

Environmental Initiatives in Transportation

At the Tokyo Electron Group, implementing environmental measures in transportation processes is a top priority. We are committed to reducing our environmental impact and promoting the effective use of energy and resources in our transportation activities.

Our Approach to Environment-Friendly Logistics

In April 2006, Japan's Act Concerning the Rational Use of Energy (Energy Saving Act) was revised and regulations on logistics were strengthened with the aim of reducing global warming. Accordingly, there are now increasing demands to reduce the environmental impact of logistics. In response, the Tokyo Electron Group has been actively reducing the environmental impact caused by the logistics of its products. For example, we introduced low emission trucks to transport our products and started to recycle unused lumber from packaging frames. We also give top priority to driving safety in delivering products to customers.



Recycling lumber from packaging frames

Environmental Impact of Logistics

The Revised Energy Saving Act designates shippers who transport 30 million ton-kilos or more a year as specified shippers. They are requested to reduce the CO₂ emissions resulting from transportation of their cargo.

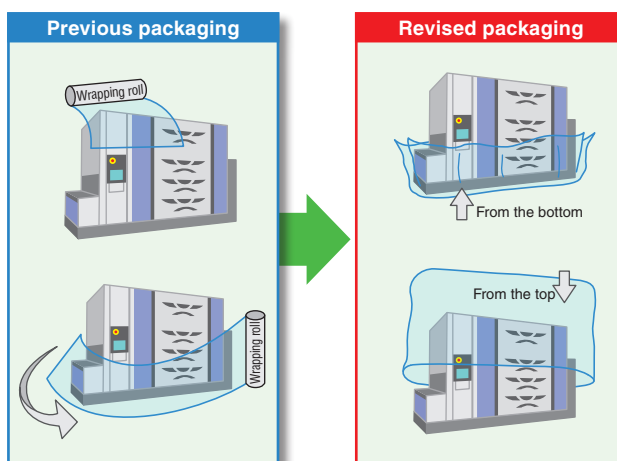
In fiscal year 2007, TEL was designated a specified shipper under the Energy Saving Act as its non-consolidated freight transportation (weight of major products transported multiplied by their transportation distance), calculated based on a given loading ratio, exceeded 30 million ton-kilos. In fiscal year 2008, we successfully reduced our freight transportation below the 30 million ton-kilos threshold as a result of our efforts to collect cargo weight data more precisely by measuring the gross weights of about 95% of our major products and deriving relevant information from design data. We thus applied to be de-listed as a specified shipper under the Energy Saving Act.

In fiscal year 2008, TEL's transportation activities in Japan emitted 4,712 tons of CO₂ (non-consolidated). During this fiscal year, the cross-departmental Office/Logistics Working Team was launched under the Environmental Steering Committee to study future steps to reduce the environmental impact. Key focuses of this working team include the promotion of a modal shift* such as increasing the use of vessels for product transportation in Japan. At present, the majority of our exports are transported by aircraft in accordance with customer instructions, which generates an estimated 20-fold more CO₂ emissions than domestic land or sea transportation. We will work to find further ways to increase exports by ship in order to achieve our emission reduction targets.

***Modal shift:** A shift from conventional freight transportation by truck to marine and rail transportation for mass transport

Green Packaging

Products of the Tokyo Electron Group are precision machines. Because of this nature, delivering our products requires special packaging so as to maintain their precise and clean condition. We previously wrapped our products two or three times with transparent plastic. But there was a downside to this packaging method: wrapping was rather difficult and created unnecessary space between the packaging material and the products. To address these problems, our coater/developer department studied and improved our packaging process. In the revised packaging process, we cover products to be shipped with a pair of specially ordered sack-shaped wrapping materials from the top and bottom. This shift has allowed us to overcome the aforementioned shortcomings and reduce the use of packaging material by 30%. It also involves fewer activities in high places, resulting in a more efficient packaging process that requires three times fewer man-hours. We intend to make further improvements to reduce the environmental impact and man-hours.



● Comment from an Employee ●



Active Promotion of Modal Shift

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In fiscal year 2008, we began to use ships rather than trucks to transport our products. About 150 trucks were replaced by marine transportation for two routes. An estimated 93 metric tons of CO₂ emissions has been saved by this modal shift. We will work to make further progress in this effort. In parallel, we will work to reduce the environmental impact of packaging material and other related elements.