

Pollutant Control and Waste Management

<http://www.cosmo-oil.co.jp/eng/sustainable/07/env/response.html>

Cosmo Oil works to reduce environmental impacts by properly controlling pollutants and minimizing and recycling industrial waste.

► Policy

Our refineries discharge exhaust gases and wastewater subject to control by the Air Pollution Control Law and the Water Pollution Control Law, respectively. Additionally, our refineries handle chemical substances that are specified in the Pollutant Release and Transfer Register (PRTR) law. The Cosmo Oil Group works to properly control and reduce the environmental impacts of these emissions and substances. Also, we undertake environmental impact assessments when installing large facilities or undertaking large-scale engineering work. For industrial waste, we set our own targets to reduce the volume of waste generated and reduce and recycle excess sludge.

► Striving to Achieve Zero Industrial Waste

Reducing Industrial Waste

In fiscal 2006, increases in industrial waste resulted from such factors as industrial waste generated by the accident and fire at the Chiba Refinery and the generation of asbestos-bearing waste material that resulted from the application of the Asbestos Removal Law. To reduce landfill and offset such increases, we promoted the recycling of asbestos-bearing waste material, combustion residue from incinerators, and waste asphalt. These activities resulted in 402 tons* of landfill produced in fiscal 2006, which corresponds to a landfill rate of 0.7%*, well below the target of 1% specified in the Consolidated Medium-Term Environmental Plan. Our affiliated companies have also individually established their own targets and made efforts to reduce industrial waste materials.

* The landfill rate covers four refineries, the Yokkaichi Kasumi Power Station (IPP) facility, oil depots, and the Research & Development Center.

Reducing Excess Sludge

Excess sludge discharged from wastewater treatment facilities accounts for the largest portion of all industrial waste in Japan. Sludge also makes up 56% of industrial waste generated at Cosmo Oil's refineries, and therefore managing this sludge is extremely important. To the present, we have been researching* technologies for reducing excess sludge generated at our refineries and have achieved large reductions in excess sludge at our Chiba and Sakaide refineries.

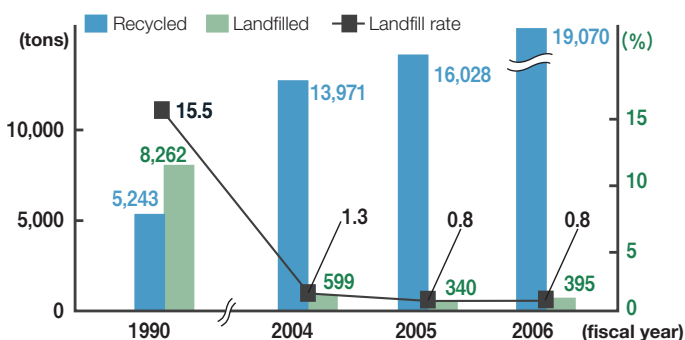
* Research is being carried out as a project supported by the Japan Petroleum Energy Center (JPEC).

► Measures against Asbestos

In fiscal 2005, we surveyed the state of asbestos usage in buildings at our refineries and service stations that the Cosmo Oil Group either owns or leases. As a result, we confirmed that sprayed asbestos was exposed at 16 locations. In fiscal 2006, we completed the removal of this asbestos at 15 of these locations, and in fiscal 2007 we plan to remove the asbestos at the one remaining location, a closed-down service station.

Besides asbestos that is sprayed, asbestos is contained in such building materials as slate as well as in heat insulators installed in production equipment. Because these are molded products, we believe no asbestine powder is emitted during normal usage. Nonetheless, we are sequentially replacing these with asbestos-free materials at the time of repairs. For other asbestos-bearing products, we undertake measures according to applicable laws.

Trends in the Volume of Industrial Waste at Four Refineries

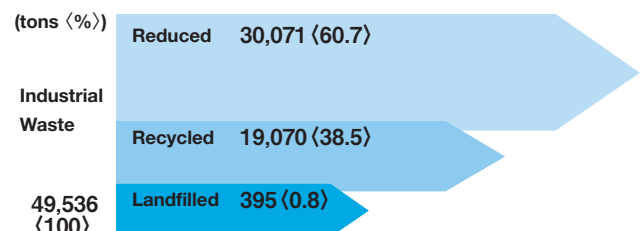


Fiscal 2005 results have been restated due to a revision in the method for calculating recycled waste at the Yokkaichi Refinery.



Detailed data
<http://www.cosmo-oil.co.jp/eng/sustainable/07/env/response.html>

Flow of Industrial Waste at Four Refineries



Detailed data
<http://www.cosmo-oil.co.jp/eng/sustainable/07/env/response.html>
Detailed data Management of Air, Water, and Chemical Substances
<http://www.cosmo-oil.co.jp/eng/sustainable/07/env/response.html>