

The brances passing and the

# COSMO OIL CO., LTD.

Cosmo Oil Group Sustainability Report 2007

# **Filling Up Your Hearts, Too** Living With Our Planet

#### Cosmo Oil Group Sustainability Report 2007 Contents



## **Editorial Policy**

This report aims to present a wide range of corporate activities conducted by the Cosmo Oil Group in a clear and easy-to-understand manner from the perspectives of CSR management, safety, the economy, environment, communication and society. While the editing of this report was conducted in accordance with the spirit of Global Reporting Initiative (GRI) Sustainability Reporting Guidelines 2006, subjects included in the report are selected with reference to Sustainability Reporting Guidelines 2002.

Environmental accounting indicators are compiled with reference to the Environmental Accounting Guidelines 2005 published by Japan's Ministry of the Environment.

- Environmental data, including detailed data on environmental accounting and site specific data, will be available on our website. From the end of December 2007, we plan to post web pages beginning with the following URL: http://www.cosmo-oil.co.jp/eng/sustainable/07

## WEB

Environmental accounting and other environmental data
 http://www.cosmo-oil.co.jp/eng/sustainable/07/info/index.html
 Site specific data

http://www.cosmo-oil.co.jp/eng/sustainable/07/site/index.html

## **Report Coverage**

This sustainability report covers initiatives for CSR management, safety, the economy, environment, communications and society conducted by the Cosmo Oil Group in fiscal 2006 (from April 1, 2006 to March 31, 2007). Note that some examples include activities in fiscal 2007. See pages 3 and 4 for an overview of the Cosmo Oil Group.

#### Other Publications

In addition to the Sustainability Report, the following publications are available. The latest versions are posted on our website and are downloadable. If you would like to request any published materials, please contact the Public Relations Office (tel: +81-3-3798-3101), Corporate Communication Dept., Cosmo Oil Co., Ltd.

## WEB

Annual Report/Fact Book

http://www.cosmo-oil.co.jp/eng/ir/annual/index.html 
News Letters

http://www.cosmo-oil.co.jp/eng/ir/financial/index.html

## Cosmo Oil Group's Stakeholders

## http://www.cosmo-oil.co.jp/eng/sustainable/07/stakeholder.html

The Cosmo Oil Group is supported by numerous stakeholders. To continue being a corporation whose ongoing existence is essential to society, we are providing value through our business activities while working toward proactive information disclosure and two-way communication.



#### Customers

We are listening to our customers and working to provide valuable services, which include improving levels of service and ensuring safety.



We regard respect for human rights as the foundation of our corporate activities and work to create a more attractive work environment in which employees can not only work safely and comfortably but also realize their potential.

## **Outline of the Cosmo Oil Group**

## http://www.cosmo-oil.co.jp/eng/sustainable/07/cosmo.html

The Cosmo Oil Group operates oil businesses ranging from the independent development of crude oil (upstream business) to the manufacture and sale of oil products (downstream business). We are also promoting the creation of a framework for ensuring continued stable supplies of energy, placing top priority on safety. Additionally, we are promoting energy businesses aimed at achieving the best mix of energy sources as well as pursuing businesses directed toward the next generation that include developing new technologies.

## Oil Business Flow and Group Summary (As of March 31, 2007 Consolidated subsidiaries: 28 companies)

**Marine Transportation** 

#### **Crude Oil Development**

Cosmo Oil imports crude oil We take measures to prevent At our refineries, we are progressing with various mainly from Middle Eastern marine accidents, which include initiatives that include promoting efficient switching to double-hull tankers. countries. We aim to maintain a use of energy, reducing industrial waste, stable oil supply by distributing We are also increasing crude oil and preventing air and water pollution. purchases from among multiple transportation efficiency by Additionally, we have started manufacturing establishing Nippon Global Tanker environment-friendly sulfur-free fuels countries and through the independent development Co., Ltd. with Nippon Oil (gasoline and diesel oil). of crude oil by Group companies. Corporation to conduct joint plying Moreover, we are further and by employing large-sized tankers. strengthening amicable relations by engaging in personnel exchanges and technology transfers with Middle Eastern countries. O Abu Dhabi Oil Co., I td. Nippon Global Tanker Co., Ltd Cosmo Oil Co., Ltd. O Qatar Petroleum Development Co., Ltd. United Petroleum Development Co., Ltd. Others : © 2 companies Import/export of crude oil and 1 company petroleum products O Hokuto Kogyo Co., Ltd. Tozai Oil Terminal Co., Ltd. Okinawa CTS Corp. © Cosmo Oil International Pte., I td. □ Ohgishima Oil Terminal Co., Ltd. O Cosmo Oil UK Plc. Others : O 2 companies Other : O 1 company □ 4 companies ©…Consolidated subsidiary ■…Affiliate under equity method Legend Non-consolidated subsidiary under equity method □…Affiliate not accounted for by equity method

Corporate Profile (As of March 31, 2007)

O···Non-consolidated subsidiary not accounted for by equity method

Name	Cosmo Oil Co., Ltd.
Head office	1-1-1, Shibaura, Minato-ku, Tokyo 105-8528 Japan
Telephone	+81-3-3798-3211
Established	April 1, 1986
Capital	62,366,816,126 yen
Main business	Oil refining and sales
No. of employees	1,916

History	Cosmo Oil Co., Ltd. was established on April 1, 1986 through the merger of Daikyo Oil Co., Ltd., Maruzen Oil Co., Ltd., and their refinery subsidiary, the former Cosmo Oil Co., Ltd. Asia Oil Co., Ltd. was merged with Cosmo Oil on October 1, 1989.	
Dealers	284 offices/4,359 service stations (fixed-type only)	
Branch officesSapporo (sales), Sendai, Tokyo, Nagoya, Osaka, Hiroshim Takamatsu, and Fukuoka		
Refineries	eries Chiba, Yokkaichi, Sakai, and Sakaide	
Oil depots	38 locations (including 34 subcontractors)	

**Oil Refining and Product Manufacturing** 

3



## **Financial Data**







# A Commitment from Top Management

### http://www.cosmo-oil.co.jp/eng/sustainable/07/commit.html

Cosmo Oil will return to its origins and solidify our position as we tackle the next challenges. While creating a corporate culture that enables employees to share pride and a high sense of ethics, Cosmo Oil is accelerating initiatives for achieving a sustainable environment for our planet.



# Never Forgetting the Lessons Learned from the Accident and Legal Violations

We at Cosmo Oil are all working together to strengthen our safety management structure and to implement and promote a wider awareness of compliance.

