

Environmentally Sound Products

We strive to reduce environmental impact across the board from product manufacturing and usage to the disposal stage.

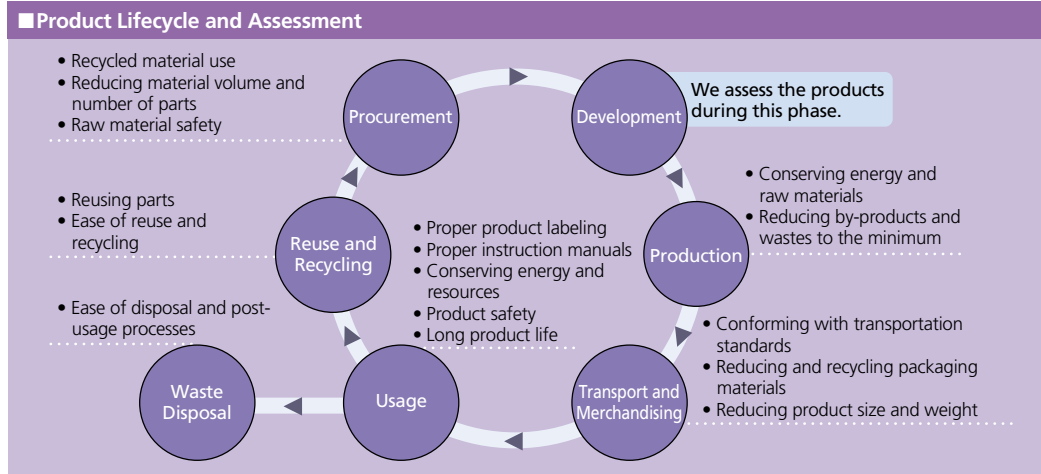
Environmental soundness check

We promote a sound environmental design from a comprehensive perspective.

Konica Minolta has been promoting its manufacturing processes under the "Design for Environment" concept that takes all environmental issues into consideration, including prevention of global warming, product recycling and elimination of hazardous emissions.

We assess the environmental impact at each stage in a product's lifecycle from raw material and component procurement through to manufacturing, transportation/sales, usage, reuse/recycling and disposal, as well

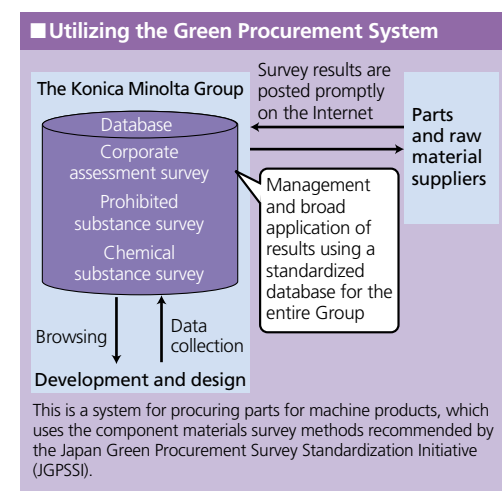
as establish assessment criteria and implement the resultant measures from a comprehensive perspective. During the planning phase for new products, numerical targets for environmental goals are set for standard product assessment evaluation items. During the testing phase, we check whether the goals are being met and conduct a final assessment before proceeding to the production stage. Only products that meet these goals are marketed.



Green Procurement

We promote Green Procurement globally.

In order to provide environmentally sound products, it is necessary to check the environmental impact from the raw materials and parts that go into making our products. The Konica Minolta Group globally promotes its Green Procurement policy of prioritizing the purchase of low environmental impact materials in addition to quality, cost, delivery and environmental factors as its assessment criteria for procurement of raw materials and parts. We have also adopted substance assessment to evaluate substances contained in the raw materials and parts to be procured both within or outside Japan, and conduct a corporate assessment survey to evaluate the extent to which an environmental management system has been established by the companies we deal with as part of our criteria. This survey data is saved in an information database and shared throughout the Group.



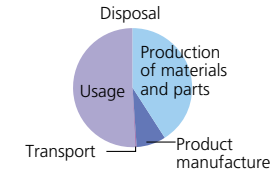
Prevention of global warming

We devise appropriate measures to reduce CO₂ emissions in accordance with product characteristics.

We have introduced the Lifecycle Assessment (LCA) method, and collect and check data for CO₂ emissions throughout the lifecycles for a wide range of products, while implementing effective measures to reduce CO₂

emissions in line with each product's characteristics, for example, those with higher emission rates during the production stage or those with higher rates during usage.

