

Konica Minolta Green Initiatives



CLEAN PLANET PROGRAM

Konica Minolta supplies return program

Konica Minolta is committed to environmental preservation and we are working to reduce any environmental impact from our products throughout their entire life cycle. We recognize that the responsibility of how our products affect the environment rests with the manufacturer. At the same time, we feel that environmental preservation is the responsibility of all human society. In this sense, Konica Minolta has established a Toner Cartridge & Waste Toner Box recycling program that is based on a joint effort between our customers and Konica Minolta.

We ask our customers' participation by taking on the responsibility of shipping used toner cartridges and waste toner boxes to our recycling facility. Konica Minolta will assume responsibility for the recycling of the returned cartridges and waste toner boxes.

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Zero Waste Emissions

Basic posture 1

Zero emissions activities with due regard to economics

Our zero emissions activities reflect our intention to minimize waste destined for landfill disposal, by promoting waste recycling. The Konica Minolta Group believes it essential to give proper consideration to real-world economics while reliably implementing risk management, so as to steadily continue our zero emissions activities. In our Level 1 zero emissions criteria, therefore, we include targets for recycling and final disposal (landfill) rates, as well as for cost-cutting. We have also established stricter Level 2 zero emissions criteria. To reach Level 2, we have to meet the reduction rate targets for externally discarded waste volumes, while also striving for greater reductions in cost and risk. Characteristically, Konica Minolta's zero emissions activities are integrated into management, from the perspective of both risk management and economy.

To fulfill our zero emissions goals, firstly we try to avoid unnecessary acquisitions, and to fundamentally reduce waste in both resources and costs. Secondly, we efficiently use all acquired resources, minimize emissions and try to reduce external emissions by implementing internal recycling. In terms of final emissions, we promote external recycling so as to reduce landfill volume to the minimum possible.

Konica Minolta zero emissions criteria

Level 1 criteria

Resource recovery rate: Over 90%

Final disposal rate: Less than 5% (including secondary residue)

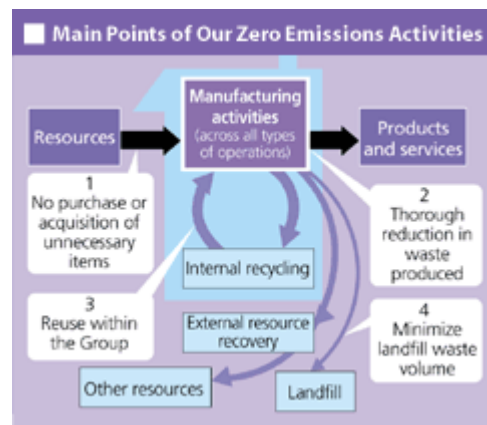
Cost reduction: Over 90% reduction in external payments (from fiscal 1998 levels)

Level 2 criteria

Reduce volume of waste externally disposed of by 30% per sales unit (from fiscal 2001 levels)

Results of zero emissions activities:

Approximately ¥1.9 billion annual savings



Basic posture 2

Integrated management of information on appropriate handling of waste disposal

We implement risk management to ensure that discarded waste is reliably and properly handled. For Group companies in Japan, we have established criteria for selecting waste disposal contractors. Through careful investigation, including preliminary and field surveys, we select reliable contractors who are then registered and managed in a database.

The database also includes a wide range of related information, such as illegal waste disposal, laws and regulations, environmental technologies and other knowledge accumulated within the Group. Such information is managed in an integrated manner, to ensure the most appropriate waste disposal and improve the level of zero emissions activities throughout the entire Group.

