



Konica Minolta environmental policies

Konica Minolta takes its responsibilities towards the environment very seriously. The company's stated policy is that "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 people and with the environment in all aspects."

This is not just lip service. In order to advance sustainable efforts efficiently, not only has Konica Minolta obtained ISO14001 certification, it is actively implementing environmental accounting standards and green procurement. To this end, the Group has established a group wide management system based on ISO 14001 principles that ensures economically efficient and effective environmental management.

Central to the environmental activity promotion structure is the Group environmental management representative (environmental executive officer of Konica Minolta Holdings), who is appointed by the President and CEO of Konica Minolta Holdings. The Environmental Management Committee is the highest management group to deliberate on environmental measures, which include the development of the mid-term environmental plans. Led by its Chairman, the Committee comprises environment management officers of business and common function companies, and is empowered to take the initiative in appropriate action throughout the entire Group.

The Environmental Management Representatives' Committee, a subordinate body of the Environmental Management Committee, determines Konica Minolta Group environmental goals for each fiscal year, and on a quarterly basis feeds back the results of evaluation as to how well these goals have been achieved, to ensure that all entities achieve their environmental goals. In line with the ISO 14001 system Konica Minolta has also established interdepartmental specialist committees to address major environmental issues such as global warming and chemical substances management.

Under this system all Konica Minolta Group employees are committed to continuous environmental improvement activities, in keeping with the Environmental Policy.

Konica Minolta's programmes to minimise the environmental impact of its activities can be divided between those concerned with the manufacture, operation and end-of-life of its products; and those in the UK regarding best practice and 'good housekeeping' for its business activities. These two areas will be examined in turn.

Environmental policies for Konica Minolta products

The Konica Minolta Group is committed to helping prevent global warming from an overall product lifecycle perspective. Measures for reducing carbon dioxide emissions cover not only emissions from business sites during product manufacture, but also during product distribution and use at the customer's site.

From fiscal year beginning 2006, Konica Minolta has targeted a 20 per cent reduction in carbon dioxide emissions by fiscal 2010 (as compared to the 2000 level) throughout the product lifecycle, from production and distribution to use. To ensure achievement of this goal, reduction targets are set for the following three parameters: carbon dioxide emissions from sites in Japan, from manufacturing sites outside Japan, and during product use.

Particularly with regard to carbon dioxide emissions from Japanese domestic sites, the importance of global warming-preventive measures has been further emphasised by implementation of the Kyoto Protocol with Konica Minolta working to curb carbon dioxide emissions systematically, by obtaining emission credits and by other means.

Lifecycle Assessment of product use

For product use the Lifecycle Assessment (LCA) method, has been introduced to collect and check data on carbon dioxide emissions throughout the lifecycle of Konica Minolta document imaging systems.

Konica Minolta also seeks to reduce the energy consumption of its document imaging systems with power conservation technologies. For example the latest generation of bizhub imaging systems use induction heating (IH) fuser technology, which improves energy efficiency by electromagnetically heating the fuser roller.

Induction heating relies on electrical currents within the material to produce heat, making it very safe. In March 2006, Konica Minolta launched the bizhub 420, incorporating IH technology and as a result the bizhub 420 uses 76 per cent less energy than its predecessor, released in 2000.

All Konica Minolta bizhub systems carry the Blue Angel mark, an internationally recognised symbol introduced in Germany in 1978 to encourage consumers to choose products with minimal environmental impact. The Blue Angel mark serves as the standard for environmental labelling in many countries. Konica Minolta became the world's first corporation to receive the Blue Angel Mark in the field of digital multi-functional peripherals (MFPs), and boasts the largest number of products with Blue Angel Mark certification in this field.

The recently launched bizhub C550 is the first in a new generation of colour bizhub devices that will have a whole host of green assets that far exceed the criteria required to meet with the new Energy Star system.

Toner use

The latest bizhub systems also use Konica Minolta's patented Simitri HD toner which has considerable environmental benefits. The Simitri HD manufacturing process requires less energy than traditional kneading and pulverizing methods, which is better for the environment. The manufacturing process also cuts the level of harmful emissions produced as compared to the pulverisation method. The so-called 'green house' gas emissions are cut for carbon dioxide by 32 per cent and for nitrogen oxide by 40 per cent. Sulphur oxide emissions, which cause acid rain, are cut by 42 per cent.

