

We strive to reduce the environmental impact of our products across their lifecycle by creating solid partnerships with suppliers.

■ Concept

As part of efforts to reduce the environmental impact of its products, the Ricoh Group promotes green procurement activities that place emphasis on partnerships with suppliers. Green procurement refers to the procurement of raw materials, parts, and products with less environmental impact. Parts and products so designed are manufactured in plants that are advanced in environmental conservation. The purpose of green procurement is to reduce the environmental impact over the entire lifecycle of Ricoh products and to reduce the costs to the Ricoh Group and its suppliers by using resources and energy effectively. Moreover, by establishing these activities, we aim to contribute to global environmental protection and reinforce management practices of the Ricoh Group and its suppliers. The basic policies for our activities until fiscal 2010 are to reduce the environmental impact of procured parts; to maintain and update the chemical substance

management systems (CMS); and to collect information on the environmental impact in order to comply with the REACH Regulation. We have also introduced our own paper procurement standards and rules regarding the composition ratio of recycled pulp, and we carry out procurement activities by paying full consideration to biodiversity conservation.

■ Target for Fiscal 2010

◎ Work with suppliers to reduce their CO₂ emissions.

■ Review of Fiscal 2010

Activities for reducing CO₂ emissions contribute not only to the prevention of global warming but also to the reduction of costs, leading to the reinforcement of suppliers' management practices. Based on this recognition, Ricoh is actively working with its suppliers to reduce CO₂ emissions by upgrading their operational processes. In fiscal 2010, Ricoh continued the initiative it started in fiscal 2009 to assist

model suppliers with their efforts to reduce CO₂ emissions. We also collected information on measures taken by other suppliers to reduce CO₂ emissions. In addition, according to the Regulations of Ricoh Group Products Made of Wood, we are working to prevent the procurement of timber used in the manufacturing our products—not limited to paper products—from forests with high conservation value from the viewpoint of protecting biodiversity.

■ Future Activities

The Group will accumulate and share know-how and experience from the joint activities with suppliers for reducing CO₂ emissions to further step up these activities. Regarding compliance with environmental laws and regulations, we will work to refine the system that allows the Group and suppliers together to respond to the REACH Regulation* and other rules, and to expedite our response to any revision of related laws and regulations. * See page 34.

Regulations of Ricoh Group Products Made of Wood <Ricoh Group (Global)>

In February 2010, the Ricoh Group established the group-wide Regulations of Ricoh Group Products Made of Wood. The new rules were developed based on the 2003 Environmental Standards for Paper Product Procurement to expand control over the procurement of wood raw material beyond that used in paper products. And they were to be applicable to the entire group. These wood raw material procurement rules apply to two groups related to products under the Ricoh or Ricoh Group company brands, namely, paper products (plain copier paper, heat-sensitive paper, etc.) and articles/materials made from wood (manuals and instructions, packaging materials, cushioning materials, pallets, etc.) provided along with any lines of products.¹ Through this application, the rules aim to help protect HCVFs², or forests with significant and critical value in terms of global environment and biodiversity conservation, by avoiding the use of wood sourced from these critical forests as material for the Ricoh Group products. The rules mainly provide for the prohibition of the use of wood sourced from HCVFs as raw material and for requirements to be met by suppliers, including provision for the suspension of business with non-compliant suppliers. The Ricoh Group will use these new rules to exert control over wood material procurement for products made from wood, mainly paper products, thereby ensuring that the Group's procurement process contributes to the conservation of HCVFs.

1. Recycled materials, including used paper, leftover wood material and wood chips, are excluded, as it is difficult to trace the original sources of such materials.
2. High conservation value forests (HCVFs), as defined here, fall under any of the following categories: Old growth forests; Primary forests/virgin forests; Natural forests containing habitats of endangered species; or Forests for which multiple environmental groups claim protective measures need to be taken mainly from the perspective of biodiversity.

