

The Cosmo Oil Group works to provide a stable supply of energy, with a primary focus on petroleum products. The themes of “Harmony and Coexistence” and “Creation of Future Value” are key words to express our commitment to sustainable development.

In terms of value creation, we are strengthening our oil development business, transforming ourselves into an “integrated energy company” covering electrical power production and liquefied natural gas (LNG) business, and improving profitability of affiliated companies, as well as strengthening our core business of oil refining and sales.

To achieve harmony and coexistence with the natural environment, people, and society, we have committed ourselves to be an environmental leading company, by implementing our Medium-Term Environmental Plan, coordinated by the Global Environmental Committee. We are also committed to act in a socially responsible manner as a corporate citizen, by following the Corporate Behavior Guidelines set by our Corporate Ethics Committee.

We recognize that pursuing sustainable development must go hand in hand with communication with society. We will continue to communicate with various stakeholders and advance our environmental protection activities together with our customers, the end-users of the energy that we provide.

Performance in fiscal 2002

Fiscal 2002 saw achievements in many fields (indicated by) and also areas for improvement in other fields (indicated by). To move toward sustainable development, we have started taking action to progress further while overcoming such challenges.

Activities Involving Customers and Society

Increasing membership of Cosmo the Card Eco credit card and activities to mitigate climate change

To mitigate climate change by working together with our customers, we introduced a new credit card, Cosmo the Card Eco, in April 2002. The membership fees, combined with Cosmo’s contribution, are channeled through non-profit organizations to support environmental protection activities.

By the end of fiscal 2002, 56,000 people had joined the Eco card program. Contributions were made to environmental conservation activities such as tropical rainforest protection projects in Papua New Guinea and the Solomon Islands. We have also increased the environmental content of our advertising, with the aim of raising the public’s interest in environmental protection.

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Sales of CO₂-neutral gasoline and CO₂ Sequestration Certificates

In December 2002, we launched a “CO₂-neutral gasoline” program, which allows us to allocate Carbon Sequestration Rights (CSRs) to offset the CO₂ emitted by Cosmo the Card Eco cardholders’ use of gasoline.

Also, based on the CSRs, we issued “CO₂ Sequestration Certificates,” which were offered for sale at 500 yen per ton of CO₂, and the money collected goes to help environmental protection activities. P.24

Reducing Environmental Impacts from Business Activities

Most targets in the Medium-Term Environmental Plan achieved

We have achieved most of the targets in our Medium-Term Environmental Plan—reducing the amount of energy consumed per unit activity at oil refineries by 9.7% from fiscal 1990 levels (target was 8.0%), as well as reducing final disposal of industrial waste generated from oil refineries by 83% from fiscal 1990 levels (target was an average reduction of 81% by the period 2002–04). In addition, we established numerical targets where we previously had qualitative targets, such as for energy saving from transportation.

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Sales launch of diesel fuel with low sulfur content

As sulfur content is one of the sources of air pollution and other environmental impacts from the use of petroleum products, we have been actively working to lower the sulfur content of our products through investment in secondary treatment equipment and development of catalysts. Cosmo Oil was able to start supplying diesel with 50 ppm sulfur content in April 2003 nationwide (except in Okinawa and the outer islands), a year and nine months ahead of new government regulations. P.17

Making longer-lasting catalysts

We succeeded in developing highly durable catalysts for heavy oil direct desulfurization units, and started trial operations at the Chiba Oil Refinery in November 2002. P.15

Sludge reduction system

We tested a new sludge reduction system at the Sakaide Oil Refinery and estimate that approximately 400 tons of sludge from wastewater treatment equipment will be reduced each year at the refinery. P.16

Working toward zero emissions

In fiscal 2003, we will launch our initiative to achieve zero waste generation at head office and all facilities, based on the "3Rs" concept (reduce, reuse, recycle). We will start devising plans for zero waste emissions of used catalysts and sludge at oil refineries and oil storage depots.

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Devising green purchasing guidelines

In fiscal 2002, we discussed ways to integrate green purchasing into a company-wide initiative. In fiscal 2003, we will devise Cosmo's original Green Purchasing Guidelines (environmental criteria for purchasing). We have set a target of purchasing 70% of our office supplies through green purchasing. We will also work to expand the list of items covered, by gradually including materials used for production processes and the construction of facilities. P.39

Soil conservation

We reinforced site inspections based on our Soil Conservation Policy. Our next tasks are to conduct site inspections at service stations and other operational sites, prevent oil leaks at service stations and minimize the environmental impacts in the event of leaks. P.16

New Energy Developments**Launching into independent power production (IPP)**

We constructed a power generating station with a capacity of 200,000 kW on land adjoining the Yokkaichi Oil Refinery. Power generation from oil residue (asphalt fractions) started in July 2003.