I would like to once again sincerely apologize for the troubles and concerns we caused everyone as a result of the fire at the Chiba Refinery in April 2006 as well as for past violations of the High-Pressure Gas Safety Law at refineries that were uncovered the following August.

I attribute the legal violations primarily to the "lack of compliance awareness" and "a closed corporate culture." Also, because we failed to realize that "a company is a member of society," which is a prerequisite for a company's existence, we not only received severe administrative penalties but also caused serious anxieties and troubles for our customers and residents of local communities. We take this matter with utmost seriousness, realizing that these incidents had a negative impact on Cosmo Oil's operations and that our very existence as a company was inevitably being questioned.

While management of the Cosmo Oil Group, myself included, and other relevant parties are held responsible for causing such a regrettable situation, we are actively pushing ahead with companywide reforms and other measures based on our strong resolve to prevent a recurrence of similar incidents and to regain the trust of society. Specifically, we are undertaking comprehensive examinations of refinery safety management in addition to re-evaluating our business process flow and revamping internal organizations to bolster checking functions in our production sections. As we promote a shared recognition of the roles that must be played by individual employees, who are simultaneously members of society and stakeholders in the Cosmo Oil Group, we are resolutely executing internal reforms aimed at implementing and fostering a wider awareness of compliance throughout the Company.

We are still in the process of implementing reforms aimed at preventing a recurrence of past improprieties. Nonetheless, we have already made notable strides in nurturing a corporate culture where all employees are bound by a strong determination to undertake safe operations. Entrusted with a crucial mission of providing society with stable supplies of energy, we intend to build an unshakeable foundation for trust as a company worthy of continuous trust and respect of society. In tandem, we undertake our utmost efforts to ensure that we never forget the lessons learned from the accident and legal violations as we continue to reform our compliance awareness and put this awareness into practice.

# Returning to the Origins of the Cosmo Oil Group's CSR Management in 2007

With the commitment of all employees, we will solidify our approach to strengthening our bonds of trust with society and strive to make contributions that benefit stakeholders.

Fiscal 2007 is the final year of our three-year consolidated mediumterm management plan under which "promoting CSR management" is being emphasized. We have rebuilt our structure for restoring trust,

## **Cosmo Oil Group Management Vision**

In striving for harmony and symbiosis among our planet, humankind, and society, we aim for sustainable growth towards a future of limitless possibilities.

## Harmony and Symbiosis

- Harmony and Symbiosis with the Global Environment
- Harmony and Symbiosis between Energy and Society
- Harmony and Symbiosis between Companies and Society

## **Creating Future Value**

- Creating the Value of "Customer First"
- Creating Value from the Diverse Ideas of the Individual
- Creating Value by Expressing Collective Wisdom

as each employee focuses on returning to the origins of the Cosmo Oil Group's CSR management and reaffirms his or her own awareness of the roles he or she must play for stakeholders.

By providing society with stable supplies of energy, the Cosmo Oil Group serves vital functions that include raising convenience in people's daily lives across all walks of society and supporting the vitalization of industry.

The value we provide is symbolized by the mottos that express our Management Vision: "Filling Up Your Hearts, Too" and "Living with Our Planet." We believe that the key to sharing this value is to forge deep relationships of trust with all stakeholders.

Additionally, "establishing a stable earnings foundation" and "promoting operations that fulfill our responsibilities to society" also represent two key pillars of our operations. Establishing a foundation for stable and sustainable earnings requires that we meet the expectations of stakeholders and earn their trust, which is predicated on undertaking safe operations and providing stable supplies of energy. As each employee maintains an appropriate awareness of these requirements, we aim to promote the Cosmo Oil Group's CSR management backed by a total commitment from all employees.

## Honestly Fulfilling Our Responsibilities While Taking on the Challenges of Creating New Value

We will contribute to global environmental protection through our businesses and environmental communication.

As one crucial management issue, the Cosmo Oil Group has been addressing a host of environmental issues since the early 1990s, and in doing so, has won acclaim from society as "Environmentally friendly company, Cosmo." In fiscal 2007, we will strive to further reduce the environmental impact of our daily business activities while researching and working toward the commercialization of forms of energy with minimal environmental impact. In keeping with these efforts, we are accelerating initiatives geared toward meeting new challenges in our environmental businesses. Taking a long-term view, we plan to engage in the solar heat power generation business in the Middle East and other regions and bio-fuel business in various South Pacific island nations. Also, as a new business field, Cosmo Oil will undertake the global development of businesses that utilize 5-aminolevulinic acid (ALA), which is attracting attention as a growth-promotion mechanism.

On a different front, we remain dedicated to promoting environmental enlightenment activities aimed at heightening concern for global environmental issues among numerous people and spurring their participation in environmental protection. At the same time, we remain wholeheartedly committed to activities that support people and communities directly facing serious environmental problems that threaten the sustainability of the Earth.

As a member of the international community, in February 2006 the Cosmo Oil Group signed the Global Compact proposed by the United Nations. In the future as well, while collaborating and cooperating with society, we will work to find solutions to various environmental problems.



Participation in "Cosmo Earth Conscious Act Cleanup Campaign on Mt. Fuji," a cleanup activity held in August 2006

# Aspiring toward "Filling Up Your Hearts, Too," for Stakeholders

# We are striving to be a company where each employee can work with a sense of pride.

Finally, I firmly believe that "people" are the essence of a company. Employees are also crucial stakeholders forming the foundation that supports the continued existence of the Cosmo Oil Group. Enriching the lives of employees is contingent upon earning the support of society, ensuring safety, and expanding or maintaining stable business results. This, in turn, requires that we satisfy conditions as a company worthy of continuous trust and respect of society. In other words, I believe that employees serve as a crucial "force" in forming the cycle of trust linking society and the Cosmo Oil Group.

In keeping with this concept, we will proceed with the creation of an environment that nurtures a corporate culture where people in the Cosmo Oil Group can work with a sense of pride and mutually raise their sense of corporate ethics. To ensure that Cosmo Oil is a company where each employee can utilize their capabilities and work with satisfaction, we continually strive to improve our personnel systems and work environment.

With the commitment and understanding of all employees, the Cosmo Oil Group will redouble efforts to regain stakeholder trust as a company that fulfils its responsibilities to society while working to make contributions that benefit all stakeholders.

In the future, I ask for your continued guidance and support of the Cosmo Oil Group.

1. Kimma

Yaichi Kimura President Cosmo Oil Co., Ltd.

## Stance on Compliance

http://www.cosmo-oil.co.jp/eng/sustainable/07/sp/index.html



The fire that broke out at our Chiba Refinery in 2006, together with a series of legal violations, have become the catalysts for reforming the awareness within the Cosmo Oil Group. This special feature once again reflects back on these legal violations and reports on subsequent measures and improvements from multiple perspectives.

