

We are shifting to larger tanker trucks and ships to boost efficiency and energy conservation.

Petroleum products are transported to oil storage depots, the factories of corporate customers, and service stations nationwide by tanker trucks and coastal tanker ships. By shifting to the use of larger tanker trucks and ships, closing and consolidating oil storage depots and/or sharing them with other oil companies, Cosmo Oil has for many years promoted efficiency and energy conservation in distribution. We have already surpassed our original goal of reducing land and sea transport fuel consumption to 9% less than 1990 levels by 2010.

Also, to promote accident prevention, we request our distribution partners to conduct safety training for their employees, and we have established and take steps to ensure compliance with specifications for standard equipment on tanker trucks. We award commendations to partner companies that achieve good safety records.

Efficiency and energy conservation in land transport

Cosmo Oil promotes energy conservation in land transport by shifting to larger vehicles, reducing the number of vehicles, and extending operating hours. Operating hours per vehicle are extended by increasing nighttime, Sunday and holiday deliveries. Despite increased volumes shipped we were able to maintain the same number of vehicles in fiscal 2002 as in the previous year. Accordingly, fuel consumption for the year remained the same as in fiscal 2001, at 17% less than the fiscal 1990 level.

Average tanker truck size and stowage factor

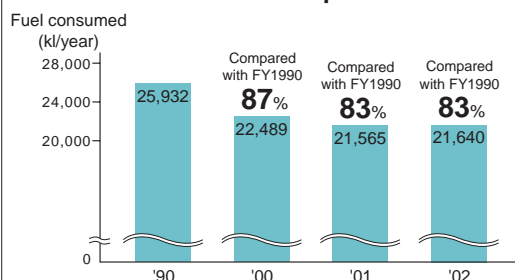
FY1990
Average truck size: 15.0 kl
Stowage factor: 94.3%



FY2002
Average truck size: 19.3 kl
Stowage factor: 94.3%



Tanker truck fuel consumption



We will continue to work hard to reduce energy consumption and achieve better distribution efficiency by increasing the stowage factor and expanding nighttime deliveries.



Large tanker truck

Efficiency and energy conservation in marine transport

Petroleum products are shipped from oil refineries in Japan to oil terminals, oil storage depots and other destinations by several-thousand-ton class coastal tankers. Although the volume shipped in fiscal 2002 increased slightly over the previous year, by using larger ships and improving loading and operating efficiencies, we maintained the same fuel consumption as in fiscal 2001, or 15% less than the fiscal 1990 level. Cosmo Oil will continue working for greater efficiency and energy conservation by eliminating mismatches in vessel allocation, increasing cargo handling at night and on holidays, and using larger tankers (made possible by our alliance with Nippon Oil Corporation, which allows the joint use of oil terminals).



Large coastal tanker

Average coastal tanker size and stowage factor

FY1990
Average ship size: 1,536 kl
Stowage factor: 90.0%



FY2002
Average ship size: 2,809 kl
Stowage factor: 94.3%



Coastal tanker fuel consumption

