pollutants from impacting the neighborhood.

To facilitate purification of contamination and prevent any further spread, a specialist team has been organized. Under the team's supervision, we carry out detailed examinations to work out decontamination measures, and study purification technologies. Based on the results of these examinations and studies, we are further strengthening our purification activities. The outcome of these activities and inspection results are regularly reported to the local government agencies concerned.



Initiatives at Business Sites

Summary of contaminated soil or groundwater at operation sites

Operation site	Substances	Progress in fiscal 2008
Tokyo Site Hino (Hino, Tokyo)	Fluorine	The company regularly monitors groundwater at 15 monitoring wells around the site. It has been confirmed that in all the monitoring wells fluorine and other specified hazardous substances with a history of use at the site are below the limits set in environmental standards.
Tokyo Site Hachioji (Hachioji, Tokyo)	Hexavalent chromium	At pumping wells installed at the site, the company has continued purification of pumped water and regular monitoring of groundwater. It has been confirmed that there was no impact on the surrounding environment outside the site.
Mikawa Site, Western Zone (Toyokawa, Aichi Prefecture)	Lead, arsenic, fluorine TCE*1	<p>From January 2008, the company started a voluntary soil survey for the Toyokawa City redemarcation project. As a result, the company has confirmed the presence of lead and arsenic contamination of the soil in the southwest part of the site, TCE contamination of groundwater in the southeast part, and fluorine contamination limited to part of the surface soil in the southeast part of the site. The company took emergency measures to prevent the contamination from spreading and at the same time, reported the situation to the government in August 2008.</p> <p>The soil contaminated with lead and arsenic in the southwest part of the site was removed by excavation, and the work was completed in March 2009. The company started purifying pumped groundwater contaminated with TCE in the southeast part of the site from June 2008. In order to prevent the contamination from spreading from the soil contaminated with fluorine, plastic sheeting was laid to prevent rainwater permeation.</p> <p>Moreover, the company has performed regular checks of the monitoring wells around the site and confirmed that neither TCE nor fluorine has leaked outside the site.</p>
Itami Site (Itami, Hyogo Prefecture)	Lead, arsenic, boron, cadmium, fluorine	The cleanup work that started in January 2007 was completed in February 2009 with the removal of treatable contaminated soil. Currently, restoration work of the excavated area and greenery is being undertaken. This restoration work is scheduled for completion around the fall of 2009. The company confirmed from the monitoring wells that lead, arsenic, cadmium, and fluorine levels are below the limits set by environmental standards. The company has performed pumping to prevent boron contamination from spreading.
Sakai Site (Sakai, Osaka)	TCE, PCE*2, c-DCE*3	The company implemented an investigation to identify contaminated locations, and detected locations with high concentrations of PCE and TCE contamination. The company has implemented soil removal by excavation and on-site purification with an iron particle mixture. In addition, a new pumping well was installed at the center of the site and pumping continues from this well and other existing wells. In this way, the company is working to prevent runoff from the site.
	Lead, arsenic, cadmium	Regular monitoring of groundwater confirms that the values for lead, arsenic, and cadmium, as well as the hexavalent chromium for which cleanup was completed in December 2006, are below the limits set by environmental standards.
Osakasayama Site (Osakasayama, Osaka)	TCE, PCE, c-DCE	Ongoing cleanup for groundwater is being carried out, mainly through the purification of pumped water. In fiscal 2008, the company identified an aquifer of contaminated groundwater that earlier procedures had not yet attained. Cleanup was implemented using bioremediation*4, and the company has confirmed that the concentration of the substances in the aquifer groundwater was below the environmental standard values, except for several specified spots.
Site of the former Nankai Optical Co., Ltd. (Kainan, Wakayama Prefecture)	TCE, PCE, c-DCE	Having achieved levels below the environmental standard values at all monitoring wells within the site, the company terminated the purification of groundwater using bioremediation. Regular monitoring for groundwater continues.
Toyohashi Precision Products Co., Ltd. (Toyohashi, Aichi Prefecture)	TCE, PCE, c-DCE, Hexavalent chromium	The company has implemented purification of pumped water and regular monitoring to confirm that there is no runoff outside the site. The levels for TCE, PCE, and c-DCE are below the environmental standard values at many monitoring wells.
Konica Minolta Opto Products Co., Ltd. (Fuefuki, Yamanashi Prefecture)	TCE, PCE, c-DCE	In an investigation in November 2008, the company confirmed that the soil was cleaned up in two out of four locations where the company carried out gas suction and aeration of pumped water, thereby the company has terminated the use of gas suction. Measures are taken to prevent the contamination from spreading in groundwater, by installing a permeable reactive barrier and by purification of pumped water.
Konica Minolta Supplies Manufacturing Co., Ltd. (Kofu, Yamanashi Prefecture)	TCE, PCE, c-DCE	The company has implemented groundwater cleanup using bioremediation and regular monitoring, and confirmed that there is no runoff of these specified substances from the site.

Lead, arsenic, cadmium, hexavalent chromium, TCE, and PCE have been completely eliminated from use.

