

# Distribution

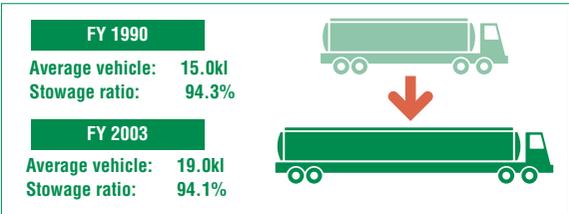
We promote energy saving and make our distribution systems more efficient – e.g. by introducing larger tanker trucks and coastal tankers.

## Improvement in the efficiency of distribution systems / energy conservation

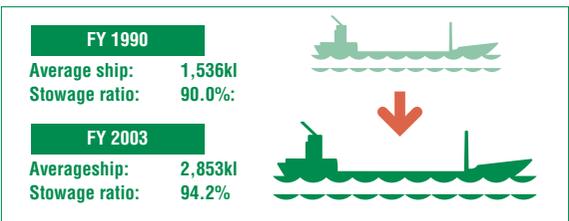
Petroleum products are transported from refineries to oil storage depots and service stations by tanker truck and coastal tanker. Here at Cosmo Oil, from the early days we have endeavored to make our distribution systems more efficient to promote energy saving by introducing larger tanker trucks and coastal tankers, merger and abolition of oil storage depots and co-sponsorship of oil storage depots with other companies.



### Average type of tanker truck and its stowage ratio \*1



### Average type of coastal tanker and its stowage ratio



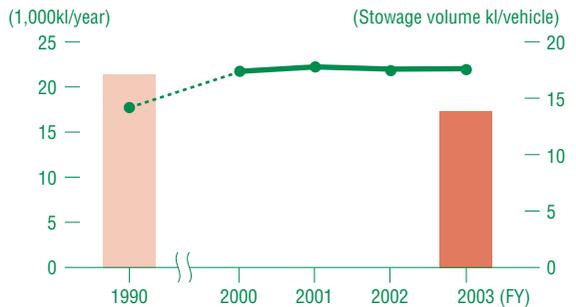
## Land transportation

Land transportation by tanker truck is a major transportation system from refineries and oil storage depots to service stations and accounts for 40% of oil transportation in Japan along with maritime transportation. In our land transportation system, we aim to enhance energy saving by introducing larger vehicles and maintaining and raising the stowage ratio\*2 to increase transported volume per delivery.

Fuel consumption in FY 2003 was reduced by 20 % from that of 1990. Introduction of the driver-controlled delivery system in FY 2003 enabled us to deliver at nighttime, which helped improve efficiency of transportation by reducing traffic jam and promoted energy saving. We continuously improve energy saving by expanding the driver-controlled delivery system and improving the efficiency of

### Fuel consumption by tanker trucks

■ Fuel consumption \*1  
● Stowage volume



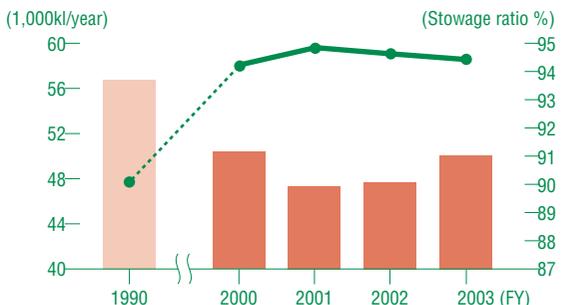
\*1 Fuel consumption: Estimated from type, stowage ratio, fuel mileage and frequency of delivery of tanker trucks.

## Maritime transportation

Petroleum products are transported from refineries to distribution bases and oil storage depots by coastal tankers weighing from several hundred to several thousand tons. Fuel consumption by coastal tankers in FY 2003 increased by approximately 5% due to the increase from the previous year in sales and maritime transportation volume, yet it is still 11% below the 1990 level. We have endeavored to improve the efficiency of transportation by promoting merger, abolition and the joint use of oil storage depots and introducing larger coastal tankers. We will continue to strive for energy saving by promoting night-time cargo handling and a high stowage ratio.

### Fuel consumption for coastal tankers

■ Fuel consumption  
● Stowage ratio \*2



\*2 Stowage ratio: The ratio of actual stowage volume to capacity of tank.