## Chiba Refinery Fire Broke Out in the Early Morning of April 16, 2006

At approximately 5:37 a.m., an explosion and fire occurred near the Vacuum Gas Oil Desulfurization Unit and the Hydrogen Production Unit No.1 at our Chiba Refinery, in Ichihara City, Chiba Prefecture. The local fire department and the refinery's own fire brigade responded, and at 8:44 a.m. the fire was extinguished. Facilities at the refinery sustained damage, but fortunately there were no employee injuries and local area residents suffered no ill health or other adverse effects.

In response to the accident, we established the Chiba Refinery Accident Investigation Committee to find the causes and submitted a report including the investigation results and actions to prevent a recurrence to the Ichihara City Fire Department and Chiba Prefecture on June 20, 2006.

The cause of accident was identified as an opening formed in the shell plate of the gas-liquid separation tank in the Hydrogen Production Unit No.1 that resulted from erosion and corrosion. In 1996, a modification to the internal structure of the tank changed the flow of fluid, causing the fluid to collide with part of the shell plate that resulted in a rapid reduction in plate thickness. At that time, however, we were unable to foresee the problem and remained unaware of the thickness reduction up until after the accident eventually occurred.

Following the accident, we took various measures to prevent a recurrence that included replacing the inner nozzle-type internal structure with a baffle-type internal structure. The internal structure was returned to its original state that is highly resistant to thickness reduction, while the plate material was also replaced with a stronger one.



reduce the flow velocity. \*3. Inner nozzle type: Includes a nozzle in the body to diffuse fluid and reduce the flow velocity.

## Subsequent Report to the Helpline Reveals Series of Legal Violations

On July 4, 2006, the Corporate Ethics Consultation Helpline received an anonymous letter from an employee of the Cosmo Oil Group. The letter stated that not only did the same type of accident that occurred in the gas-liquid separation tank happen in 1995, but that this earlier accident had never been reported. The content of the letter indicated that returning the tank's structure to its original state was likely to have been an attempt to conceal the earlier accident. An investigation conducted mainly by the

Corporate Ethics Committee revealed that no report of the 1995 accident had ever been filed with regulatory authorities and that the hole had been repaired without permission. Furthermore, the previously submitted accident investigation report included fictitious thickness measurement data. On August 4, 2006, this information, together with an apology, was submitted to the Ichihara City Fire Department and Chiba Prefecture.

An investigation team was formed at Cosmo Oil to conduct interviews and research internal documents and records. On August 31, 2006, the results of the investigation into the gas-liquid separation tank accident that occurred at the Chiba Refinery in 1995, as well as the legal violations of the High-Pressure Gas Safety Law after 1997, were submitted to the Nuclear and Industrial Safety Agency and Chiba Prefecture.

Further legal violations came to light following the submission of this report. These were subsequently included in a revised report resubmitted on October 3, 2006.

## Fiscal 2006 Activities Relating to Safety and Compliance

Drawing on the lessons learned from the accident and legal violations, in fiscal 2006 we readjusted our stance on safety and compliance and commenced the following three organizational activities.

- 1. Rebuilding Our Safety Control System (see page 26) We have established the Change 21 Project Action Committee and reviewed our traditional safety control measures while adding new activities as we strive to rebuild our safety control system. We are carrying out various activities and formulating preventative measures in terms of both a technological perspective (raising safety levels) and management system (decisive initiatives and implementation).
- 2. Strengthening Adherence to Corporate Ethics (see page 8) We have established the Refinery Compliance Committee at each refinery as sub-organizations under the Corporate Ethics Committee. These committees emphasize "strict application of reporting," the "elimination of repair work without prior approval or notification," and "transparency of research data." Through these committees, we will continue to call for compliance, thereby reinforcing corporate ethics of every employee through to the front lines of work sites.
- 3. Strengthening Checking and Monitoring Functions at Production Sites We have enacted measures to further strengthen the system under which the opinions of safety control sections are sufficiently reflected in operations and facilities management. We have separated the responsibilities of directors in charge of safety control and production and have clarified the lines of responsibility of the managing director in charge of safety control, the head office Safety and Environment Control Department, and the Safety and Environment Control Office at each refinery. Internal audits conducted at the refineries are augmented by overlapping audits that include checks to verify the actual state of the implementation of measures at the headquarters and other refineries.

7

## **Strengthening Adherence to Corporate Ethics**

**Compliance-Related Preventative Measures** 

## (Main Initiatives)

As measures to prevent a recurrence of accidents and legal violations, we reported in our *Sustainability Report 2006* that we were strengthening our checking and monitoring functions and emphasizing comprehensive reporting. We have subsequently proceeded with more concrete measures, and specific initiatives are explained as follows.

#### **Strict Application of Reporting**

All possible irregular phenomena must be reported directly to the fire department with jurisdiction immediately following discovery regardless of the scale of the possible irregularity, including even minute leakages (emissions). In undertaking this process, we have carried out repeated consultations with fire departments with jurisdiction, which has led to a common awareness regarding two points, specifically, the "fire department's way of thinking on determining irregularities," and that the "level of the irregular phenomena will dictate our responses to fire departments." Our protocol is currently based on these areas of awareness.

#### Establishment of Procedural Flow to Eliminate Repair Work Done without Prior Approval or Notification

We carry out stringent checks at every stage, including at the start of planning, the start of work activities, and the start of operations as well as during post operations. All work must go through a process whereby the manager in charge of the Safety and Environment Control Office determines the necessity of application for approval in accordance with safety laws and the Refining Section Manager conducts a check and gives approval at the start of work and at the start of operations. Although some instructions for work have still been given based on erroneous assumptions, there has been an overall heightened awareness toward reducing unauthorized work as the implementation of this procedural flow steadily progresses.

#### **Raising Transparency of Inspection Data**

To prevent the falsification of data, we have built a framework that assures transparency. The details of inspection data (hereinafter "server data") input into a refinery's server are confirmed and approved by the Maintenance and Engineering Section Manager. Revisions to this server data are restricted. Moreover, raw inspection data is stored at a separate company and audits are conducted to compare server data with this raw inspection data.

#### [Convening Compliance Committee Meetings and Their Continuation into Fiscal 2007]

As part of measures to prevent a recurrence of accidents and legal violations and to ensure thorough compliance at our refineries, we have established a Refinery Compliance Committee (chairperson: refinery director) at each refinery that operates as a sub-organization of the Corporate Ethics Committee. Each respective Refinery Compliance Committee has convened once per month since October 2006. Through the committees, we have firmly positioned our initiatives for preventing recurrences and in fiscal 2007 are convening meetings quarterly. (These are convened monthly depending on the sections and refinery.)