*1 TCE: Trichloroethylene

*2 PCE: Tetrachloroethylene (perchloroethylene)

*3 c-DCE: cis-1,2-dichloroethylene (resolvent of TCE and PCE)

*4 Bioremediation: A technology for treating pollutants by using degradation potential of soil microorganisms



Initiatives for Products

Green Procurement

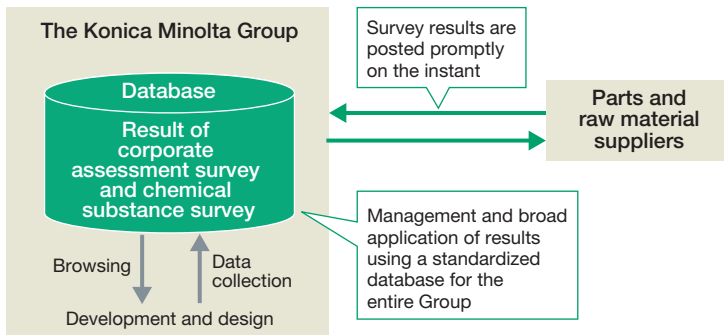
Carrying out green procurement in order to reduce or eliminate harmful substances

Konica Minolta implements green procurement on a global scale, evaluating the contained chemical substances of parts and materials, and giving priority to product purchases with a lower environmental impact. It defines prohibited substances and reportable substances from the point of view of legal compliance and environmental responsibility for use of products such as MFPs and printers. The Group is working to reduce or eliminate chemical substances from its production processes and products, which have an adverse impact on human health and the environment. Moreover, the Group has completely eliminated the substances subject to control under the European RoHS Directive*1 from most of its new products launched since 2005, and is taking steps to eliminate these substances from the rest of its products. Konica Minolta plans to make reductions in the substances of very high concern(SVHC) in the REACH regulations*2.

*1 RoHS Directive: Regulations enacted by the EU in July 2006 prohibiting the use of specified hazardous substances in electrical and electronic equipment.

*2 REACH regulations: The EU consolidated its earlier regulations concerning chemical substances, and in June 2007, enacted new regulations for the registration, evaluation, authorization and restriction of chemicals.

Using the Green Procurement System



This is a system for procuring parts for machine products



Initiatives for Products

Action to Control Chemical Substances Emissions from Products

Undertaking product development with the aim of reducing the emission of volatile organic compounds (VOCs)

Example 1: Multi-Functional Peripherals (MFPs) and laser printers

Business information products, such as copiers and printers, are required not to have a negative effect on comfortable office environment. Therefore, Konica Minolta Business Technologies, Inc., providers of MFPs and laser printers, is working actively to ensure that its products are certified under the German Blue Angel Mark (BAM) which strictly regulates the environmental impact of products, including noise and vibration, and emission of VOCs.

The company's laboratory has been certified by the Federal Institute for Materials Research and Testing, Germany, as an institution qualified for measurement of emissions of chemical substances and acoustic measurement required for certification under the Blue Angel Mark. This speeds up the certification process and enables the results of testing to be applied more promptly and effectively to products.

Furthermore, in September 2008 the environmental measurement division of Konica Minolta Technology Center, Inc., which is in charge of research and development in the Group, obtained ISO/IEC 17025 accreditation, the international standard for laboratories, from the Japan Accreditation Board for Conformity Assessment (JAB), for chemical testing and analysis of harmful substances. By ensuring the reliability of its analysis and test results, Konica Minolta is further advancing its manufacturing of environmentally responsible products.



Blue Angel Mark (Germany)

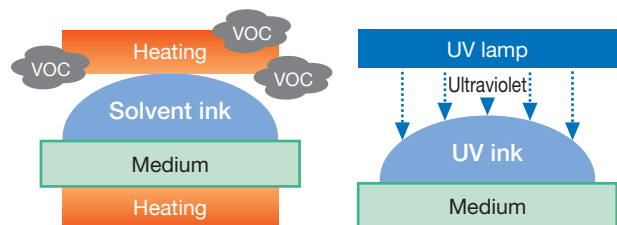
Example 2: UV* Ink for Ink Jet Printers

Typically, solvent inks are used for printing signs and displays such as advertisement placards and wrapping film. The principal constituent of solvent inks is organic solvent and when the inks are printed, the organic solvents are volatilized in the atmosphere as VOCs.

In order to solve this problem, Konica Minolta IJ Technologies, Inc. focuses on UV curable ink for printers that is dried and fixed with ultraviolet irradiation instead of heating. By using cationic polymerization inks that can be cured with low-level irradiation, printers can be equipped with irradiation lamps that consume little power. The odor of the printout is also reduced. Furthermore, Konica Minolta has also developed its own unique ink materials which result in enhanced curability and environmental performance.

* UV: ultraviolet

Comparison of Solvent Ink and UV Ink



	Solvent ink	UV ink
Fixing	Heating and drying (slow)	Ultraviolet irradiation (fast)
VOC	Yes	No
Printable media	Poly Vinyl chloride, PET etc.	Poly Vinyl chloride, PET, metal, glass etc.



Basic Concept

The entire Konica Minolta Group is working to carry out environmental conservation activities and to reduce the environmental impact associated with its business activities. The Group actively provides information on the planning and progress of these efforts. By developing close communication with various stakeholders, Konica Minolta intends to fulfill its responsibilities as a good corporate citizen.

The Group distributes information through various methods, including its website and CSR reports, based on the principle of transparent and ongoing information disclosure. In order to inform customers of the environmental performance of its products, Konica Minolta seeks to provide this information through environmental labels. It is actively pursuing various social contribution activities while creating regular opportunities for direct dialogue with community members.

