Improving Efficiency and Conserving Energy by Shifting to Larger Tanker Trucks and Ships

Petroleum products are transported by tanker trucks and domestic tanker ships from oil refineries to nationwide service stations, oil storage depots, and factories of major customers. Cosmo Oil has long been engaged in a variety of activities to increase efficiency and save energy, including shifting to larger tanker trucks and ships, and consolidating and closing oil storage depots or sharing them with other companies. We set a target of a nine percent reduction in fuel consumption from FY 1990 levels by 2010 for both land and sea transport and are already well ahead of this target.

We request the companies that jointly operate tanker trucks to conduct safety training and fatigue testing of their employees and to upgrade their tanker trucks; we commend those who make a contribution to the safety of transport.

Efficient Land Transport

Energy conservation is being achieved in land transportation through a shift to larger vehicles, longer operating hours, and a reduction in the number of vehicles used. The operating hours of each truck have been improved by increasing the nighttime, Sunday, and holiday deliveries made, while reducing the number of vehicles by 59 (10.1 percent) in FY 2001. These efforts resulted in reduced fuel consumption in FY 2001, a reduction of 16.8 percent from the FY 1990 figure.

We will continue to work hard to reduce energy consumption by further increasing loading ratios, expanding night deliveries, and improving delivery efficiency.

Large-sized tanker truck

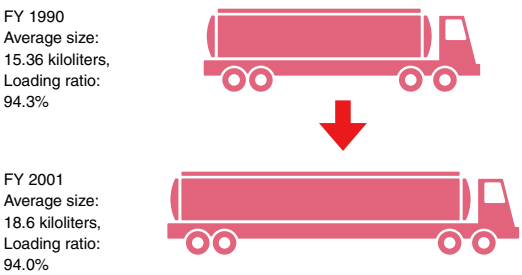
Efficient Ocean Transport

Several thousand-ton tankers are used for transport of petroleum products from oil refineries to distribution bases, oil storage depots, and other destinations. We have achieved a 15.3 percent reduction in fuel consumption compared with FY 1990 through shifting to larger vessels and improving loading ratios and rate of operation.

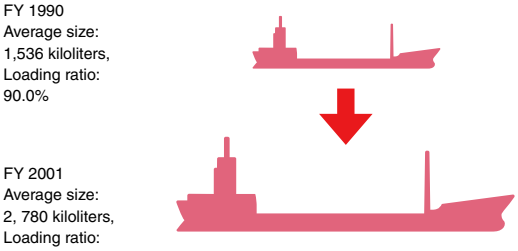
Cosmo Oil will continue to promote the elimination of mismatches in vessel allocation and the increase of cargo handling at night and on holidays as well as the shift to larger tankers by the joint use of oil receiving terminals, making the most of our alliance with Nippon Oil Corporation.

Large-sized tanker

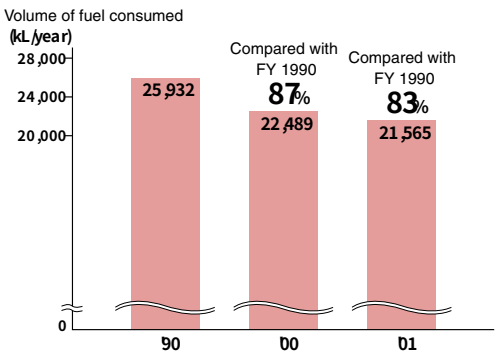
Average Size of Tanker Truck and Loading Ratio



Average Size of Domestic Tanker and Loading Ratio



Fuel Consumption by Tanker Truck



Fuel Consumption by Tanker