We also hold monthly follow-up meetings, which provide opportunities for each refinery director to confirm individual reports and responses to work operations. In this manner, we are continuing to strengthen our monitoring.

## **Corporate Ethics Promotion Plan for the Entire Company**

Regarding corporate ethics, we continue to carry out educational activities and implement Corporate Ethics Training Meetings. We also continue to provide training according to rank and position, including training for new employees, persons newly appointed to management level and newly appointed line chiefs. Further, at Corporate Ethics Training Meetings convened by department managers, business site managers, and Group company presidents, independent training themes, which include specific examples, are established for each section.

## Stance on Compliance Interview Report

## http://www.cosmo-oil.co.jp/eng/sustainable/07/sp/interview.html

What are the feelings of employees at production sites and what actions are they carrying out? We now shift our focus to the refinery directly involved in the fire and legal violations. Taking a looking back at the past year, this on-site report examines the actions taken in response to risk and the various improvement methods implemented.



Teruyuki Takishima Assistant General Manager in charge of Production Control, Chiba Refinery

# Improving communication is the key to realizing thoroughgoing compliance.

Everything began in the early morning of April 16, 2006 when I heard the thunderous explosion from my home. Hurrying to the scene, I observed that the refinery was already swarming with firefighters and police. My first task was to verify whether there were any injuries, and I confirmed that fortunately all employees were safe. Previously held simulations that visualized a spread of toxic substances, along with our daily training drills, proved their worth in the refinery accident. We also carried out effective communications while continuously providing point-by-point explanations to government authorities, residents of the local community, and the media that included giving updates on the status of damage and danger as well as making related announcements.

Looking at the series of legal violations subsequently uncovered, in retrospect, there were obviously communication problems, both within the refinery as well as externally. Refineries are subject to numerous laws, and putting top-priority on the so-called "Four Safety Laws\*" in particular is regarded as fundamental to the operations of refineries. Any areas or points of uncertainty must be confirmed with relevant government authorities in every case. Over the years, however, a type of thinking evolved at the Chiba Refinery based on the belief that autonomous decisions were permissible in instances of uncertainty. I believe this mindset eventually led to the legal violations.

In undertaking refinery maintenance, the timing of whether notification must be submitted before or after the maintenance differs depending on the law. Looking at our most recent regularly scheduled maintenance, the main personnel involved in the maintenance work gathered to decide whether a notification for each type of work needed to be submitted. In daily operations as well, we have been improving our systems and deciding on a case-by-case basis whether notification needs to be submitted.

After the legal violations came to light, compliance awareness at the Chiba Refinery has risen markedly. I believe this trend is irrefutable evidence that compliance awareness now permeates our production sites. Currently, we are thoroughly implementing broad-ranging compliance that includes solid retraining that starts with the aforementioned Four Safety Laws. This retraining also covers detailed rules for daily operations. By taking these thoroughgoing measures, we have also increased our opportunities for making relevant verifications with government authorities and created an ethos whereby we satisfy compliance requirements in any areas of uncertainty. Knowing that we can "confidently carry out proper actions" is creating a positive environment at the Chiba Refinery.



Koji Goto Assistant General Manager in charge of General Affairs, Chiba Refinery

# The thorough implementation of will evoke greater openness both

In any emergency situation such as last year's fire, the role of the general affairs section is to confirm the well-being and safety of the refinery's employees and disclose information to residents of the local community, various government agencies, and the media. During the fire in 2006, acting on information received that sulfurous acid gas had been emitted, we immediately asked local residents to remain indoors. In doing so, we conveyed detailed information about the course of events more quickly than announcements by the media. Our response was based on our belief that promptly providing accurate information would reduce unease and anxiety of local residents.

When the legal violations were subsequently uncovered, we convened numerous explanation meetings for local residents and disclosed all pertinent information in an open manner. I believe these meetings were instrumental in enabling us to earn the understanding of local residents. On the other hand, we still nonetheless received strict administrative guidance measures from government authorities. The key issue we faced afterwards was how to restore trust in Cosmo Oil. To regain trust, the focus has been on thoroughly fulfilling obligations that are normally taken for granted, namely, "Reporting," "Communication," and "Consultation." Unfortunately, overconfidence and pride with regard to safety led us to neglect these areas in the past.

The changes that are being undertaken at the refinery were thus triggered by what we call "4.16," which is the date of the refinery fire, and

Four Safety Laws: The generic name given to the Fire Defense Law, the High-Pressure Gas Safety Law, the Industrial Safety and Health Law, and the Law on the Prevention of Disasters in Petroleum Industrial Complexe: and other Petroleum Facilities



#### Safety Chiba The Chiba Refinery has created a badge bearing the slogan "Chiba is Trying to Change" that is intended to foster a sense of togetherness among employees that includes unifying and reforming employee awareness. The design for the badge was decided via a vote after soliciting proposals from employees of the Chiba Refinery. The badges were distributed to employees of the refinery as well as to employees of affili ated companies beginning in December 2006.



Satoru Nakanishi Manager of the Safety and Environment Office, Chiba Refinery

## I try to ensure real safety by making on-site confirmations, even by relying on my five senses.

I was working at the Sakaide Refinery when the accident occurred at the Chiba Refinery. At that time, however, I remember we even took measures at the Sakaide Refinery to confirm the safety of operations. Soon after the accident at the Chiba Refinery, however, the legal violations were uncovered and this escalated into an issue with repercussions that spread across the entire Cosmo Oil Group, including the Sakaide Refinery, which was also being urged for a response. I believe that each refinery probably faced a similar situation.

Since arriving at the Chiba Refinery in October 2006 as the Manager of the Safety and Environment Office, I have continually engaged in discussions with relevant government authorities. The frequency of my visits to authorities has increased while visits by government officials to the Chiba Refinery have also risen.

As a result, I sense that our mutual understanding is also deepening. The importance of compliance at the Chiba Refinery has been painfully learned by such guidance measures as the order to cease operations of certain facilities due to the legal violations. Now, we continually maintain close communications with relevant departments and verify compliance through our actual work operations. We are also re-examining matters crucial to our business operations, beginning with a review of the fundamental aspects of the Four Safety Laws.

The refinery adopted a policy of separating the lines of responsibility for production and safety control in the production sections. As part of this move, the Safety and Environment Office has also become an independent entity within the Chiba Refinery and plays the role of checking on the production line.