Issuing Environmental Reports

Providing environmental information in reports and online

Printed CSR Report and online environmental report are prepared to provide information on the environmental activities of the entire Konica Minolta Group. Environmental information concerning individual Konica Minolta sites in Japan is presented in reports issued by each site.

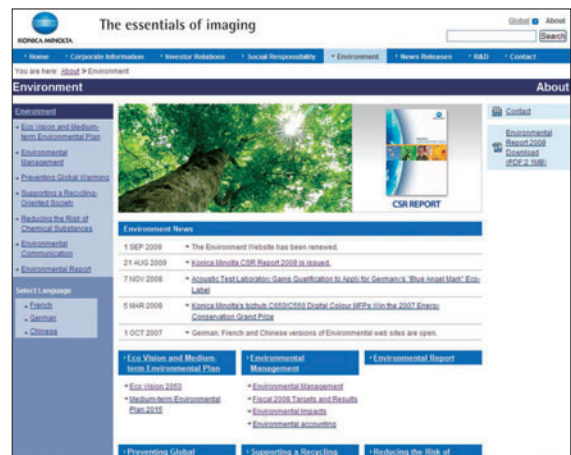
The reports are updated once a year, and PDF-file versions are available for download from the Group's environmental website.



CSR Report 2009



Environmental Report (PDF only)



The Group's environmental website



Communication with Customers

Providing Environmental Information on Products

Actively supplying information concerning products using environmental labels

Type-I Environmental Labels

Konica Minolta is actively promoting the acquisition of Type-I environmental certification labels. These labels indicate that a third-party institution has certified the low environmental impact of a product.

● Blue Angel Mark

Launched in Germany in 1978 as the world's first environmental labeling system, the Blue Angel Mark is granted to certify products and services that have a smaller environmental impact. Since receiving the world's first Blue Angel certification in the field of copiers in January 1992, Konica Minolta has continued to receive certification for new products by clearing the certification bar each time it has been raised.



● Eco Mark

The Eco Mark was established by the Japan Environment Association in 1989 as a standard environmental labeling system in Japan. Konica Minolta's basic policy is to obtain Eco Mark certification for all its business information products.



● EcoLogo

Established by the Canadian government in 1988, EcoLogo is North America's most widely respected environmental standard and certification system. In 2009, Konica Minolta obtained EcoLogo certification, ahead of the competition, for 12 of its MFPs in the newly established Office Machines category.



International Energy Star Program

Products that meet certain standards can be registered as Energy Star devices as part of an energy-saving program for OA equipment. Implemented in 1995 through an agreement between the Japanese and US governments, the international program has now expanded with the participation of the EU, Canada, Australia, New Zealand, Taiwan, and other countries.

All of Konica Minolta's business information products meet the Energy Star standards.



Eco Leaf Environmental Label

Type-III environmental labeling provides information on the environmental impact of a product, based on quantitative measurement of environmental impact through the product's entire life cycle, from raw material procurement to production, sales, usage, disposal, and recycling.

Konica Minolta discloses environmental impact data concerning its business information products through the Eco Leaf system of Type-III environmental labeling.

Eco Leaf offers a system certification tool whereby a third-party institution certifies that a company has mechanisms for the proper and effective gathering of environmental impact data. Konica Minolta has obtained this certification for its copier and printer businesses.





Communication with Customers

Participating in Shows and Exhibits

Introducing environmental technologies and products

Since fiscal 1999, Konica Minolta has been participating in the largest environmental exhibit in Japan, the Eco-Products exhibition, which is held at Tokyo Big Sight every year.

At Eco-Products 2008, which was held in December of the same year, Konica Minolta exhibited its color MFPs, printers, and other products with environmental features. The Group also offered a service where visitors could print out paper craft patterns of endangered animals available on its website, and projected a video program on global environmental protection with its mobile digital planetarium—all of which helped raise awareness of Konica Minolta's environmental initiatives.

The Group also set up a permanent booth at the Osaka ATC Green Eco Plaza in Osaka. This facility is designed to promote ecologically sound businesses through the display of environmental technologies and products. At the booth, Konica Minolta provides visitors with easy-to-understand information on the energy-saving technology of its MFPs, and on the Group's environmental initiatives.



An exhibition booth at Eco-Products 2008



A permanent booth at Osaka ATC Green Eco Plaza



Communication with Society

Issuing Site Reports

Konica Minolta sites report their environmental impact and conservation activities to local communities

Each year, the Konica Minolta sites in Japan issue their own site reports containing environmental information.

These publications provide information to local residents, including an outline of the site's environmental impact. The reports describe environmental conservation activities, health, safety, and disaster prevention efforts, as well as activities for promoting interaction with local communities. Konica Minolta also utilizes these reports for establishing and revising targets and execution plans.



Site reports

Holding Community Environmental Briefings

Creating opportunities for direct dialogue with residents living near Konica Minolta sites

Every year since fiscal 2002, Konica Minolta has been holding Community Environmental Briefings to inform local residents about its community activities, as well as efforts for safety, disaster prevention, and environmental protection, including initiatives to reduce waste and fight global warming.