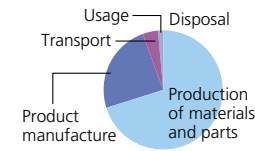
Digital multi-functional devices



CO₂ emission rate throughout the lifecycle
Usage accounts for about **50%**

Energy efficiency during usage has been improved significantly through the development of more energy-efficient technologies. In the production of materials and parts, the development of a polymerized toner has enabled us to reduce CO₂ emissions during toner production by 32.4%. We have also reduced toner consumption by improving the consistency of the toner particles.

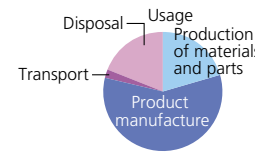
Single-use cameras



CO₂ emission rate throughout the lifecycle
Production of materials and parts accounts for about **70%**

We promote the reuse of parts, which conserves the energy that would have been needed to manufacture new parts. We initiated a full-scale reuse and recycling system back in 1992, and have now achieved a reuse ratio of over 90% (on a "total number of parts" basis).

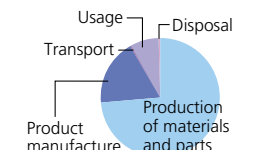
Color film



CO₂ emission rate throughout the lifecycle
Product manufacture accounts for about **60%**

A significant amount of thermal energy is required for the drying process during film production. We first introduced electrical cogeneration systems that simultaneously provide electricity and heat at our film manufacturing plants as far back as 1987 in order to maximize our thermal production efficiency, and have three such systems as of fiscal 2004.

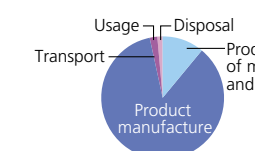
Digital cameras



CO₂ emission rate throughout the lifecycle
Production of materials and parts accounts for about **70%**

By reducing the size and weight of our products, we have reduced the amount of energy required for raw material production as well as for transportation of the products and raw materials. By using Konica Minolta's proprietary folded optical zoom unit, we are making our cameras even more compact and lightweight.

Triacetyl-cellulose (TAC) film for use in LCDs



CO₂ emission rate throughout the lifecycle
Product manufacture accounts for about **80%**

In terms of triacetyl-cellulose (TAC) film for use in LCDs, which have experienced a rapid increase in production volume, we have reduced the use of raw materials for the thin film type that is half the conventional thickness, while at the same time reducing energy consumption during production by 30% per production unit.



Digital multi-functional device—the "bizhub 7222"—uses less than half the energy of its predecessor.

In terms of digital multi-function devices, we have sought thorough energy savings per model. As a result of our efforts, the bizhub 7222 model released in fiscal 2004 uses 57% less energy than the equivalent model (released in 2000).

Environmentally Sound Products

Resource conservation through design

Minimization of product size and weight is the key to reducing environmental impact.

Incorporating size and weight reductions into the product design not only reduces raw material and energy consumption during production but also significantly contributes to reduced use of packaging materials, CO₂ emissions during transportation and environmental impact upon disposal. Konica Minolta has been promoting a wide range of measures for resource conservation through its designs as part of designing environmentally sound products. We produced the smallest and lightest color laser printer in the world (as of March 2005), the "magicolor 2430DL color laser printer" released in December 2004, which has an opti-

cal unit a quarter size of its normal size, with an ultra-small print head and reduced optical path of the laser beam.



magicolor 2430DL
Dimensions: 430 × 395 × 341 mm (W × D × H)
Weight: approx. 18 kg (excluding consumables)

Recycling system for single-use camera series

We promote the extensive reuse and recycling of single-use cameras.

Used single-use cameras are returned to the Konica Minolta Recycling Center from the photo developers/minilabs where their films were developed. They are sorted, taken apart and the parts inspected before being reused or recycled. Konica Minolta began collection of single-use cameras in 1990, opened the recycling center in 1992 and established its own recycling system. We implement reuse and recycling worldwide, including in Europe and North America. The reuse rate for single-use cameras collected through the recycling system is over 90% for parts, and if recycling is included, the rate is almost 100%.

Design for reuse and recycling increases the recycling ratio

We carefully consider all aspects from the design stage to maximize the reuse and recycling rate for collected single-use cameras.

Our adoption of several module designs has enabled reuse per module; thus, the efficiency for disassembly, testing and reassembling parts during the reuse stage has been increased.

