

CO₂ Reduction Activities by Improvement of Distribution, etc.

Besides the efforts for reducing CO₂ emission from its production activities, FDK Group is enthusiastically addressing to reduce CO₂ emission in the entire corporate activities from procurement of parts and materials to transportation, use, disposal and recycling of products.

Targets of the Third Environmental Action Plan

Contribution to the reduction of greenhouse gas emission

- Reduction of CO₂ emission is promoted through improvement of logistics, recycled use of products and packaging materials, and development and purchase of energy-saving products.

Reduction of CO₂ Emission through Improving Logistics

As an important part of its production innovation activities, FDK Group is involved in "logistics innovation" which includes improvement of product flow from suppliers to FDK and FDK to customers. This will greatly contribute to improve production efficiency in the group companies and is directly associated to reduce environmental burdens.

Reduction of CO₂ Emission through Revision of Logistics Modes

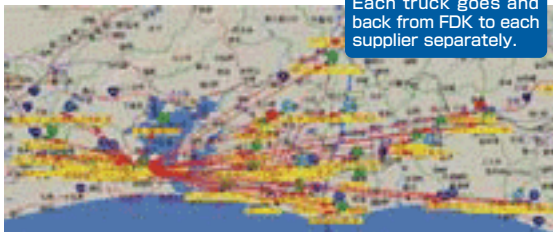
The mode of distributing products from suppliers to FDK has been changed from conventional shuttle system to a "route distribution system" whereby a truck picks up products from more than one supplier by making rounds. FDK Group expects that this will help not only decreasing delivery lead time and work-in-process items, but also shortening total traveling distance of a truck by which total CO₂ emission volume is decreased.



Route shipment ceremony

Change in Distribution Modes

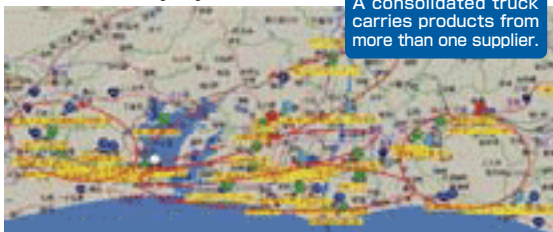
Shuttle System



Each truck goes and back from FDK to each supplier separately.

Current Status : A shuttle truck (owned by FDK and charter service) goes back and forth between FDK to one supplier scattered around the plant.

Route Delivery System

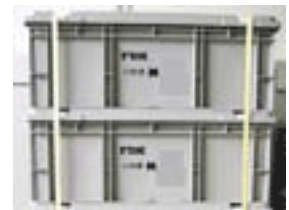


A consolidated truck carries products from more than one supplier.

Proposals : Using a regular consolidated truck of a fixed route service covering more than one supplier, efficiency of distribution will be enhanced.

Improvement of Load Efficiency and Reuse of Packaging Materials

Packaging materials used by FDK Group is designed highly resource and space saving. Decreasing the size of a package will increase the number of packages that can be loaded onto a truck, which helps decreasing CO₂ emission. The TP trays aiming at reuse of packaging materials are appropriately sized to increase the load efficiency.



TP tray

Example of Enhancing Load Efficiency

Packaging materials for power supply unit for inverters (CN264-00)



Before

After

	Size(mm)	Capacity(liter)
Before (For 20pcs)	530W×353D×321H	60
After (For 40pcs)	525W×348D×167H	31

Ratio of per product of space in a package: Improved by approx. 25%

Reduction of CO₂ Emission through Recycled and Energy-Saving Products

FDK Group determined to increase the ratio of using recycled products and promotes energy-saving product design in the future and will numerically monitor them to grasp the volume CO₂ emission reduced through these activities.

Development of Dielectric Material Paste (Energy-Saving Type)

FDK Group has developed a new type of dielectric material paste for its multi-layer inductors, multi-layer baluns and other high frequency chip inductors. Use of the paste has enabled drying and sintering at low temperature and for a shortened time. Moreover, the heat for sintering has been decreased by 20 to 30% of that required for conventional products. Currently the paste is used at FDK Kosai Plant.