The briefings are held at Konica Minolta sites, and provide opportunities for residents to see company facilities for development and production, as well as environmental equipment not usually seen on company tours. Emphasis is placed on answering questions and chatting with participants, and the comments and questions received are used to help improve site activities in the future.

Community Environmental Briefings Held in Fiscal 2008

	Date	Number of participants
Tokyo Site	Saturday September 20	26
Joint Briefing for Three Tokai Sites (Mizuho, Toyokawa, and Mikawa)	Saturday October 18	17
Itami Site	Saturday October 18	12
Osakasayama Site	Saturday November 29	16



Tokyo Site



Mikawa Site



Itami Site



Osakasayama Site



Communication with Society

Environmental and Social Contribution Activities

To earn the loyalty and trust of the local communities in which it operates, Konica Minolta is striving to fulfill its responsibility as a corporate citizen by engaging in a variety of activities that contribute to the creation of a better society.

Protecting the Natural Environment

● Supporting Charity Photo Contest for Protecting the Japanese Red-Crowned Crane

Not long ago, the number of red-crowned cranes* indigenous to Japan plummeted due to the deterioration of their native habitat. The bird was, for a time, on the verge of extinction. However, thanks to the establishment of the Tsurui Ito Red-Crowned Crane Sanctuary in 1987 by the Wild Bird Society of Japan, and to the protection activities undertaken by local residents and concerned organizations, the number of cranes has increased to more than 1,000. Konica Minolta has been a supporter of the crane-protection activities since the establishment of the sanctuary. As part of this effort, Konica Minolta co-sponsors the Konica Minolta Japanese Red-Crowned Crane Charity Photo Contests.

* The red-crowned crane is a large bird with a white body and a patch of red on the crown of its head. Its habitat extends from eastern Eurasia to Hokkaido in Japan.



The prize-winning photo of the 8th Konica Minolta Red-Crowned Crane Charity Photo Contest

● Co-sponsoring Environmental Photo Contest

Konica Minolta sponsored an Environmental Photo Contest designed to help foster a love of nature by showing the planet as it appears now, through photographs. We invited people to submit photos based on the theme of “color and light,” using the concept that beautiful light and color are a reflection of a beautiful Earth.



“Rainbow Fields of Rice” won the Excellent Award at the Konica Minolta Awards 2009.



Communication with Society

● Supporting the Forest Conservation Activities (Japan)

Konica Minolta is a participant and a partner in a variety of forest protection initiatives. One of these is the Takao Forest Society. Focusing on the natural vegetation in the national forest located in Uratakao, in the western part of Tokyo Metropolis, the society aims, by thinning the trees, planting more, clearing undergrowth and so on, to re-create a lush forest where coniferous trees mingle with broad-leaved varieties. Our company is a corporate member of the society, and our employees take part in its activities, working up a sweat for the cause of fostering better forests.



● Support for the Activities of the National Forests Office (France)

Konica Minolta Business Solutions France S.A.S., a business information systems sales company, has been participating in Activities to Help All People Interact with Nature since 2007, which are activities sponsored by the National Forests Office in France. Thus far, the company has provided support for the creation of walking trails in various parts of France that provide access for wheelchair users along beaches and through forests. Konica Minolta offers universally designed products, which are intended to ensure that anyone regardless of handicap can use the products easily. The support activities follow the spirit of universal design.

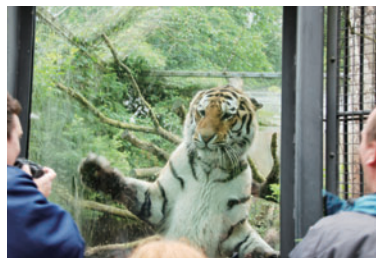


Nature trail

In fiscal 2009, the company will co-sponsor nature and wildlife-watching events, as well as seminars on environmental issues, which will be held in Rambouillet Forest about 60 km southwest of Paris. Guests are invited to attend these events and contribute to the festive activities.

● Support for a Zoo and Museum (Denmark)

Konica Minolta Business Solutions Denmark a/s, a business information systems sales company, provided support to the Aalborg Zoo and the Esbjerg Fisheries and Maritime Museum. These popular tourist attractions are known for their various activities for raising awareness, understanding and respecting nature while conserving the Earth's rich wildlife.



Aalborg Zoo



Esbjerg Fisheries and Maritime Museum

● Community Beautification Activities

The Konica Minolta Group organizes clean-up and beautification activities in the neighborhoods around its business sites.



Sakai site (Japan)



Atsugi site (Japan)



Konica Minolta Business Technologies (Wuxi) Co., Ltd. (China)

