

Environmental Management System

Web page <http://www.cosmo-oil.co.jp/eng/sustainable/06/env/management.html>

The Cosmo Oil Group implements its environmental management system and undertakes various environmental initiatives in order to fulfill its responsibility for the environment - one of the most important social responsibilities for an energy company.

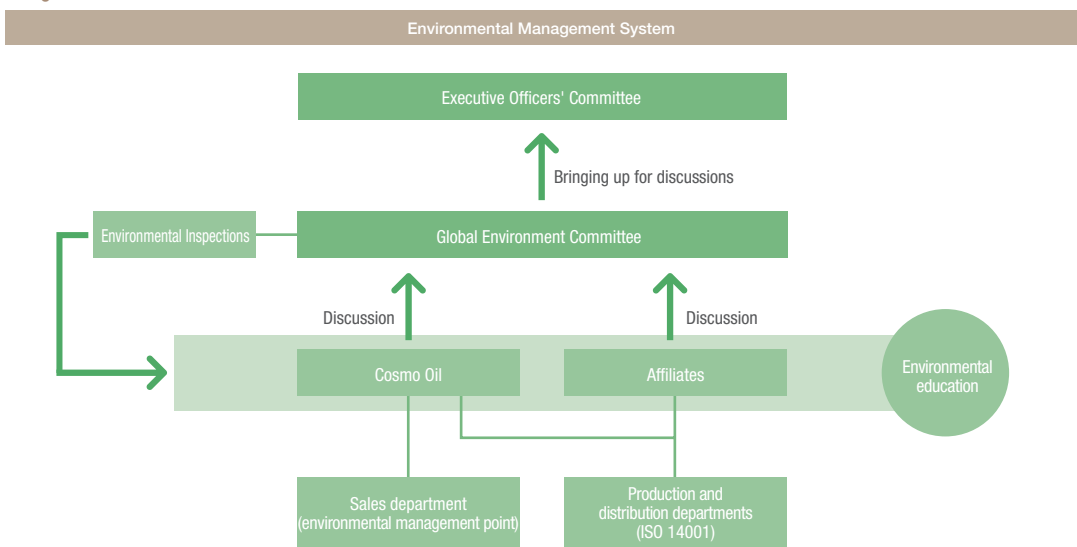
Environmental Management System

The Cosmo Oil Group has established its own environmental management system in which our affiliates are also involved. Each business unit specifies its own targets based on the Consolidated Medium-Term Environmental Plan, and the results are fed back into the plan. The hub of this system is the "Global Environment Committee" that connects all the departments horizontally with the goal of preserving the environment. The committee reviews the plan and performance, and reports the review results to the Executive Officers' Committee in order to implement the PDCA cycle effectively and to allow all the personnel, ranging from management to field workers, to share information. We also conduct "Environmental Inspections" to grasp the status of activities at each site. To ensure that environmental management is properly done at individual sites, each site also has its own environmental management system, and provide the employees with environmental education to raise their awareness (see page 18).

Environmental Inspections

In order to implement the environmental management system efficiently, it is important not only to review the results but also to check whether proper operational controls are put in place, and to take corrective actions against the identified problems. The Cosmo Oil Group lets the members of the Global Environment Committee conduct environmental inspections audit at each site. As a rule, they inspect the production, logistics, sales, and new businesses development departments once a year. At our oil refinery, which exert non-negligible impacts on the environment, the director in charge of the Safety and Environment Dept. and the person in charge of environment at another site are involved in as the leader and observer, respectively. The inspectors report the results to the Executive Officers' Committee via the Global Environment Committee.

▼ Figure 3



Site-based environmental management system

The environmental management system is implemented horizontally throughout the Group, while each site has its own system.

ISO 14001 at the production and logistics departments

The Cosmo Oil Group encourages our sites which exert non-negligible impacts on the environment to get the ISO 14001 certification. Eight sites including the four oil refineries have been already certified. Each site implements the PDCA cycle to make continuous improvements according to ISO 14001. Apart from regular external audits performed by certification bodies, each site conducts internal audits.

Environmental management (EM) point at the service stations (SS)

Since April 2003, the Cosmo Oil Group has been running the SS sales promotion program "NAVI" that reviews performance indicators including "Measures against Leaks," "Checks on Facilities," and "Industrial Waste Treatment." As part of this program, we use an "SS Environmental Management (EM) Point Checklist" to inspect the actual status of the service stations and to address the identified problems.

We conduct this survey at about 5,000 service stations all over Japan, twice a year. The rate of checklist collection and the resulting scores has been increasing gradually.

We will continue the survey in order to grasp the actual safety control of the SS facilities and to improve the management system..

Environmental education

For the environmental management system to work well, we believe that all personnel needs to correctly understand the background and meaning of environmental activities conducted by the Cosmo Oil Group. We provide an environmental education program in our position-based training courses and allow each employee to take them step by step while building their careers. Refineries also provide their employees with training courses required by ISO14001.

Environmental Accounting

To conduct environmental conservation initiatives effectively, the Cosmo Oil Group began the environmental accounting from FY2000 to identify the environmental conservation costs, as well as the environmental conservation benefits and economic benefits.

The environmental conservation cost totaled 68.1 billion yen, which includes the cost of 2.5 billion yen for reducing sulfur content of products. The environmental conservation benefit was 9.795 billion EIP (JEPPIX's index*), which was slightly higher than previous year. We think this is because a rise in crude throughput and our advanced refining (a new de-sulfurization unit running in full) increased the environmental loads. Concerning the economic benefit, we made 2.6 billion yen thanks to energy saving by cogeneration facilities and R&D patents.

*1 JEPPIX: A method of integrating different types of environmental loads that was developed using the background data of Japan. It employs an index called EIP (Eco Impact Point).



Details of Environmental Accounting
http://www.cosmo-oil.co.jp/eng/sustainable/06/info/ev_accounting.html