The Safety and Environment Office ultimately decides on whether a regulatory request application or notification must be submitted for each type of work carried out at the refinery. Nevertheless, I personally believe it would be better if we reach a level where safety can be assured autonomously based on our rising compliance awareness and knowledge of laws. Taking this approach would almost certainly make the refinery a more dynamic place. Safety and compliance cannot be achieved by relying only on documents. I would like to make as many on-site visits as possible and confirm safety using my own five senses.

# "Chiba is Trying to Change" at refineries and externally.

"8.31," when we submitted a report on legal violations to government authorities. These incidents have helped us regain the common sense of emphasizing safety and compliance over production and profit.

The general affairs section must ensure that compliance awareness is spread throughout the refinery and is thus implementing a host of measures to attain this goal. These include firmly emphasizing the previously mentioned "Reporting," "Communication," and "Consultation;" ensuring that employees have a proper understanding of the Four Safety Laws; and reforming practices that are inconsistent with compliance. The key to adhering to rules is to understand the reasons why such rules exist. Also, it is important to consider ways to efficiently execute business affairs upon implementing thoroughgoing compliance. We believe that continually carrying out such activities on a daily basis will ultimately lead to excellent communications with residents of the local community.

All employees working at the Chiba Refinery wear "Chiba is Trying to Change" badges on their work uniforms. The design for this badge was chosen from among suggestions solicited at the Chiba Refinery. The slogan "Chiba is Trying to Change" expresses our stance, "We want to change everything that can be changed." The adoption of this slogan has spurred forward-looking dialogue among refinery employees and has thus been effective in promoting more open communications within the refinery as well as with the local community.

## Stance on Compliance Interview Report

#### http://www.cosmo-oil.co.jp/eng/sustainable/07/sp/interview.html

The accident at the Chiba refinery and subsequent legal violations served as catalysts in putting the entire Cosmo Oil Group back on the right track. How has compliance awareness changed in each section during the one year since the incidents? Managers of non-manufacturing sections explain the changes in compliance awareness.



Hiroshi Kiriyama General Manager of the Demand and Supply Coordination Department

## The attitude that it is "probably okay" is no longer acceptable, and we are thoroughly eliminating areas of ambiguity.

As the name implies, the Demand and Supply Coordination Department is involved in adjusting the balance of supply and demand. Accordingly, when the refinery accident occurred in 2006, we were required to forecast the amount of time needed until operations could be resumed, and we worked around the clock seven days a week to ensure that supplies were maintained. Together with these efforts, we also asked each wholesale company and sales department to make adjustments, and thanks to such measures we avoided a worst-case scenario.

However, when the subsequent series of legal violations came to light, we were unable to forecast what facts would eventually be uncovered. The successive reporting of an array of improprieties was like a direct blow to the gut. From October 2006, we had to make exceedingly tough demands on refineries due to continuous revisions to production plans. Meanwhile, I heard that the refineries were also undertaking highly detailed discussions with government agencies from various regions. In this manner, thanks to a company-wide cooperative structure, we were able to keep production line stoppages and supply disruptions to a minimum.

Refineries are obligated to report to regulatory agencies. Based on this requirement, in the wake of the accident and legal violations, we have established an ethos of never overlooking even the smallest of details. Frankly speaking, up until recently some aspects of our operations were a bit lax. However, we have eliminated these deficiencies, and gray areas of ambiguity are no longer acceptable. Upon re-evaluating practices handed down and inherited from successive generations, we clearly realized we had become disconnected from social norms. As such, we moved to increase opportunities for studying relevant laws, and when we encounter a gray area of uncertainty, we frequently visit the Legal Department for clarification.

Using past issues as a catalyst, I am hoping we can now get back on the right track as we carry out such activities as exchanging information with the petroleum industry as a whole. I think that raising compliance awareness is also imperative to avoid being left behind amid the rapid changes currently taking place.

I believe that achieving a balance between raising profits and realizing a legal framework will be an important future task. Although this will require both time and money, I have no doubt that we can create a new Cosmo Oil Group by attaining such a balance.



Michio Shimizu Senior Executive Officer and General Manager of the Tokyo Branch Office

## I would like to approach all matters I believe this stance will yield

This has literally been a year of "terrible incidents." When the accident at the Chiba Refinery occurred, we were able to directly allay distributors' concerns about any adverse impacts on supplies and gain their understanding of the situation. When the legal violations were subsequently uncovered, however, we were concerned from the outset that the Cosmo Oil brand image would be tarnished. Nevertheless, Cosmo Oil issued detailed press releases and publicly disclosed all information without concealing any facts, an approach that I think ultimately worked in the Company's favor. That said, I still personally offered my wholehearted apologies to stakeholders while listening to the deep concerns of parties with which we have longstanding relations.

At the Tokyo Branch Office, we devoted major efforts to compliance education even before the series of incidents. At weekly study sessions as well, we focused on numerous compliancerelated themes. The sales front is also subject to a plethora of laws, including the Anti-Monopoly Law, the Quality Assurance Law, and the Fire Defense Law. There is no excuse for being unaware of any relevant law. Accordingly, we began our education by asking, "What is compliance?" Our education also naturally includes training in risk management.

Although the overarching goal of the Tokyo Branch Office is "improving business results," achieving this objective is predicated on compliance. Failure to increase levels of



Kiyoshi Aoyagi Executive Officer and General Manager of the General Affairs Department

# We must be determined to avoid complacency to change our corporate culture.

The experience involving the accident at the Chiba Refinery in 2006 and the legal violations that were subsequently uncovered has prompted the Cosmo Oil Group to "change our corporate culture." These incidents exposed various problems, enabling us to clearly identify areas necessitating improvement. To address these deficiencies, we inaugurated a compliance committee at each refinery under the Corporate Ethics Committee, which is positioned directly under the control of the president. We set up these committees at refineries to create a system that allows the intentions of top management to be conveyed directly to the front line of production. From October 2006 through March 2007, the compliance committees convened monthly at each refinery and provided all employees at the refineries with a thorough awareness of legal compliance and various preventive measures. It was also requested that efforts be made to nurture an awareness that compliance not only involves listening to explanations and lectures but is also something that must be put into practice during production.

Additionally, each branch office held corporate ethics workshops, where the respective branch managers took the initiative in explaining how to implement compliance during sales activities.

To ascertain the actual state of various current issues, we also implement anonymous surveys throughout the Company. Looking at the results of these surveys, I am convinced that compliance awareness is firmly becoming entrenched. Additionally, we use opinions gathered in these surveys as well as information on problematic areas as feedback, which in turn contributes to our improvement activities. Through such concrete measures, the Corporate Ethics Promotion Office within the General Affairs Department at the Head Office is promoting corporate ethics internally.