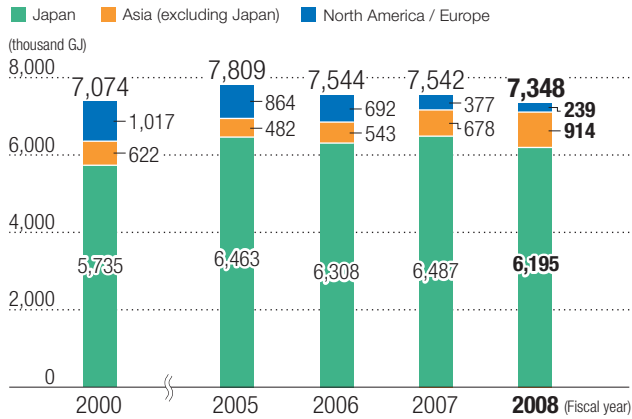
Environmental Performance Data



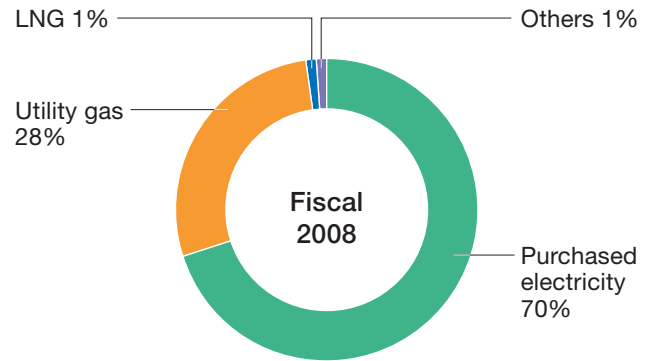
INPUT

Energy, Water

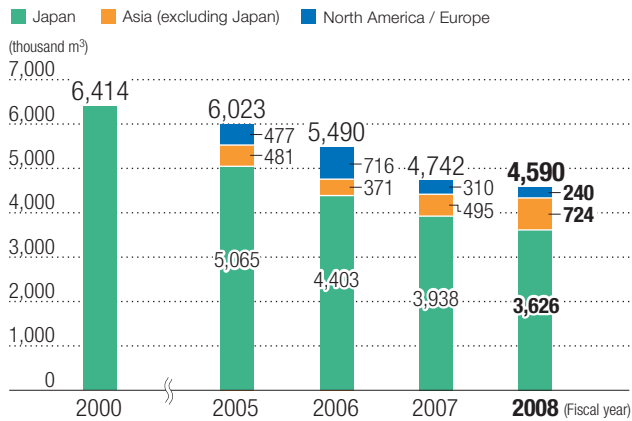
Total energy inputs



Energy use by type



Total water inputs



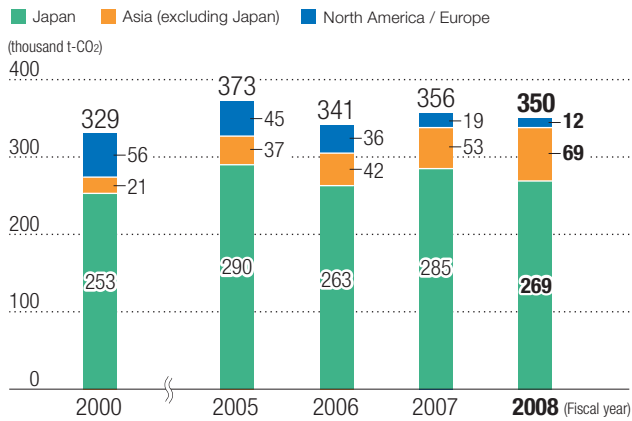
* Scope of data: Charts cover production and R&D sites of Konica Minolta Group.



OUTPUT

Atmosphere

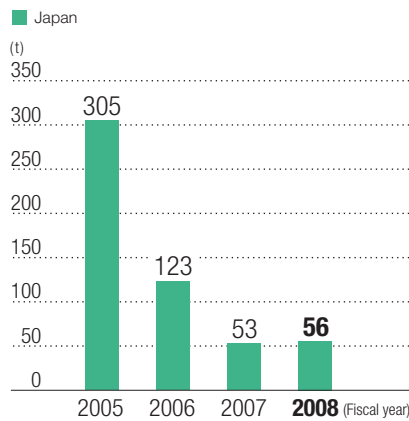
CO₂ emissions



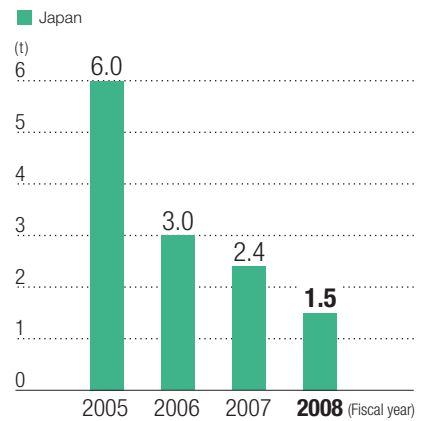
SO_x discharged



NO_x discharged



Soot and dust discharged



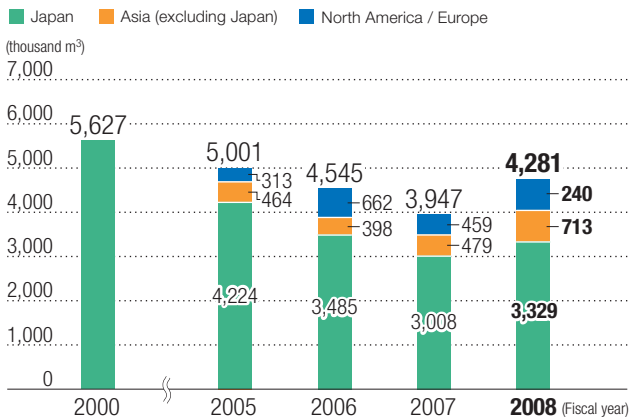
* Scope of data: Charts cover production and R&D sites in Konica Minolta Group.
 (Until fiscal 2007, charts of atmospheric pollutants covered Konica Minolta Group production sites in Japan.)
 * The figures of atmospheric pollutants are total values for factories that are legally required to measure emissions.



