

Promotion for Distribution Measures

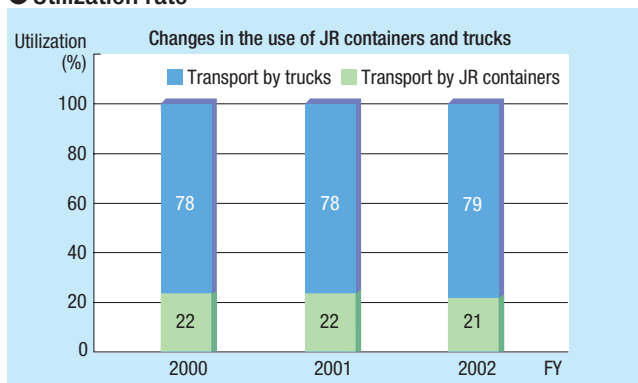
Noting that the CO₂ emitted from vehicles such as trucks also causes global warming, we are reducing environmental impacts caused by our distribution activities through modal shifts and a reduction of delivery vehicles.

Domestic Distribution

Modal shift

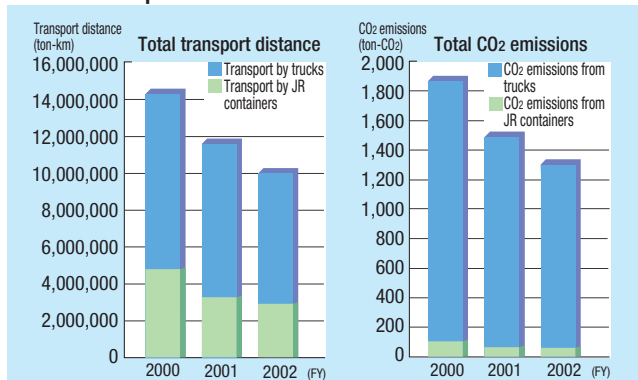
We now make it our policy to promote a modal shift from transportation by trucks with large environmental impacts to rail freight transportation. By volumetric ratio, 21% of our freight was delivered by Japan Railways (JR) using rail containers and 79% by trucks in fiscal 2002. The utilization ratio remained almost the same as in fiscal 2001. The total CO₂ emissions were 1,308 tons in fiscal 2002, reduced by 214 tons compared to fiscal 2001.

Utilization rate



* For the utilization rates, total transport distances and total CO₂ emissions in fiscal 2000, we used the data on a representative transport route (from Suzuka Distribution Center to Tobu Delivery Center). For fiscal 2001 and onwards, we used data on all transport routes.

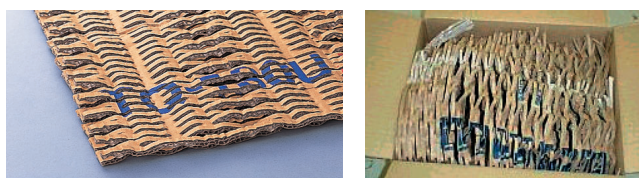
Total transport distance and total CO₂ emissions



* In the Environmental Report 2002, the total transport distances and total CO₂ emissions were calculated by converting 1 m³ to 50 kg. In the Environmental Report 2003, however, they were calculated by converting 1 m³ to 280 kg (standard conversion made in Japan for general transport routes).

Reuse of cardboard as cushioning

In the past, paper containing chemical pulp less than 40% was used as cushioning for packaging products to be delivered to customers. We have, however, reviewed such usage. We now reuse cardboard used for regular outer and inner boxes by cutting it and using it as cushioning, thereby achieving effective use of waste cardboard.



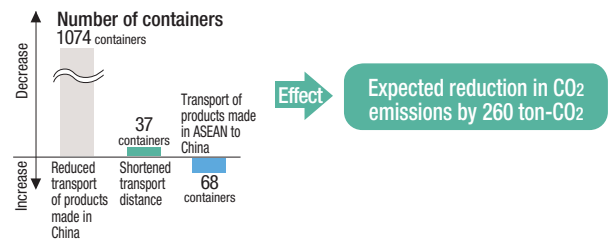
Examples of reused cardboard

Overseas Distribution: Reduction of CO₂ Emissions by 750 ton-CO₂ by Transferring the Overseas Distribution Base

The Casio Group, following the shift of its domestic production sites to China, transferred its overseas marketing and distribution base (warehouses of the International Sales Division) from Singapore to China (Shenzhen) in December 2002. As a result, it is now possible to reduce transport by maritime containers and we expect a reduction of CO₂ emissions by 490 ton-CO₂ in fiscal 2003. Also in the fiscal year, CO₂ emissions will decrease by another 260 ton-CO₂ as a result of reduced air transport. In total, CO₂ emissions will be decreased by 750 ton-CO₂.

Breakdown of reduction in CO₂ emissions

Transport by ocean containers



(Method to calculate the reduction in CO₂ emissions based on the number of containers)

1. Decide the number of containers required to transport the predicted production (m³)
2. CO₂ reduction (in tons) = predicted production (m³) x transport distance (km) x 280* (kg/m³) x 13** (g/ton-km) x 10⁻⁶

* The volume is converted to weight assuming that 1 m³ is equivalent to 280 kg.

** CO₂ emissions from the transport over 1 km of goods weighing 1 ton

Air transport

As in ocean transport, it is no longer necessary to transport products made in China to Singapore by air.

Effect → Expected reduction in CO₂ emissions by 490 ton-CO₂

(Method of calculating the reduction in CO₂ emissions in air transport)

Reduction in CO₂ emissions (in tons) = Predicted production (m³) x transport distance (km) x 280* (kg/m³) x 402** (g/ton-km) x 10⁻⁶

* The volume is converted to weight assuming that 1 m³ is equivalent to 280 kg.

** CO₂ emissions per kilometer due to the transport of products weighing 1 ton.

Other measures to promote the reduction of CO₂ emissions

- We use a port nearer to Shenzhen than to Hong Kong to shorten the transport distance by trucks.
- For digital cameras shipped to North America, they are now directly delivered to mass merchandisers located in the region instead of being first delivered to warehouses of Casio Inc., thereby reducing the transportation distance by trucks.