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Developing GTL catalysts

We have developed gas to liquid (GTL) catalysts and succeeded for the first time in Japan to produce liquid fuels using GTL technologies.

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Developing hydrogen production technologies for fuel cells

We participated in a Hydrogen/Fuel Cell Demonstration Project and opened a hydrogen fueling station in Yokohama for fuel cell automobiles. We have also succeeded in developing a hydrogen production unit using reforming catalysts and initiated a demonstration test. P.19

Laying the foundations of an integrated energy company

In the Cosmo Oil Group Medium-Term Management Plan, we have included electrical power and natural gas as part of our business strategies until fiscal 2005. We are taking on the challenge of expanding our business to become an integrated energy company.

Working for Greater Trust**Implementing Corporate Ethics Regulations**

To keep the public's trust, the Cosmo Oil Group has formulated the Cosmo Corporate Ethics Regulations (including Corporate Behavior Guidelines) and started implementing them on April 1, 2003.

Computerizing systems for environmental accounting

We have completed computerization of environmental accounting and started operating the system in fiscal 2003. P.48

Third party comment

To gain an objective perspective on our activities and the contents of our reporting, we have requested and included a third party comment by Mr. Toshihiko Goto. P.53

Safer operations

There was one job accident requiring time off work at the refineries in fiscal 2002. With over 14 million accident-free hours, the Chiba Oil Refinery maintains its number-one safety ranking in Japan's petroleum industry. P.40

Greater information disclosure

We are working toward greater information disclosure regarding Cosmo's social dimensions, especially in the areas of employee engagement such as human rights, personnel policy, and equal opportunity. We will keep working on further initiatives and information disclosure in the future. P.43

*1. See pages 35–38 for calculation methods of data on four oil refineries.

*2. See page 47 for the scope of data regarding environmental accounting.

*3. We duly comply with rules and regulations set by Air Pollution Control Law, Water Pollution Control Law, other ordinances, pollution control agreements, reporting requirements, pollution control memorandums, etc.

Key Performance Indicators

Indicator	FY2001 Actual	FY2002 Actual	Target	Self- assessment	Page
Environment					
Unit energy consumption** (compared with FY1990 levels)	-9.1%	-9.7%	10% below FY1990 levels by FY2010		36
For reference: CO ₂ emissions (thousand tons-CO ₂)* ¹	4,711	4,785			36
For reference: CO ₂ emissions throughout life cycle (thousand tons-CO ₂)	76,754	79,275			32
Fuel consumption by tanker trucks (compared with FY1990 levels)	-17%	-16.5%	20% below FY1990 levels by FY2004		41
Fuel consumption by coastal tankers (compared with FY1990 levels)	-15%	-15%	17% below FY1990 levels by FY2004		41
Sulfur oxide emissions per crude oil equivalent throughput (g/kl)* ¹	25.4	27.6	Compliance with regulatory limits* ³		38
Nitrogen oxide emissions per crude oil equivalent throughput (g/kl)* ¹	17.3	16.6	Compliance with regulatory limits* ³		38
COD discharges per crude oil equivalent throughput (g/kl)	0.72	0.71	Compliance with regulatory limits* ³		38
Final disposal (landfill) of industrial waste compared with FY1990 levels* ¹	-78%	-83%	81% below FY1990 levels by 2002–04 (average)		36
Society					
Work accidents requiring time off (per million hours of work)* ¹	0	0.43			40
Cosmo the Card Eco Membership (thousand persons)	N/A	56			23
Economy					
Net sales (consolidated, billion yen)	1,814	1,903			45
Net income (consolidated, billion yen)	-5.2	3.4			45
Shareholders' equity (consolidated, billion yen)	194.3	193.6			45
Environmental expenses (billion yen)* ²	47.2	44.5			49
Environmental investments (billion yen)* ²	1.1	2.2			49
				Good	Needs improvement

External recognition

In March 2003, Cosmo Oil became the first Japanese oil company included in the FTSE4Good Global Index, an internationally renowned stock index for socially responsible investment. In July 2003, our stocks were also included in the Morningstar Socially Responsible Investment Index. P.46