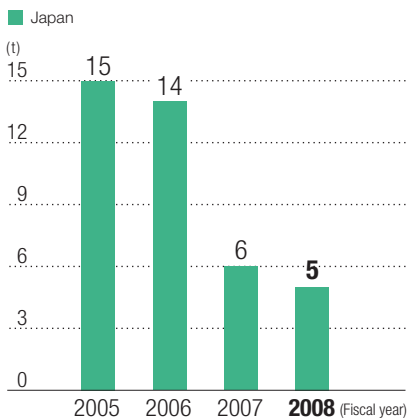
OUTPUT

Wastewater

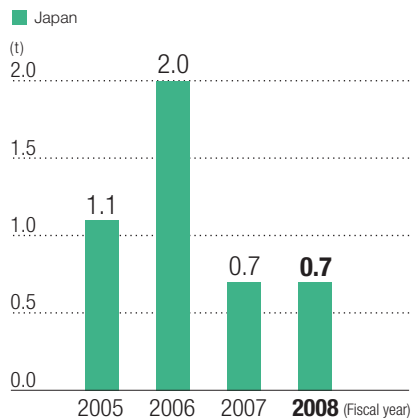
Total wastewater



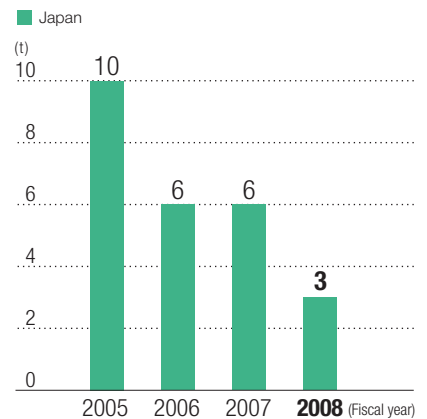
COD discharged



Phosphorus discharged



Nitrogen discharged



* Scope of data: Charts cover production and R&D sites in Konica Minolta Group.
 (Until fiscal 2007, charts of water pollutants covered Konica Minolta Group production sites in Japan.)
 * The figures of water pollutants are total values for factories that are legally required to measure emissions.

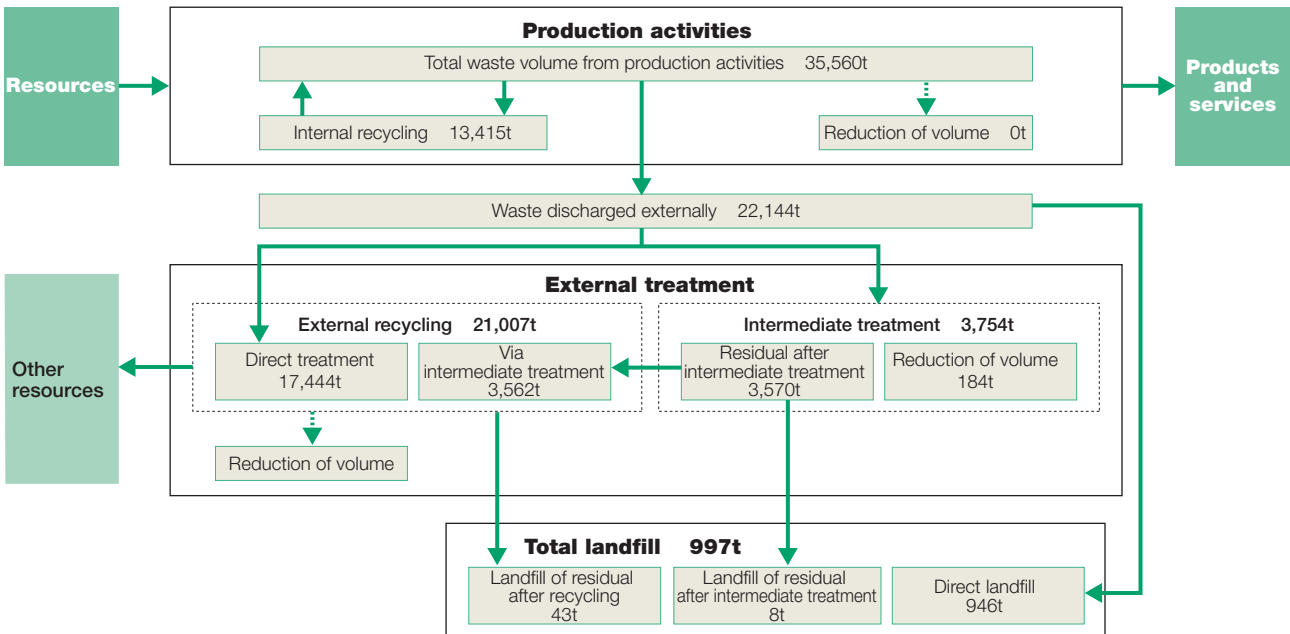


OUTPUT

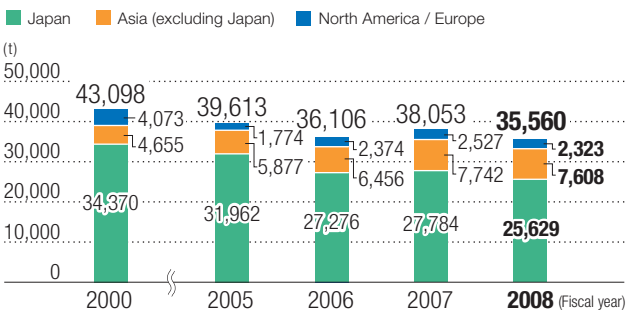
Waste

Waste flows (Results of recycling and waste)