As I mentioned, Cosmo Oil has resolved to "change our corporate culture." In working toward this objective, we must first all share the principle of "Not giving priority to production activities over interests protected by law." Among interests protected by the Four Safety Laws, I believe the most fundamental interest is assuring the safety of the lives and well-being of employees. Without being able to guarantee the safety of employees, we will never be able to assure the safety of residents of local communities or customers. Our corporate culture will change only when this resolve to ensure safety penetrates beginning from top management all the way down to the front line of production.

I am always aware of "never becoming complacent." This is because it is never known where and in what form risk will emerge. As we avoid complacency, I would like to implement compliance together with everyone.

## with "integrity." favorable results.

compliance awareness creates the risk that our business results will become no more than a house of cards. I believe that possessing the sense of duty of waiting until "being ordered to do something by a superior" is no longer acceptable. Instead, each person must have their own sense of mission and continually undertake self-examination while remaining focused on business results.

The Cosmo Oil Group has adopted the corporate slogan "Filling Up Your Hearts, Too." This slogan is also a declaration expressing our corporate stance toward society as well as the guiding light for employees' behavior internally. To realize the intent of this slogan, we must always act with integrity in every situation. I believe that such integrity will spark each employee's motivation to see Cosmo Oil "become a good company." At the same time, I also believe this will provide further impetus to enhancing the Cosmo Oil Group's brand image.

## Stance on Compliance Expert Panel Discussion

## http://www.cosmo-oil.co.jp/eng/sustainable/07/sp/meeting.html

#### **Toward Making Compliance Rewarding**

Cosmo Oil has reflected on the 2006 refinery accident and series of legal violations and is undertaking company-wide efforts to prevent any recurrences. We welcome the participants in this panel discussion—experts with a profound knowledge of compliance, CSR management, and corporate communications—for their opinions on specific measures to make our compliance activities more effective.

# Initiatives in Response to the Accident and Legal Violations

Tanaka: Today we will focus mainly on the Cosmo Oil Group's compliance, talking with two experts as well as with Cosmo Oil Managing Director Naomasa Kondo.

Prior to this discussion, Managing Director Kondo briefly explained the background of the refinery accident as well as the series of legal violations. He also updated us on efforts to prevent recurrences, namely, the rebuilding of the safety control system, strengthening of adherence to corporate ethics, and strengthening of checking and monitoring functions at production sites. Starting with our two experts, what were your impressions of the accident and series of legal violations? **Mizuo**: I believe there were two contributing factors. First, ensuring stable supplies took priority over safety. The second factor was the rationale that the area of operations involved was a highly specialized niche field and thus nobody would understand what was taking place. I suspect that compliance lacked genuine substance and had not truly taken root in the minds of the people involved. You might say this situation was tantamount to plowing a field but forgetting to sow the seeds.

Gohara: Having reflected deeply on last year's events, I'm sure every measure possible has been employed. Among all these measures, however, what were the really critical points? Compliance cannot be sustained unless you think about it intently.

Tanaka: Regarding the awareness of compliance by each individual, isn't it likely that the larger an organization, the more difficult it becomes to make people aware that compliance is a matter of personal responsibility?

**Mizuo:** In the case of Cosmo Oil, the ethics of engineers are especially important. In this regard, I want to stress two points. The first is commitment from the top. Basically, top management should make a commitment to all employees to work with integrity. The second is action from the bottom up—how are workers in the field involved? I believe that only when these two points converge will a culture of safety and compliance initially be realized.

Panel members (photo, from left)

#### Junichi Mizuo

Specially Appointed Professor, Graduats School of Tokyo Institute of Technology Faculty of Economics, Surugadai University Professor, Surugadai University Graduate School Head of the Institute of Economics, Surugadai University While employed at Shiseido, Co., Ltd., Professor Mizuo participated in the creation of a corporate ethics committee, the first such committee to be established by a Japanese company. At Surugadai University, he subsequently formulated so-called "marketing ethics," a blend of theories and practices in marketing and business ethics. Professor Mizuo currently conducts CSR-focused research.

#### Nobuo Gohara

Professor, Toin University of Yokohama Law School Director, Compliance Research Center, Toin University of Yokohama Torlossor Gohara has been in his present position since 2005 after serving in the Tokyo Special Investigations Department of the Tokyo District Public Prosecutors Office and as a Deputy Chief Prosecutor of the Nagasaki District Public Prosecutors Office. He has authored The Power to Adapt to Society's Demands, which proposes ways of achieving compliance.

#### Risa Tanaka

Elitor-in-Chief, Senden Kaigi magazine Alter working in an advertising company, Risa Tanaka entered Senden Kaigi Co., Ltd. In 1993. Ms. Tanaka was appointed to the current post of Editor-in-Chief In 1996. Since 2003. Ms. Tanaka has concurrently served as Editor-in-Chief of Kankyo Kaigi and Ningen Kaigi magazines. An expert in advertising and publicity strategy and marketing trend analysis, Ms. Tanaka is a member of government and administration committees on publicity evaluation, serves as an advisor, and is active as a judge for a range of advertising award competitions.

Naomasa Kondo Managing Director, Cosmo Oil Co., Ltd.



**Gohara:** As for the commitment of top management, it is imperative to clarify their reasoning on where to attain a balance between stable supplies versus safety.

Kondo: The current reasoning of top management regarding this matter is that no arbitrary decisions will be made when it comes to safety. The relevant supervisory authority must be contacted no matter how small the issue. When maintenance or repairs are required, operations will be halted and maintenance or repairs will be performed properly. This rationale has been scrupulously established and communicated throughout the Company.

Supervisory authorities do offer some flexibility regarding the application of laws in cases where the common good is concerned. This has led to the creation of a relationship whereby we proactively make the necessary confirmations with authorities while striving to assure safety. **Gohara:** A crucial approach is to objectify safety not only through our own decisions but also through collaboration with authorities as well.

## Internal Communication Crucial for Creating Employee Awareness

**Tanaka**: Managing Director Kondo will now convey specific initiatives being undertaken in fiscal 2007.

Kondo: With a view toward the accident and legal violations of the



previous fiscal year, I believe we are continuing to make progress in establishing a framework for the prevention of any recurrences. We are very much aware of the necessity to put our heart and spirit into these efforts in fiscal 2007. We must ask ourselves such questions as

whether we are putting off compliance and instead setting our sights on immediate profits, whether our common sense has diverged from that of society, and how can we properly assure open communication. It is imperative that we share problems and forge excellent relationships with our partners, including the construction and maintenance companies operating within our refineries, the dealers in our sales operations, and government authorities. I would like to focus mainly on these issues in fiscal 2007. Tanaka: I believe that communication within the Company will become increasingly vital to putting one's heart and soul into these efforts. In reality, however, it is common for companies to have various gaps when it comes to internal communications.