The smaller Simitri HD toner particles have a better transfer rate onto paper, reducing the amount of toner used in image reproduction. Fusing temperature for Simitri HD toner is also lower than for conventional toner cutting the amount of energy needed to run Konica Minolta bizhub systems.

Toner usage is also reduced because of the bizhub Toner Recycling System which collects, recycles and re-uses toner that is not transferred to the paper during the printing process. Without this system, about 20 per cent of the toner put into a bizhub system would be wasted.

End-of-life recycling

In terms of end-of-life recycling, Konica Minolta has established a Practical Design Manual for Recycling, to enable easy removal of recyclable parts and resources from used products. For ease of reuse there is a component standardisation policy. For example, motors that can also be used for next generation products, to increase the reuse rate over the long term.

All outer casing parts for bizhub systems are made from the same two types of plastic, to allow a closed material-recycling loop for recycling plastics from end-of-life Konica Minolta copier-printers and incorporating them into the manufacture of newer models. The plastic parts taken from post-use systems are first pulverized, then melted, and moulded into new parts for reuse. This kind of closed-loop materials recycling is one of the most effective recycling measures to help reduce waste while at the same time contributing to conserve natural resources, with approximately 100 tons of plastics were recycled in 2005.

Toner cartridge and consumable item recycling

In the area of toner cartridge and consumable recycling the company has two programmes. For laser printer cartridges Konica Minolta has the Clean Planet Programme and it is entirely free for users to return their cartridges for safe recycling.

For consumable items from Konica Minolta's range of bizhub multifunctional systems the company provides 'A world on loan' giving customers a process to return and recycle used consumables. The waste products are recycled and recovered into raw materials for other industrial use. This service has a nominal administration charge, which is payable direct to our recycling partner for their services.

Minimising environmental impact of UK business activities

To ensure that Konica Minolta Business Solutions in the United Kingdom minimises the environmental impact of its business activities a Quality and Environment department has been formed. The department audits and reviews the environmental impact of business activities on a continuing basis and institutes programmes to reduce the environmental impact of Konica Minolta's activities.

Konica Minolta's UK head office in Basildon is certified to the ISO 14001 and is subject to a regular audit. Other regional offices are also regularly inspected for best-practice with regard to environmental impact.

The company has programmes in place to recycle the following items:

- Photocopiers/Business Machines
- Paper and cardboard
- Pallets
- Aluminium cans and rollers
- Other metals
- Plastic cups
- Plastic film
- Computers

- Mobile phones
- Batteries
- CD and DVD disks
- Fluorescent light tubes

For example, Konica Minolta has invested in machinery to recycle cardboard into packing materials. Polystyrene packaging is also recycled and the company is purchasing a crusher to recycle polystyrene waste into briquettes that can be reused industrially.

WEEE Directive

The Waste Electrical and Electronics Equipment Directive of the European Union came into force in the UK on 1 July 2007. The directive imposes a responsibility for the disposal of waste electrical and electronics equipment on the manufacturers of such equipment. Manufacturers are required to establish an infrastructure for collecting WEEE and to arrange for either the refurbishment and reuse of devices, or their ecologically friendly disposal at a government approved and authorised treatment facility (AATF).

Prior to the WEEE directive taking effect, Konica Minolta already had a robust end-of-life recycling programme in place for its machines. As a founder member of the UK BEIGE (Business Equipment Industry Group for the Environment) group Konica Minolta has a reciprocal arrangement with most other leading business equipment manufacturers for the collection and disposal of redundant copier-printer devices. Thus when Konica Minolta supplies a replacement copier-printer device, the previous machine is collected and disposed of under the terms of the WEEE directive by Konica Minolta.

Conclusion

At every level within the Konica Minolta Corporation there is an awareness of the need to minimise the environmental impact of the company's activities. Every new employee joining Konica Minolta Business Solutions (UK) attends an Environmental Awareness seminar as part of the company induction programme.

Konica Minolta continues to improve its environmental management system to conform to and exceed the expectations of customers, legislation and best practices.

The company has put in place programmes that seek to reduce ecological harm from limiting the carbon dioxide emissions of manufacturing plants to recycling plastic cups in offices. All new product development now includes the reduction of environmental impact as part of the design brief.

Through these proactive policies Konica Minolta seeks to conserve resources, preserve the earth's ecological balance and act as a friend to the environment.