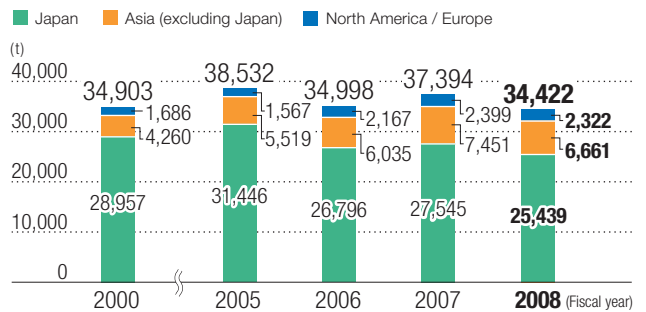
Fiscal 2008



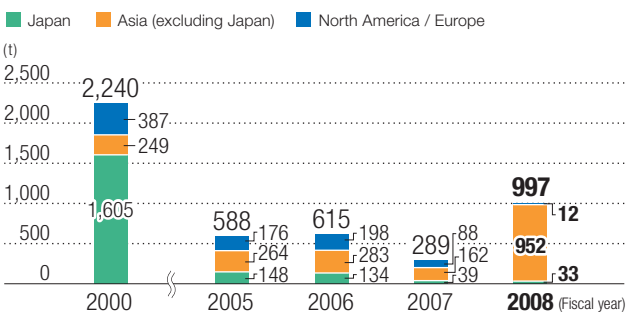
Total waste volume



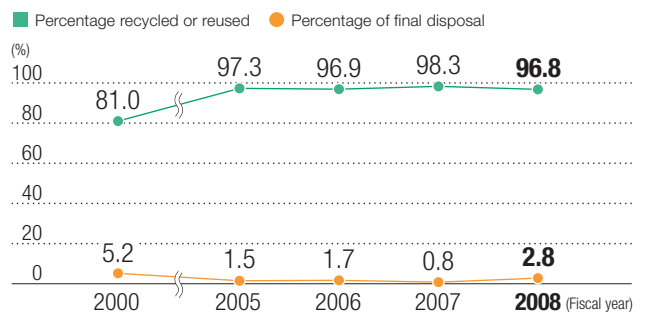
Total volume of recycled resources (Internal and external recycled)



Total volume of final disposal (Landfill waste)



Percentage recycled or reused / Percentage of final disposal



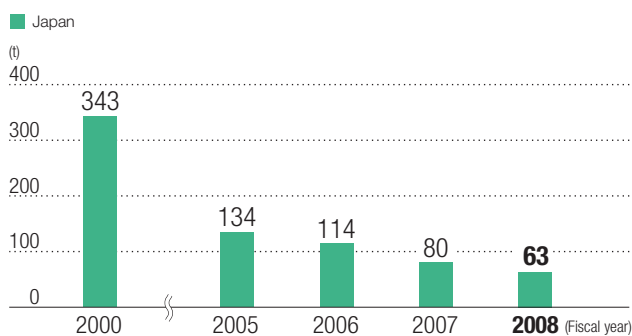
* Scope of data: Charts cover production sites in Konica Minolta Group.



OUTPUT

PRTR substances

Atmospheric emissions of PRTR substances



Substances Controlled by PRTR (Pollution Release and Transfer Register) Regulations

 Fiscal 2008
(t)

PRTR Law identification number	Name of chemical substance	Amount handled	Releases			A-amounts used (in products)	Treated on-site (incinerated, decomposed)	Amount transferred externally		Recycled
			To air	To water	To soil			waste*	sewage	
4	Ethyl acrylate	2.5	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0
12	Acetonitrile	73.8	2.0	0.0	0.0	0	3.2	68.6	0.0	0.0
25	Antimony and its compounds	13.3	0.1	0.0	0.0	10.5	0.0	2.7	0.0	0.0
46	Ethylenediamine	1.1	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0
63	Xylene	1.0	0.0	0.0	0.0	0	0.0	1.0	0.0	0.0
64	Silver compounds (Ag equivalent)	536.1	0.0	0.0	0.0	529.3	0.0	6.5	0.0	0.2
102	Vinyl acetate	0.9	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0
116	1,2-Dichloroethane	0.9	0.9	0.0	0.0	0	0.0	0.0	0.0	0.0
117	1,1-Dichloroethylene	4.9	0.0	0.0	0.0	4.9	0.0	0.0	0.0	0.0
139	o-Dichlorobenzene	2.5	0.0	0.0	0.0	0	0.0	2.5	0.0	0.0
145	Dichloromethane	920.0	49.2	0.0	0.0	8.8	0.1	835.9	0.0	26.1
172	N,N-Dimethyl formamide (DMF)	55.6	0.0	0.0	0.0	0	0.4	55.1	0.0	0.0
177	Styrene	3,310.3	4.0	0.0	0.0	3,286.8	0.0	19.5	0.0	0.0
212	2,4,6-Trichloro- 1,3,5-triazine (also known as cyanuric chloride)	14.4	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0
227	Toluene	89.2	6.7	0.0	0.0	2.4	0.2	79.9	0.0	0.0
243	Barium and its water-soluble compounds (such as barium iodide)	5.1	0.0	0.7	0.0	3.6	0.0	0.8	0.0	0.0
254	Hydroquinone	11.7	0.0	0.0	0.0	10.6	0.0	1.1	0.0	0.0
259	Pyridine	7.0	0.0	0.0	0.0	0.6	0.1	6.2	0.0	0.0
304	Boron and its compounds (B equivalent)	5.1	0.0	0.0	0.0	3.4	0.0	1.6	0.0	0.0
311	Manganese and its compounds	107.4	0.0	0.0	0.0	104.1	0.0	3.4	0.0	0.0
313	Maleic anhydride	1.9	0.0	0.0	0.0	1.8	0.0	0.1	0.0	0.0
314	Methacrylic acid	336.8	0.4	0.0	0.0	334.7	0.0	1.7	0.0	0.0
316	2,3-epoxypropyl methacrylate	15.6	0.0	0.0	0.0	15.5	0.0	0.1	0.0	0.0
320	Methyl methacrylate	3.6	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0