Mizuo: Socrates stated: "Communication first begins with dialogue with oneself. Communication starts from introspection of oneself." If you are unable to have such self-communication, there is no way you can convey your thoughts to another person. I believe this is the source of communication in terms of managing subordinates as well. Kondo: If on-site supervisory personnel who convey policies are unable to clearly explain policies themselves, the listener will not understand the policies and will have a sense of being pushed. To prevent such a situation, promoting a constant awareness through dialogue is vital. Gohara: In the past, an ideal supervisor was considered to be someone who never commented on subordinates' actions and then firmly shouldered responsibility for these actions. However, in reality, it is impossible to take responsibility when allowing someone to act as they please. Such a stance may have been acceptable in times of relatively gradual change. However, in the current age of drastic societal and environmental changes, decisive leadership has become essential.

A tremendous sense of unity is realized when a supervisor directly visits the front lines to instruct subordinates on what needs to be done. It is extremely important that people believe they are recognized by their superiors who can see the good job they are doing. Mizuo: Organizations with so-called old-style managementcharacterized by shouting, evading responsibilities, provoking others, looking the other way, failing to provide instruction, and being apathetic-will not be capable of achieving open communication. Today, it is essential to practice "servant leadership," in other words, management that supports the growth of subordinates. In Japan, when a problem arises cultural taboos may hinder open discussion of the issue. I believe such an obstruction within Japanese organizations is the most significant factor behind communication problems. Gohara: Concerning this problem, the fact that Cosmo Oil's helpline functioned as intended is an extremely rare case. Conversely, you might also say that there is room for further reflection because the helpline was the only way this issue could be communicated. Tanaka: I would like to ask Managing Director Kondo if he personally has sensed any change in awareness within the Company as a result of initiatives taken following the accident.

Kondo: Yes. Following the accident and the legal violations, questionnaire surveys and other methods show extremely high figures

continued on next page

## http://www.cosmo-oil.co.jp/eng/sustainable/07/sp/meeting.html

in terms of awareness of compliance and assurance of safety compared with in the past. However, communication still tends to be one-way, so I feel there is still much work to be done.

**Tanaka:** Beyond that, are there any recommendations for further improving the approaches currently being taken?

**Mizuo**: At Shiseido, in 1997 I established the first corporate ethics committee among all Japanese companies. However, bringing



together a group of 20,000 employees nationwide would have been an impossible task for me alone. Therefore, I enlisted a total of 411 male and female co-workers ranging from young employees to experienced personnel as so-called "Code Leaders" in order to promote the establishment and permeation

of "The Shiseido Code" at each work site. By way of such grassroots efforts, we strived to achieve a self-reinforcing consciousness of compliance. At Cosmo Oil as well, in addition to the vertical lines between the Refinery Compliance Committee and respective departmental personnel in charge of promoting compliance, I would very much like to see Cosmo Oil consider methods that enable the functioning of horizontal and diagonal lines as well.

Gohara: It goes without saying that obeying laws and regulations is of paramount importance. However, to further raise the level of compliance across the organization, instead of merely directly adhering to current laws and regulations, these laws and regulations should be internalized. When necessary, reviews that also encompass internal regulations should be carried out and responses made to new demands taking into consideration actual on-site conditions. I believe that this represents the next stage of compliance.

### **CSR and Brand Communication**

Tanaka: I have received suggestions on how to take CSR to the next stage. However, in listening to the variety of opinions from the general public, it is apparent that people are especially conscious of whether a company's CSR befits its corporate image. The sense of consistency between what is communicated and what the company does is now being questioned.

**Gohara**: To undertake CSR with unity as a company, collaboration is essential not only within a company but also with companies that can be considered quasi-internal entities, such as affiliates in the same corporate group and dealerships. For example, at the front lines, such as affiliated service stations, they directly face a host of problems that arise from societal changes. For this reason, it is important to ascertain and solve these issues in a practical and down-to-earth manner.

Tanaka: There is a tendency for CSR and communication to be pursued under idealistic theories that presume everything will proceed smoothly. On the other hand, what points that are prone to failure with regards to compliance or CSR management should we be looking out for?

**Gohara**: I believe that compliance should not necessarily be equated with adherence to the law. Rather, in a broader sense, compliance should be thought of as something that responds to the demands of society. The basic direction of compliance is no different than CSR.



However, the difference between compliance and CSR is methodology. CSR traditionally practiced up to now by a large number of Japanese companies was meant to appeal to their good side—often much like advertising in order to demonstrate their positive initiatives. However, this CSR

approach lacked a methodology that tangibly shows what as well as how issues were to be solved. In this respect, I am referring to tangible "full-set compliance" broken down into five elements for solving specific problems one by one. This approach goes beyond fulfilling just legal obligations and extends to finding solutions to social problems as well. Steady efforts in this area are what I believe will bring about genuine CSR.

Mizuo: Some management representatives may say that their companies are not yet up to the level where they can undertake CSR. However, they have clearly mistaken social contributions for CSR.

**Tanaka:** What you're saying is that it is important that a company prioritize the tasks that should be undertaken and solve one issue at a time.

**Gohara:** An actual crisis is a situation where CSR is demanded in a true sense. Such a crisis situation is precisely when a company's methods of functioning and its responsibility to society become apparent as problems. These problems can never be remedied by only considering legal responsibilities. In this type of situation, relationships with the media are also likely to be adversarial. However, if a company considers the nature of the media and the conscious way in which they act, then common ground can be found that will enable the establishment of collaborative relationships with the media.

It is important not only to simply convey information but also to fulfill responsibilities for providing explanations. Companies must regard transparency and responsibilities for providing explanations as going hand in hand.

Tanaka: Certainly, crisis situations are a time for showing one's true character. I have a sense that it would also be beneficial to focus on the challenges of further CSR communication. In that Cosmo Oil is concentrating on brand communication as well, I would like to ask your impressions of CSR from a brand perspective.

**Mizuo:** I believe that in the future publicizing CSR efforts will account for a large proportion of corporate advertising. I am talking about the concept of a "visionary brand." It will be important to establish a structure whereby CSR is first firmly established as a base, on top of which are the dreams, aspirations, and visionary concepts conveyed to consumers, employees, and society.

Tanaka: Because I work in the advertising industry, I am especially pleased to see that corporate efforts to appeal to society through



advertising and promotions lead to the upholding of ideals and making good on one's promises. Company employees and affiliated personnel can also become key persons for public relations and promotions. Thus, I think that it is exceedingly important that these personnel share the same perspectives in disseminating information outside the company.

