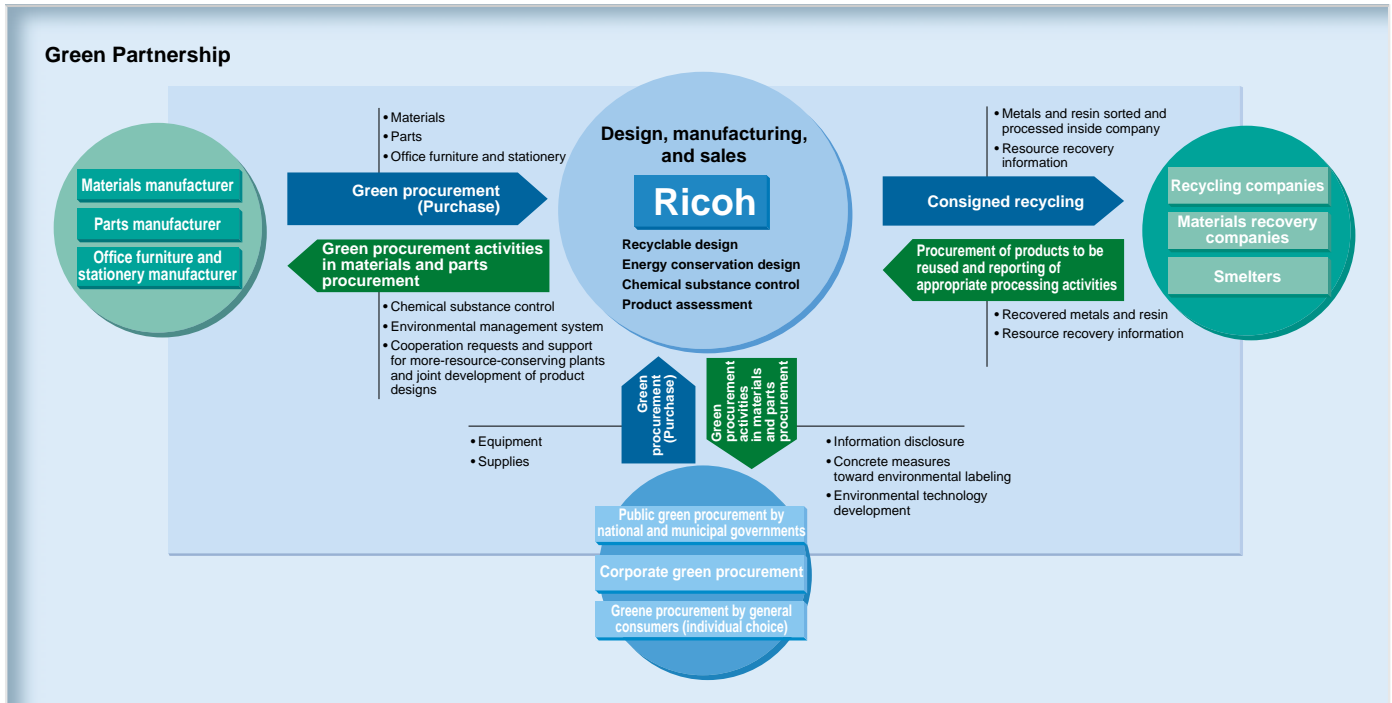
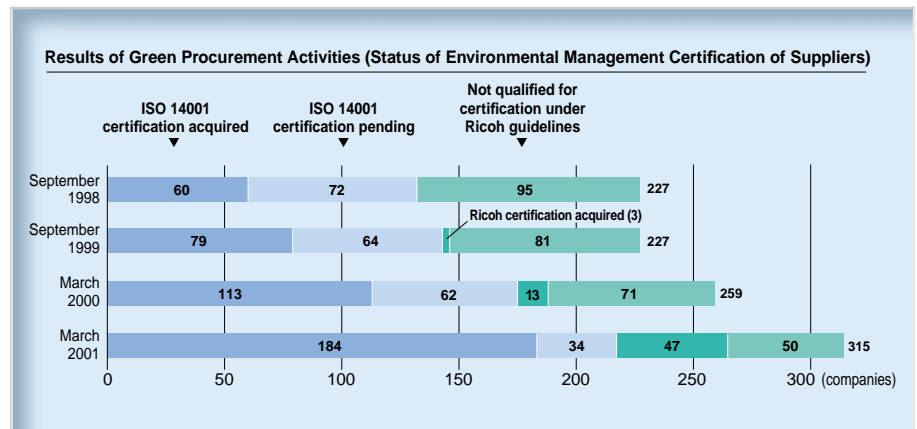


Green Procurement



In order to provide customers with products that have minimum environmental impact, it is important for the materials that go into those products to not only have minimum environmental impact but also be manufactured at plants that generate minimum environmental impact. The Ricoh Group regards suppliers as green partners and strives to reduce the environmental impact of all business activities, including those conducted by its partners, by supporting the establishment of EMS at its suppliers' places of business and jointly developing materials that have less environmental impact. Accordingly, the Ricoh Group aims to successfully carry out environmental management along with total cost reduction.



