

Medium-term Environmental Plan: Blue Earth 21

In an effort to become a sustainable company while meeting environmental, social, and economic responsibilities as a company, Cosmo Oil drew up “Blue Earth 21”, a medium-term environmental plan in FY 2002.

Six challenges are included in “Blue Earth 21” under the “Medium-term Environmental Plan Slogans”. By further categorizing them into nine principle themes, we will work hard to achieve concrete targets set for each department by FY 2004.

Medium-term Environmental Plan Slogans

**“Environmentally preferred
Cosmo Oil.”**

**“Aiming for a true environmentally
advanced company.”**

**“Meeting social responsibilities
as a corporate citizen.”**

**“Striking a balance between environmental
protection and economic efficiency.”**

Six Challenges

1. The challenge to develop green products

The development and sales of products with minimum environmental impacts.

2. The challenge to promote green factories

Efforts to achieve zero emissions and to minimize CO₂ emissions and waste generation.

3. The challenge to establish green logistics and sales

Promotion of resource and energy conservation.

4. The challenge to develop new energy technologies

The development of new energy technologies such as fuel cell and GTL (conversion of natural gas to liquid hydrocarbons) technology.

5. The challenge to promote green offices

The promotion of the three “R’s” (reduce, reuse, and recycle).

6. The challenge to establish environmental communication

The fostering of environmental awareness among all employees and cooperation with stakeholders.

* Ideas of environmental contribution projects:

Cosmo Oil implements and supports environmental contribution projects based on the recognition that it is our responsibility to hand down an affluent society to the next generation, namely to promote sustainable development.

1. Environmental improvement and environmental protection activities in Japan and overseas.
2. Education and enlightenment activities for children.

Medium-term Environmental Plan “Blue Earth 21”

Theme

1. Prevention of Global Warming

Promotional activities for the reduction of energy consumption at each operating department.

Efforts to use the Kyoto Mechanism and to develop new energy technologies.

2. Reduction of Pollutant Emissions

Control of air and water pollutant emissions in accordance with the voluntary standards, which are more stringent than regulatory standards.

Efforts of voluntary VOC emission control.
Further reduction in industrial waste.

3. Soil Environment Protection

Soil environment assessment by site and response to detected problems.

Soil environment assessment at service stations and promotion of pollution prevention.

4. Resource Conservation

Reduction in general waste by promoting three “R’s” Paper (reduce, reuse, and recycle).

5. Reduction of Environmental Impacts of Products

Provision of oil-based products that have less environmental impacts.

6. Green Procurement

Expansion of the range of items considered for green purchase.

7. Research and Development

Technology development in the oil-related business area.
Technology development in the environmental area.

Technology development in the new energy area.

8. Environmental Contribution Projects

Promotion of continuous projects based on Cosmo Oil’s basic policy*.

Social Action Programs

9. Organization of Environmental Management

Promotion of continuous improvement of environmental management systems.

Improvement of communication activities for a variety of stakeholders

Medium-term Targets (FY 2004)

Energy Conservation	9.2% reduction of crude oil energy consumption units used at oil refineries (compared with 1990 levels). Further reduction in the amount of fuel used for logistics. The promotion of energy conservation within our offices.
Kyoto Mechanism	Consideration of the use of the Kyoto Mechanism.
New Energies	Consideration of the introduction of power generation systems using natural energy resources (wind and solar power).

Air Pollution Control	Maintenance of the current levels of NOx, SOx and dust emissions from oil refineries. Consideration of the installation of VOC reduction equipment on dispensers at self-service stations.
Water Pollution Control	Maintenance of the current level of COD discharges.
Industrial Waste Reduction	Average annual reduction rate of 81% (compared with 1990 levels) in the amount of waste disposal from oil for a three-year period (2002-2004).

Business Establishments	Soil investigation at business establishments and the implementation of necessary measures.
Service Stations	Promotion of pollution prevention based on the new control standards. Voluntary inspection of service station facilities and implementation of necessary measures.

Commodities	40% reduction in paper purchased (compared with 2000 levels). Promotion of general waste reduction by encouraging garbage separation and recycling.
Water	Consideration of installation of wastewater recycling facilities at service stations.

Diesel Oil	Provision of low-sulfur diesel oil meeting the regulatory level of less than 50ppm sulfur content.
Gasoline	Establishment of a new long-term supply system for the products subject to regulations.

Office Supplies	Green purchasing ratio of 80% (based on the purchase value).
Others	Promotion of the green procurement of equipment and materials (construction materials, submaterials (catalysts, containers, etc.), and consumable supplies (service station uniforms, etc.).

Reduction of Environmental Impacts	Development of high-activity desulfurization catalysts.
Waste Reduction	Reduction of the amount of catalyst used, development of technologies for spent catalyst recycling, and for the reduction of excess sludge generated from oil refineries.
Soil Remediation	Development of a new method for the evaluation of oil content in the soil.
Environmental Businesses	Development of technologies for absorption/recovery of vapors including VOC.
Performance Evaluation of New Energies	Development of technologies for fuel cell system and the conversion of natural gas to liquid hydrocarbons (GTL: Gas to Liquid).

Environmental Technology Support	Transfer of environmental technologies to other countries.
Eco Card Project	Implementation of and support for projects for the prevention of global warming, natural environment conservation, environmental education, etc.
	Active involvement in social action programs.

Human Resource Development	Creation of a system to share environmental awareness.
Communication	Promotion of effective environmental information disclosure for each type of stakeholder.