

Working in Harmony with the Global Environment

The Cosmo Oil Group recognizes that global warming and other issues related to the global environment are among the most serious problems that demand solutions. The Group takes an active, steadfast and transparent approach to its measures and initiatives designed to preserve the environment.

Overview of Environmental Activities

Third Consolidated Medium-Term **Environmental Plan**

The Cosmo Oil Group launched its first initiatives under its Consolidated Medium-Term Environmental Plan in fiscal 2002. In fiscal 2008, the Group introduced its Third Consolidated Medium-Term Environmental Plan based on the following policies:

- Expand the boundary of initiatives, and further reinforce Group-wide environmental management
- Further improve environmental performance, and implement strategic responses to risks related to global warming
- Encourage employees to independently promote the Group's environmental initiatives with the overall aim of establishing Cosmo Oil as an environmental brand.

The Consolidated Medium-Term Environmental Plan incorporates the following four themes:

- 1. Implement global warming countermeasures including energy conservation at refineries and other workplaces, and government-sponsored Team Minus 6% activities at offices
- 2. Minimize environmental impact by reducing industrial waste, ensuring soil preservation, and properly managing chemical substances
- 3. Develop environmentally friendly businesses and technologies in the new areas of alternative energy and non-petroleum energy
- 4. Share and disseminate information on the environment through Team Minus 6% activities for individuals, the Cosmo Oil Eco Card Foundation, and other activities.

▶ Third Consolidated Medium-Term Environmental Plan Fiscal 2008 Initiatives

Degree of achievement:

○Achieved △Partially achieved ×No progress

Themes		Goals	Fiscal 2008 Initiatives and Results	Achieve- ment of Goal	Fiscal 2009 Goals and Plans
Improve environmental efficiency	Implement global warming countermeasures	Improve unit energy consumption at the Group's four refineries, targeting a 15% reduction by 2010 compared to 1990	Unit energy consumption was reduced by 10.54% compared to fiscal 1990	×	Further reduce unit energy consumption to achieve a 15% reduction by fiscal 2010
		Manage greenhouse gas emissions and conduct quantitative assessments at each stage of operations from international development to distribution	Quantitative assessments were started for Abu Dhabi Oil at the international development stage and for regular crude oil shipments at the distribution stage	Δ	Expand targeted workplaces for quantitative assessments and set a policy aimed at post-Kyoto Protocol standards for CO ₂ emissions
		Promote energy and resource conservation to achieve goals for Team Minus 6% activities at offices	Goals were not achieved for the amount of copy paper used at offices or fuel used in company vehicles, however, the goal for the amount of electricity consumed at offices was attained	Δ	Achieve goals set in fiscal 2008 for each targeted area
	Minimize environmental impact	Reduce industrial waste, targeting a final disposal rate ¹ of less than 0.5% for Cosmo Oil and less than 5% for subsidiaries and affiliates ²	Cosmo Oil achieved a final disposal rate of 1.0%, and 5 of 6 subsidiaries and affiliates achieved their goals	Δ	Achieve final disposal rate of less than 0.5% at Cosmo Oil Achieve final disposal rate of less than 5% at subsidiaries and affiliates
		Adopt stringent measures to ensure soil preservation, reducing risks through preventative and post-response measures tailored to sites, including refineries, R&D Center, service stations, and idle land	At refineries, drainage pipes carrying oil were inspected and repaired, and at service stations, soil was evaluated and treated and employees were given training	0	Apply the same stringent measures to ensure soil preservation as in fiscal 2008, reducing risks through preventative and post-response measures tailored to sites, including refineries, R&D Center, service stations, and idle land
Strengthen environmental management	Develop environmentally friendly businesses and technologies	Develop new environmental businesses and conduct R&D related to the oil industry and new industries	Steady progress was made in each area, including the manufacture of biomass fuel, concentrated solar thermal power generation and other new environmental businesses	0	Progress with the commercialization of new environmental businesses, conduct R&D to improve performance in existing businesses, and seek out new business opportunities
	Share and disseminate environmental information	Carry out Team Minus 6% activities for individuals as well as their families	The number of participants in activities increased by 1,233 CO ₂ emissions were reduced by 1.066 kg each day per person	0	Further increase the number of participants in activities Maintain a CO ₂ reduction amount of 1.0 kg or more each day per person