Results of resource recovery

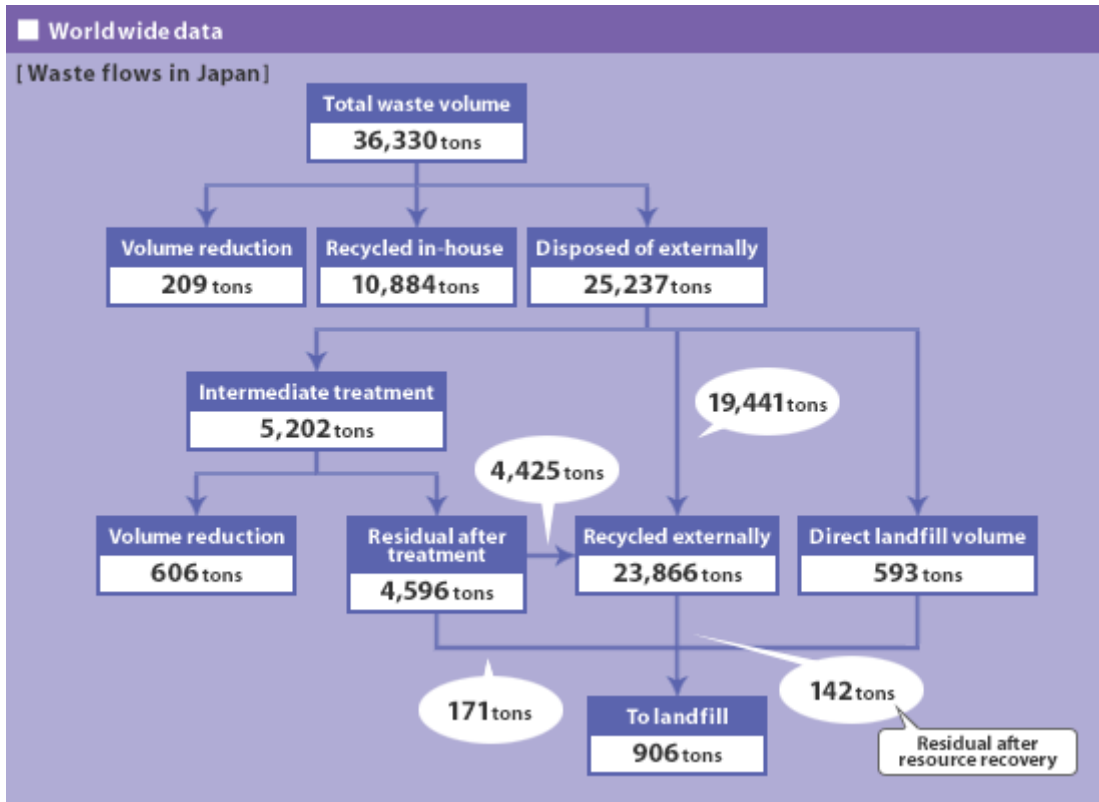
Reducing landfill waste volume through resource recovery

In pursuing resource recovery, top priority is given to the in-house recycling of leftover materials produced in the manufacturing process. To facilitate this effort, we research and develop new recycling and production technologies.

Regarding landfill disposal, we feel that the handling of secondary residuals, those that remain after energy recovery and other recycling processes, is also the responsibility of waste producers. Accordingly, we are acutely aware of disposal volume. To reduce landfill volume we thoroughly implement waste separation and select an appropriate recycling route after checking the secondary residual volume.

As a result, in fiscal 2005 the total waste volume from Group manufacturing sites worldwide was 36,330 tons, the volume of recovered resources (the volume recycled in-house and externally) was 34,750 tons and the landfill volume was 906 tons. Thus, the resource recovery rate was 95.7% and the final disposal rate (landfill rate) was 2.5%.

Total waste volume from Group manufacturing sites in Japan for fiscal 2005 was 28,403 tons, the volume of recovered resources was 27,667 tons and the landfill volume was 148 tons. Accordingly, the resource recovery rate was 97.4% and the final disposal rate (landfill rate) was 0.5%.



Achieving zero emission targets

Entering the next phase of zero emissions activities involving overseas business sites, now that Level 1 zero emissions have been achieved at all business sites, Level 2 at two additional sites in Japan.

In fiscal 2005, two more sites achieved Level 1 criteria; all business sites in Japan have therefore attained Level 1 zero emissions. Moreover, Level 2 zero emissions has been attained by two additional sites in Japan. Worthy of special note is that Konica Minolta Glass Tech. Co., Ltd., which manufactures

glass hard disk substrates, fulfilled both Levels 1 and 2 criteria at the same time. In fiscal 2006, we will expand our zero emissions activities to overseas sites, especially in China.

Sites that achieved zero emissions in fiscal 2005

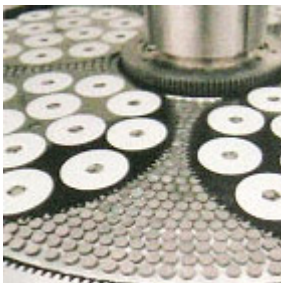


Iruma Plant of Konica Minolta Glass Tech. Co., Ltd.: simultaneously achieved Levels 1 and 2 zero emissions

Konica Minolta Glass Tech greatly reduced waste emissions through in-house treatment of grinding wastewater produced in processing glass hard disk substrates. In addition, whereas defective products found in the inspection process were previously disposed of, the company now selects and re-processes such products for use as test pieces by users. Through such activities, the company achieved substantial results, satisfying both Level 1 and 2 criteria.

Itami Site: achieved Level 2 zero emissions

By further advancing the internal recycling of waste glass produced during the glass lens manufacturing process, while improving production efficiency the site achieved impressive results, attaining Level 2 zero emission criteria.



Osakasayama Site: achieved Level 1 zero emissions

In addition to reducing waste glass by improving the yield of glass hard disk substrates, the site succeeded in significantly reducing the cost of purchasing raw materials, thereby attaining Level 1 criteria.

