

## Logistics

**Improvements in the supply chain management (SCM) system, including “venous logistics,” are being carried out all over the world.**

To reduce the environmental impact in transportation, the Ricoh Group, led by Ricoh Logistics System Co., Ltd., is striving to improve its worldwide transportation system. In Japan, with delivery seen as the core of “arterial logistics,” a direct shipment system, from plant to customer, was established. Looking at “venous logistics” as a part of the SCM system, the recycling information system<sup>1</sup> was merged with the marketing order entry system to improve the profitability of the recycling business by integrating the arterial and “venous logistics” into one unified system. If used products are left outside and get wet, they will not be able to be recovered. Used products are therefore collected directly from the customer to improve their chances of being reused. One of the activities that were carried out in 2001 was turning collection centers into Green Centers<sup>2</sup>.

1. See page 51.

2. See page 52.

### Japan

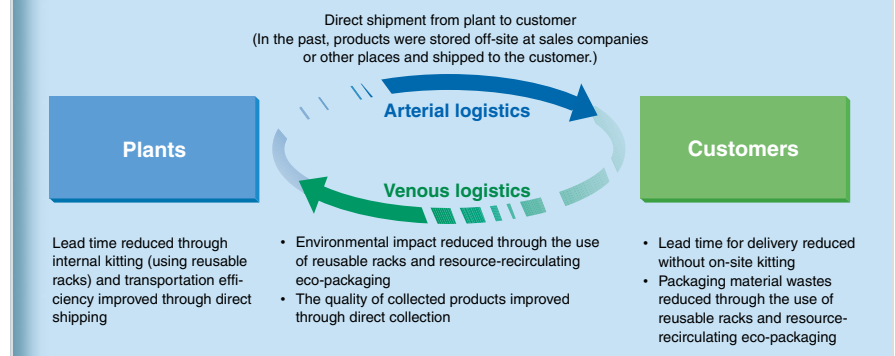
#### Resource-Recirculating Eco-Packaging

In 2000, Ricoh developed a reusable eco-packaging made of recycled plastic. Reusing eco-packaging was found to be profitable in terms of environmental impact and cost.



Eco-packaging (left) developed in 1994 and resource-recirculating eco-packaging developed in 2000

#### The Supply Chain Management (SCM) System, Combining “Arterial Logistics” and “Venous Logistics”



#### Reusable Racks

For the bulk delivery of printers and other equipment that comes with optional attachments, Ricoh developed adjustable pipe-framed reusable racks. Ricoh had its plants arrange for optional equipment and prepare an easier production plan based on the order receipt information of sales companies. This resulted in a significant reduction in lead-time and environmental impact during delivery. In the first half of fiscal 2001, 2,943 machines were shipped in reusable racks, reducing packaging costs by at least ¥8 million.



Reusable pipe-framed racks

### Europe

#### France

#### Improvements in Transportation Routes to Production Sites

Ricoh Industrie France S.A. did a modal shift in the logistics from one based on land transportation to one based on shipping on the river. In the past, assembly parts were transported from Japan to Rotterdam in the Netherlands by sea and then to Ricoh Industrie France by truck. The use of trucks was replaced by vessels going up the Rhine River. As a result, the company successfully reduced CO<sub>2</sub> emissions to 40% of past levels.

### China and Taiwan

#### China

#### Improvements in Loadage and Transportation Routes

Ricoh Express (S.Z) Warehouse Ltd., a logistics company in China, reduced the number of trucks by approximately 50% by improving transportation routes and establishing a more efficient loading plan. Some improvements, such as reducing truck transportation, were made to reduce costs and environmental impact.