* For the outline of the Regulations of Ricoh Group Products Made of Wood, please refer to the specific section of our website at:
http://www.ricoh.com/environment/product/procurement/01_01.html

Green procurement activities in partnership with suppliers

Ricoh's support for suppliers' environmental conservation activities is provided in three areas: resource conservation and recycling, pollution prevention, and energy conservation and prevention of global warming. As part of this support, we have assisted suppliers in building the foundations of their environmental conservation activities, namely environmental management systems (EMS) and chemical substance management systems (CMS), since fiscal 1998. However, the results of analysis of greenhouse gases generated during the lifecycle of Ricoh products show that the emissions during upstream production, including in the production of materials and parts, account for a large share of total emissions. Because of this, the Ricoh Group began to support and encourage suppliers to practice CO₂ reduction activities in fiscal 2007 by utilizing the know-how acquired by Ricoh through its efforts to reduce CO₂ emissions during the production process.

Establishing CMS at suppliers

<Ricoh Group (Global)>

To help establish a chemical substance management system (CMS)* across its entire supply chain, the Ricoh Group commenced a program in fiscal 2005 to train and certify suppliers' employees as CMS examiners. In addition to internal audits facilitated by their own companies, certified examiners will conduct audits upstream at second- and third-tier suppliers that deal with important processes involving environmentally sensitive substances and will support them in establishing a CMS. As of the end of June 2011, there were 1,494 certified CMS examiners at 871 suppliers and CMS was in place at 1,980 sites of 922 first-tier suppliers, including 296 with important processes involving environmentally sensitive substances. The suppliers' CMS is checked every two years for certification renewal, and in fiscal 2010, 314 suppliers completed the renewal procedure.

* See page 33.

Supporting CO₂ reduction activities at suppliers

<Ricoh Group (Japan)>

Ricoh's global procurement headquarters and Ricoh Creative Service Company Ltd. have started a joint project to assist suppliers to reduce CO₂ emissions by utilizing the energy conservation know-how accumulated within the Group. Promoting CO₂ reduction activities as a useful approach for process improvement, cost curtailment and quality enhancement, the project facilitators introduce suppliers to a range of measures, including those to improve yield rates and introduce inverter-driven compressors, and actively support the suppliers to implement these measures appropriately. In order to conduct energy saving activities effectively, on-site evaluation, monitoring and analysis are important to identify where waste can be eliminated and to expose the causes of waste in a form of visual data. A notable success is the improved clean room air-conditioning control. Thanks to changes made based on findings from monitoring the room temperature and humidity, air-conditioning costs and CO₂ emissions have dramatically declined.

System for reliable information management

Building a system to increase the accuracy of environmental information communication

<Ricoh Group (Global)>

The Ricoh Group has been working to reduce its products' lifecycle CO₂ emissions, but most of the parts used in Ricoh products are manufactured and supplied by external vendors, who also often procure materials for their products from others. In order to reduce CO₂ emissions from its production activities, the Ricoh Group therefore needs to have a system to collect and communicate a vast amount of environmental information in an accurate manner in cooperation with its suppliers. To this end, the Group built a system to conduct environmental surveys on materials and parts used in its products and communicate the obtained environmental impact information on RaVenderNET, a network infrastructure operated jointly with its suppliers. The system has been in operation since 2001.

For the information communication flow, Ricoh's design department first selects the products and parts to be included in the information collection target, and then the materials procurement department specifies the information to be collected, such as the chemical substances contained in a particular material and the environmental impact caused by the production of

the material. Subsequently, Ricoh asks suppliers to collect the necessary data and helps them operate the data collection tools and manage the collection process. Suppliers then submit the information to Ricoh. The submitted information is checked and an investigation is conducted as required. Information assessed as usable is then tabulated and disclosed.

For smoother and more accurate information collection and communication, Ricoh has been continuously conducting activities for suppliers in five global regions, such as providing them with education and training and creating manuals and guidelines in local languages.

Managing product information becomes more difficult the more materials and parts there are in them, and the risk of unexpected errors also increases. Based on this recognition, the design and production departments are implementing projects to collect information about materials, processing methods, and secondary materials used in production processes earlier than initially planned, in order to eventually narrow the target of information collection.