* In accordance with PRTR Law definitions, even if materials were recycled later, they were counted here as waste if they were not sold at a profit.

* Scope of data: Charts cover Konica Minolta Group production sites in Japan.



Production Sites of Konica Minolta Group

Production sites (as of 2009.3.31)

Konica Minolta production sites in Japan

Site name or Company name	Location	Items produced
Konica Minolta Tokyo site (Hachioji block)	Hachioji-shi, Tokyo	Optical devices
Konica Minolta Itami site	Itami-shi, Hyogo Prefecture	Optical devices
Konica Minolta Osakasayama site	Osakasayama-shi, Osaka	Optical devices
Konica Minolta Kobe site	Kobe-shi, Hyogo Prefecture	Electronic materials such as triacetyl cellulose (TAC) film
Konica Minolta Seishin site	Kobe-shi, Hyogo Prefecture	Electronic materials such as triacetyl cellulose (TAC) film
Konica Minolta Tokyo site (Hino block)	Hino-shi, Tokyo	Medical and graphic imaging materials
Konica Minolta Kofu site	Chuo-shi, Yamanashi Prefecture	Medical imaging materials

Affiliate production sites in Japan

Site name or Company name	Location	Items produced
Konica Minolta Supplies Manufacturing Co., Ltd.	Headquarter: Kofu-shi, Yamanashi Prefecture Tasuno facility: Tasuno-shi, Nagano Prefecture	Consumables of multi-function peripherals (MFPs) and laser printers
Konica Minolta Supplies Manufacturing Kansai Co., Ltd.	Headquarter: Miki-shi, Hyogo Prefecture Seishin facility: Kobe-shi, Hyogo Prefecture	Consumables of multi-function peripherals (MFPs) and laser printers
Toyohashi Precision Products Co., Ltd.	Toyohashi-shi, Aichi Prefecture	Consumables of multi-function peripherals (MFPs) and laser printers
Konica Minolta Electronics Co., Ltd.	Tsuru-shi, Yamanashi Prefecture	Electronics parts
Konica Minolta Opto Products Co., Ltd.	Headquarter: Fuefuki-shi, Yamanashi Prefecture Yamanashi site: Minamitsuru-gun, Yamanashi Prefecture	Optical devices
Konica Minolta Components Co., Ltd.	Toyokawa-shi, Aichi Prefecture	Optical devices
Konica Minolta Glass Tech. Co., Ltd.	Headquarter: Osakasayama-shi, Osaka (within Osakasayama site) Iruma facility: Iruma-shi, Saitama Prefecture Itami facility: Itami-shi, Hyogo Prefecture (within Itami site)	Optical devices
Konica Minolta Opto Device Co., Ltd.	Osakasayama-shi, Osaka (within Osakasayama site)	Optical devices
Konica Minolta Technoproducts Co., Ltd.	Headquarter: Sayama-shi, Saitama Prefecture Hachioji facility: Hachioji-shi, Tokyo (within Tokyo site)	Medical and graphic imaging equipment
Konica Minolta Chemical Co., Ltd.	Fukuroi-shi, Shizuoka Prefecture	Chemicals

Affiliate production sites outside Japan

Site name or Company name	Location	Items produced
Konica Minolta Business Technologies (Wuxi) Co., Ltd.	China	Multi-function peripherals (MFPs), laser printers and consumables
Konica Minolta Business Technologies (Dongguan) Co., Ltd.	China	Multi-function peripherals (MFPs), laser printers and consumables
Konica Minolta Supplies Manufacturing U.S.A., Inc.	United States	Consumables of multi-function peripherals (MFPs) and laser printers
Konica Minolta Supplies Manufacturing France S.A.S.	France	Consumables of multi-function peripherals (MFPs) and laser printers
Konica Minolta Opto (Dalian) Co., Ltd.	China	Optical-related products
Konica Minolta Optical Products (Shanghai) Co., Ltd.	China	Optical devices
Konica Minolta Glass Tech (M) Sdn. Bhd.	Malaysia	Optical devices
American Litho, Inc.	United States	Graphic imaging materials