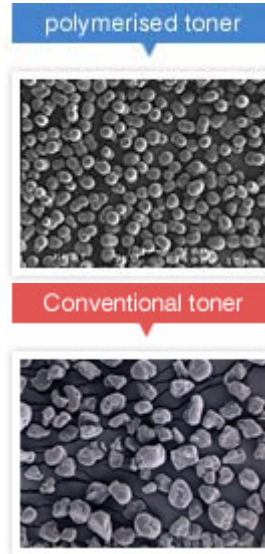
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Konica Minolta Toner Technology

At Konica Minolta, we're constantly working to reduce bizhub's environmental footprint and improve its efficiency. Here are a few of the earth-friendly innovations we've developed to help bizhub stay green.

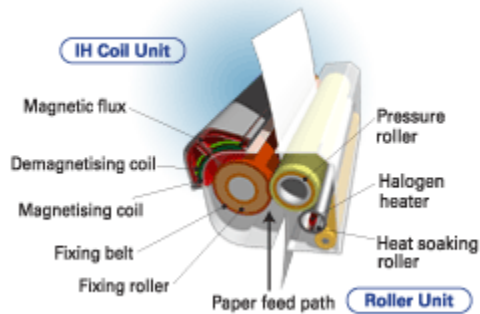
Simitri Polymerized Toner

Konica Minolta's Simitri Polymerized Toner achieves an approximately 40% reduction in CO2 emissions during production, as compared with toners produced by conventional pulverization methods.



IH Fixing Technology

IH Fixing unit



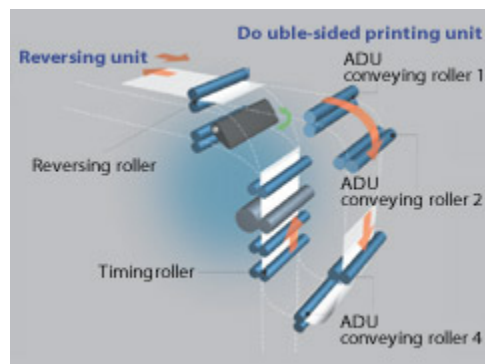
Konica Minolta's Induction Heating (IH)

fixing technology reduces power consumption during the fixing process and results in shorter warm-up time. Optimal Power Control

The power in Konica Minolta devices is optimized for each operating mode, eliminating wasted power. For example, when the C650/C550 are printing from a PC or receiving a fax, the power supply is adjusted so that no electricity is sent to the scanner or other idle sections.

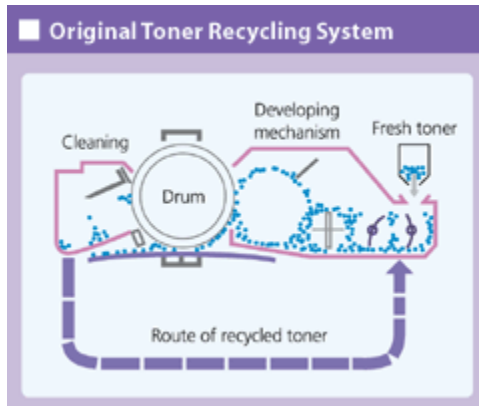
Duplex Printing

When it comes to forest resource conservation, paper use reduction in offices is important; double-sided printing is an effective means of achieving such reduction. The bizhub C650/C550/C451 realize high-speed printing when outputting double-sided color pages, thanks to a paper feed control system that feeds three sheets alternately. This system offers productivity equal to single-sided printing, and makes it easier to reduce paper use in offices.



Konica Minolta Toner Recycling System

Original Toner Recycling System



Our original system collects, recycles, and re-uses toner that is not transferred to the paper during the printing process in MFPs. This results in saving 20% of the toner from going to waste without reducing image/print quality.

Outer Casing Plastics

The outer casing parts for every Konica Minolta MFP are made from the same two types of plastic, creating a closed material-recycling loop for recycling plastics from end-of-life MFPs and incorporating them into the production of newer models. With this process, we have enabled the recycling of high purity plastics, recycling approximately 100 tons of plastics annually.

Konica Minolta Energy Star Printers

ENERGY STAR, a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy, is a voluntary labeling program designed to protect the environment through the identification and promotion of energy-efficient products and practices. The ENERGY STAR label may be found on qualifying office equipment, major appliances, lighting, home electronics, residential homes, commercial and industrial buildings and more.



Earning the ENERGY STAR Rating

- Konica Minolta ENERGY STAR printers & imaging equipment deliver the same performance as less efficient, conventional equipment and are at least 30% more efficient.
- ENERGY STAR copiers not only use less energy, but also power down when not in use.
- ENERGY STAR MFPs and other qualified machines print double-sided pages, reducing both copying and paper costs.

Recipient Description

Every Konica Minolta MFP since 1995 has qualified for the Energy Star printer label. In April 2007, a new Energy Star standard for office imaging equipment went into effect. This new specification calls for even tougher energy guidelines for efficient operation and maximum productivity for digital office machines. Today, upon introduction, the latest bizhub MFPs are exceeding this new specification, and we're working to ensure the same for future products.