^{1.} The industrial waste final disposal rate covers Cosmo Oil's four refineries, the Yokkaichi Kasumi Power Station (IPP) facility, oil depots, and the Research and

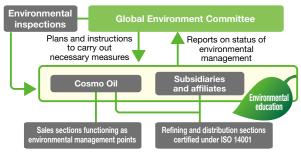
^{2.} The six subsidiaries and affiliates are Cosmo Matsuyama Oil Co., Ltd., Cosmo Engineering Co., Ltd., Cosmo Oil Lubricants Co., Ltd., (two sites), Cosmo Petroleum Gas Co., Ltd., and Hokuto Kogyo Co., Ltd.

Environmental Management System

Under its own environmental management system, the Cosmo Oil Group encourages employees Group-wide to take independent initiatives. To ensure that environmental management proceeds smoothly and efficiently, the Group has created a structure under which the Global Environment Committee, a cross-sectional body, drafts the Consolidated Medium-Term Environmental Plan, reports on and evaluates the results, and then provides feedback to specific departments.

The Global Environment Committee reports to the CSR Promotion Committee to ensure that the PDCA (plan, do, check, and act) cycle is efficiently implemented. The Cosmo Oil Group continues to provide education on environmental issues to raise awareness among employees, and has adopted schemes so that environmental initiatives are shared throughout the Group, from work sites to the management level. Environmental inspections are conducted at each site as part of the Group's efforts to ensure that its environmental standards are observed at all sites.

Environmental Management System



Environmental Inspections

The Global Environment Committee conducts regular environmental inspections of refineries, the Research and Development Center and the Head Office departments that supervise sales and distribution. After assessing the environmental management status of these workplaces, the Committee recommends improvements and provides advice as necessary. The results of the environmental inspections are reported to the CSR Promotion Committee. In fiscal 2008, inspections focused primarily on environmental management and impact reduction during irregular but occasionally necessary facility operations, such as when equipment must be shut down or powered up. In addition, the daily environmental management status was audited through interviews to identify operations on site, as well as document reviews, which also verified progress made in the Consolidated Medium-Term Environmental Plan. As a result, the Group was able to confirm that the sites, subsidiaries and affiliates surveyed were conducting their environmental management appropriately.

Sites and Companies Where Inspections Were Performed in Fiscal 2008

III FISCAI 2000			
Chiba Refinery			
Yokkaichi Refinery			
Sakai Refinery			
Sakaide Refinery			
Sales Support Department			
Project Development Department			
Distribution Department			
Research and Development Center			
Cosmo Matsuyama Oil Co., Ltd.			
Cosmo Engineering Co., Ltd.			
Cosmo Oil Lubricants Co., Ltd.			
Cosmo Petroleum Gas Co., Ltd.			

ISO 14001 Environmental Management System in the Workplace

The Cosmo Oil Group has acquired ISO 14001 certification for ten business sites, including the Group's four refineries, which have a significant impact on the environment. These workplaces incorporate the Consolidated Medium-Term Environmental Plan into their business objectives and adopt a systematic approach to achieving its goals. The Group also regularly carries out internal audits, has certification bodies carry out external audits, and checks that PDCA and other aspects of the system are functioning effectively.

▶ Sites with ISO 14001 Certification

Name of site	Date Obtained		
Sakaide Refinery	June 1997		
Chiba Refinery	March 1998		
Yokkaichi Refinery	March 1998		
Sakai Refinery	March 1998		
Cosmo Matsuyama Oil Co., Ltd.	December 1998		
Cosmo Oil Lubricants Co., Ltd., Shimotsu Plant	June 2003		
Cosmo Kaiun Co., Ltd.	August 2003		
Cosmo Oil Lubricants Co., Ltd., Osaka Plant	October 2003		
Yokkaichi LPG Terminal Co., Ltd.	September 2006		
Research and Development Center	December 2006		