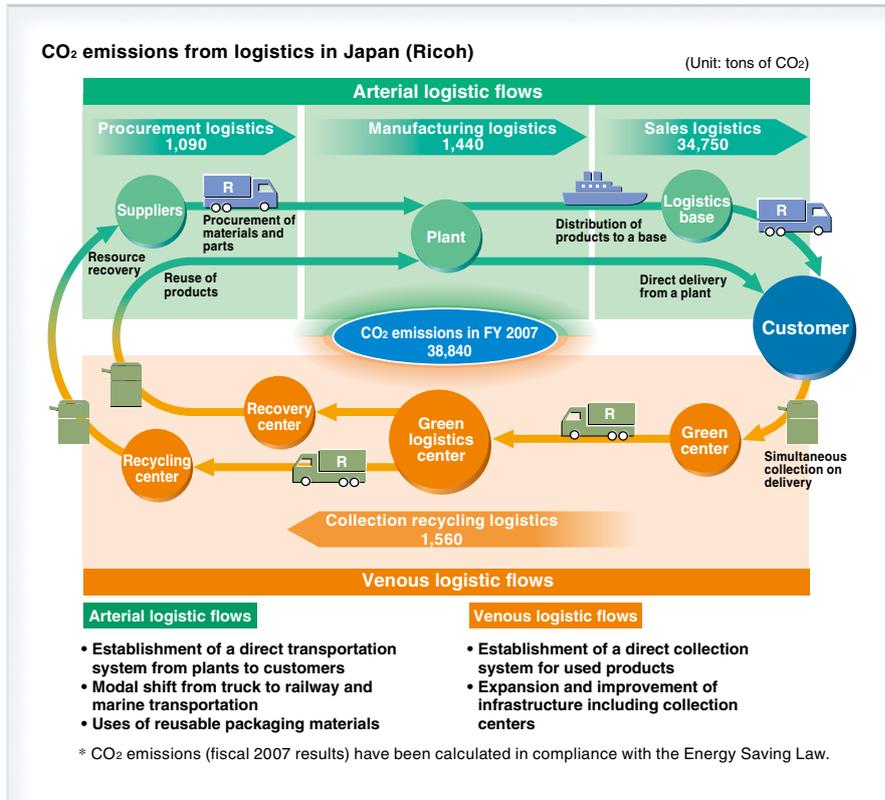


The Ricoh Group is working to reduce CO₂ emissions and costs from transportation by global optimization of SCM.

To achieve a sustainable society, one of the most important issues is to reduce CO₂ emissions from logistics. To address this issue as a company, it is essential to reduce costs in parallel with curbing CO₂ emissions. To achieve this purpose, opportunities for improvement in the logistic process are identified and logistic costs as well as CO₂ emissions are visualized simultaneously to encourage improvements to be made. In addition, the effects are leveraged by rapidly spreading the improvement horizontally within the group. The Ricoh Group is striving to reduce environmental impact by optimizing Global SCM (Supply Chain Management), through modal shifts, direct delivery to each customer, improved efficiency of transportation among warehouses, the introduction of the milk run system, and so forth.



Efforts for Reducing Environmental Impact via the Supply Chain as a Whole <Ricoh Group (Japan)>

For reducing the burden caused by distribution, it is important for Ricoh, as a shipper, and logistics companies to make efforts in close cooperation with each other. Ricoh Logistics System Co., Ltd., which is in charge of sales and collection logistics for products, has established an information system to visualize CO₂ emissions in transportation. This system offers detailed information on the distance between the starting point and the destination, weight, vehicle type, fuel used, and loading rate for each transport, which has allowed Ricoh Logistics System to present the shippers with effective ways to reduce environmental impact. In addition, the Ricoh Group is promoting SCM in logistics for procurement, manufacturing, and sales, aiming to reduce costs and CO₂ emissions. Other efforts that are being actively promoted include modal shifts in distribution between warehouses, route collection of parts, and improvement of the cargo-carrying efficiency through review of packaging materials.

① CO₂, NO_x, and SO_x Emissions in Transportation by Ricoh Logistics System

FY	CO ₂ (tons)	NO _x (tons)	SO _x (tons)
2005	1,467.7	2.8	0.4
2006	1,368.0	2.6	0.4
2007	1,383.1	2.7	0.4

TOPIC

Reducing Environmental Impact in Procurement Logistics

Parts Supply through Milk Runs (Cooperative Loop Collection of Cargos)

<Ricoh Numazu Plant (Japan)>

Several companies supplying toner materials to Ricoh Numazu Plant are located within a 10-kilometer radius, and they used to deliver materials individually to the plant by truck one to three times a day. This method involved waste in terms of the total distance travelled by each truck, load-carrying efficiency, etc.

In order to remove such waste, Ricoh started operating the supply system through milk runs in October 2007. Under the new system, one truck goes around to different companies collecting materials, which has brought about reduction of both environmental impact and costs. CO₂ emissions have decreased by about 50% from the level in the past, due to the shortened travelling distance for vehicles and improved load-carrying efficiency. In addition, the traffic at the time of delivery has been less busy because of the decreased number of trucks, which has resulted in shorter waiting time for drivers. Ricoh plans to expand the system to cover more suppliers in the future.

Image of Cooperative Loop Collection of Cargos (Milk Run)