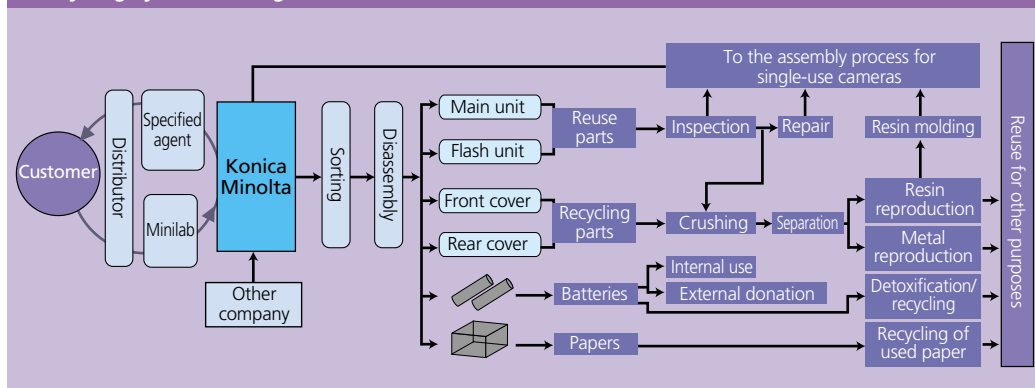
Even among products in different series, the reuse efficiency has been significantly enhanced by thoroughly designing standardized parts.

Material recycling eligibility has also been increased by using polystyrene as the standard material for all resin parts.



Collection work at North American site

Recycling System for Single-use Cameras



Reuse and recycle of digital multi-functional devices

Standardized design to facilitate recycling in production of digital multi-functional devices

We promote measures to facilitate the recycling and re-use of digital multi-functional devices which have copier, printer and other functions. In terms of recycling, we have established a Practical Design Manual for Recycling so that recyclable parts and resources can easily be removed from used products.

For reuse, we promote the standardization of components. We aim to design standardized parts for new products, such as motors that can be used for the next generation as well, and strive to increase the reuse rate from a long-term perspective.

Uniformity of outer casing plastics promotes recycling

All outer casing parts for every multi-functional device are made from the same two types of plastic in order to promote a closed material-recycling loop by recycling plastics from end-of-life, multi-functional devices and incorporating them into the manufacture of newer models.



Outer casing plastic part of multi-functional devices

Restriction of Hazardous Substances Directive (RoHS)

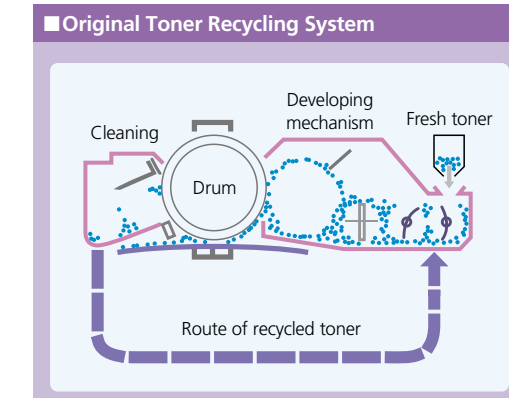
We promote action for all products including non-RoHS designated products.

Beginning in July 2006, sales in the EU of electrical and electronic equipment that contain any of six specified toxic substances—namely lead, cadmium, mercury, hexavalent chromium and two types of polybromic fire retardants (PBB & PBDE)—will generally be prohibited (as per the RoHS Directive).

In March 2002, Konica Minolta was the first company in the world to use lead-free solder in a single-use camera. Since that time, Konica Minolta has used lead-free solder in all types of single-use cameras in compliance with the RoHS Directive. For multi-functional devices, we have long been promoting the use of plastic that does not include any polybromic fire retardants and have already phased out their use from outer casing of all models.

Toner recycling system eliminates toner wastage

Our original Toner Recycling System collects, recycles and re-uses toner that is not transferred to the paper during the copying process. Without this system, about 20% of the toner put into a copier would go to waste, but with this system, toner waste is minimized.



Collection and recycling of multi-functional devices and printers

In March 2005, Konica Minolta was approved as a "designated industrial waste disposer for wide area recycling" by Japan's Ministry of the Environment, and as of fiscal 2005, the copiers, multi-functional devices and printers that we sell in Japan can be collected. Thus the extent to which our products are placed within the Konica Minolta Group's recycling route has been significantly expanded in Japan.

By 2004, preparation for compliance with the RoHS Directive was completed for many products. We have also been promoting the phasing out of these six specified toxic substances for non-RoHS designated products in much the same way.



FILM-IN Centuria Super 800 Flash
Lead-free solder is used for flash unit.