Supporting Suppliers

The Ricoh Group issued its *Green Procurement Guidelines* in 1998. It asked suppliers to cooperate by either following the conditions laid out in the guidelines or by acquiring ISO 14001 certification. Rather than merely asking to observe its guidelines, Ricoh sends its internal auditors to suppliers to give advice and inspections free of charge. To spread the concept of green procurement globally, the guidelines were translated into English, French, and Chinese. Furthermore, business sites located in the United States, France, the U.K., and China give support to their suppliers in

the same way as those in Japan do.



The Ricoh Group's *Green Procurement Audit Guidelines* (left, issued December 2000) and *Green Procurement Guidelines* (revised December 2000)

Sharing Technologies with Suppliers

To achieve more efficient environmental activities, it is important to share information and know-how with its suppliers. Ricoh shares its technologies with its suppliers through its *Green Procurement News* as well as through seminars that focus on such topics as zero waste plants¹ and energy conservation production lines². Thanks to such sharing, many Ricoh's suppliers³ are developing their own activities aimed at cost reduction and minimum environmental impact.

1. See pages 25–28.
2. See page 29.
3. See sidebar.



The 5th Green Procurement seminar held in February 2001 to share technologies with suppliers

Reducing Chemical Substances in Materials

Aiming to reduce the environmental impact of chemical substances, Ricoh is working with its suppliers to develop a joint system to eliminate the use of PVC, lead, hexavalent chromium, and PVC-coated wiring. The Company is also doing its best to successfully adopt lead-free solder and chromium-free steel plates for its products. Ricoh first began restricting the use of the above-mentioned chemical substances with its Aficio 1022/1027 (imago Neo 220/270 marketed in June 2001) and continues its drive toward eliminating them in most of the newly designed parts for these product lines.

These chemical substances do not effect the environment when customers use them, but they may if disposed without appropriate processing. This is also an important issue in recyclable designs* because those substances may limit the reuse and recycling of used products. If PVC is not

dechlorinated at recovery, it may produce dioxins when incinerated. The use of lead and chrome, substances that greatly affect the environment, is expected to be limited in the future. Reducing the usage of these chemical substances will temporarily raise costs but will ultimately lessen the environmental impact of a product's life cycle as well as recycling costs. Ricoh thus takes on such challenges as part of its environmental management activities.

* See page 39.

Green Procurement of Office Consumables and Supplies

Ricoh's eight business sites, which are all located in metropolitan areas, and three production sites drafted a "green procurement list" for office automation (OA) equipment, office supplies, stationery, sales promotion giveaways, and gifts. They promote efficient green procurement activities with the use of a computerized ordering system they established. Ricoh is planning to adopt this system nationwide. Ricoh Unitechno established a Green Supplies section that is connected online to suppliers. Ricoh Unitechno's inventory is automatically checked and restocked when needed, thereby eliminating the need to fill out order forms that waste paper.



Green Supplies section at Ricoh Unitechno

Supporting Partner Companies

Through activities that support partner companies, the Ricoh Group succeeded in improving the management systems of its partners as well as reducing costs.

Employee Awareness Improves through the Establishment of EMS and Employee Efforts

Haneda Unitech Co., Ltd.

Haneda Unitech is a Tokyo-based press parts manufacturer with approximately 100 employees. Its Fukushima Plant acquired ISO 14001 certification in June 2000. The company, under the slogan "everyone is in charge of environmental activities," strives to establish and improve its EMS by annually reelecting a dozen environmental promotion committee members.

Employee efforts resulted in an 18% reduction in Haneda Unitech's electricity bill for lighting and air-conditioning from the previous year. Such efforts encouraged improvements in employee awareness of environmental activities being their responsibility, too.



Office EMS Invites Favorable Reviews from Customers

Heibon Trading Co., Ltd.

Heibon Trading, located in Ginza, Tokyo, is a paper supplier with about 40 employees. It acquired EMS certification in September 2000 pursuant to Ricoh Group guidelines. The company made thorough efforts to organize internal operations, such as establishing office energy conservation activities and switching to vehicles that have minimum emissions for company use. These efforts received favorable response from customers, who made such remarks as "the change both the company and employees came as a surprise." Heibon Trading is striving to develop and introduce into the market ecology-conscious products that have a higher percentage of used paper.