## Compliance Directed toward the Realization of "Filling Up Your Hearts, Too"

Tanaka: I believe Cosmo Oil's unwavering commitment in terms of the "environment," "people," and "integrity" represents a significant achievement to date. With a solid foundation steadily being put into place, can you now tell us about the expectations of Cosmo Oil as a progressive company in CSR and as a leading company? **Gohara:** I think that a perfect score of 100 points for compliance is probably not possible. Because Cosmo Oil caused an accident, there is a tendency to say they should do this or do that. However, in attempting to take such steps and implement compliance thoroughly from the top down, adverse side effects will undoubtedly appear. It will thus be necessary to maintain compliance at the most appropriate level while keeping a close watch out for any adverse side effects.

Mizuo: The sustainable development of a company goes hand in hand with the development of employees. With this in mind, ensuring employee satisfaction is a crucial task. It will also be important to promote employee satisfaction to raise levels of customer satisfaction. **Tanaka**: Speaking of employee satisfaction, I believe Cosmo Oil has commenced a campaign focusing on service station workers. **Kondo**: That's correct. "Filling Up Your Hearts, Too" is our slogan that refers to CSR and compliance initiatives being implemented on the front line of sales, as mentioned earlier by Professor Gohara. We have recently begun to implement initiatives at Cosmo Oil service stations that encompass the ways customers are greeted and the other responses that should be taken to ensure customer satisfaction. **Gohara**: That's really terrific!

**Mizuo:** In promoting CSR on a Group and organizational basis, it is essential for everybody, including affiliated partners, to work toward the same objectives. In this sense, I think Cosmo Oil's approach is truly outstanding.

Kondo: Today, we have had an extremely meaningful discussion. In the future as well, by continuing to promote the spread of CSR and compliance to each Company employee, we hope to be a company that realizes the slogan "Filling Up Your Hearts, Too" for our stakeholders. We ask for your continued guidance. Thank you.

(Held on July 10, 2007)



# Promoting and Strengthening CSR Management

Table of Contents

Corporate Governance	- 18
Consolidated Medium-Term Management Plan and CSR Promotion	- 19
Compliance and Risk Management	- 20
Toward the Realization of a Sustainable Global Environment	21
Providing Stable Supplies of High-Quality Petroleum Products	- 22
Next-Generation Energy with Minimal Environmental Impacts	- 23
Carrying Out Businesses in New Fields beyond the Spheres of the Petroleum Business and	
Developing New Environmental Technologies	-24

## **Corporate Governance**

#### http://www.cosmo-oil.co.jp/eng/sustainable/07/gov/index.html

As we reflect on the refinery accident and series of legal violations, Cosmo Oil is creating a structure to ensure continued stable supplies of energy, placing top priority on safety, while making constant efforts in reforming awareness.

## Corporate Governance Structure

#### Basic Stance on Corporate Governance

In recognition of our mission as a company and our wide-ranging social responsibilities, we formulated the Cosmo Oil Group Management Vision along with the Cosmo Oil Group Corporate Activity Guidelines (a corporate code of conduct), which are concrete guidelines for realizing the management vision. In keeping with these guidelines, we are striving to maximize stakeholder satisfaction by focusing on "raising management transparency and efficiency," "rapidly executing business," and "implementing thorough risk management and compliance" as we work to further improve corporate governance.

## Corporate Governance Structure, Measures, and Implementation Status

The Cosmo Oil Group has adopted the corporate auditor system. Under this system, we have set up the Board of Directors, Executive Officers' Committee, and the Executive Advisory Council for separating three management functions, namely, management decision-making and supervision, execution of business duties, and the evaluation of director performance. Corporate auditors strive to enhance their management supervisory functions by attending meetings of the Board of Directors and Executive Officers' Committee and other important meetings, while outside corporate auditors are utilized to provide external checks. In this manner, we have established a sufficiently functioning structure for supervising Group management. In June 2006, we introduced an executive officer system to further clarify the separation between management supervision and business execution and to respond rapidly to changes in the business environment. Along with the introduction of this system, we established the Officers' Meeting as a sub-organization under the Executive Officers' Committee to more flexibly execute business and to enhance the sharing of information.

## Measures toward Internal Control

#### Basic Stance on Internal Control

Cosmo Oil is progressing with the establishment of an internal control system, including policies and procedures for executing duties by directors and employees to ensure proper and efficient business execution and to enable all Cosmo Oil Group employees to implement the Cosmo Oil Group Management Vision and the Cosmo Oil Group Corporate Activity Guidelines (a corporate code of conduct). To support this system, we established a framework for risk management and internal audits in addition to systematic measures for ensuring the efficient execution of auditing by corporate auditors.

#### Implementation Status of Internal Control System

We established the Cosmo Oil Corporate Ethics Committee, which reports directly to the Board of Directors and is chaired by the president. Assisting this committee is the Cosmo Oil Group Corporate Ethics Promotion Office. The Cosmo Oil Corporate Ethics Committee works to ensure that all corporate activities are conducted with a law-abiding spirit and a sound sense of ethics based on the Cosmo Oil Group Corporate Activity Guidelines (a corporate code of conduct). We also set up the Internal Control Committee, which serves as an advisory committee to the president, as the organization for overseeing the Cosmo Oil Group's overall internal control system. Assisted by the Internal Control Promotion Project Office, the Internal Control Committee is establishing a structure for evaluating and building an internal control system for the Cosmo Oil Group. As organizations under the direct jurisdiction of the Executive Officers' Committee and chaired by related directors, we established the Global Environment Committee, the Comprehensive Safety Action Headquarters Committee, the Human Rights Committee, and the Risk Management Committee. Assisted by various corporate departments, these committees actively carry out an array of highly focused activities throughout the entire Company.



# **Consolidated Medium-Term Management Plan and CSR Promotion**

## http://www.cosmo-oil.co.jp/eng/sustainable/07/gov/csr.html

To establish a stable earnings foundation and fulfill our social responsibilities, we are implementing our "New Consolidated Medium-Term Management Plan."

## Consolidated Medium-Term Management Plan

The Cosmo Oil Group formulated its New Consolidated Medium-Term Management Plan (fiscal 2005 to fiscal 2007), which covers a three-year period from fiscal 2005. The plan designates this three-year period as a time to prepare for growth over the "next 20 years," focusing on the themes of "strengthening the management foundation to withstand future structural changes" and "transitioning to a growth strategy."

#### Strengthening the Management Foundation to Withstand Future Structural Changes

The Cosmo Oil Group continually carries out such businesses as oil exploration and production and petroleum refining and sales and works to bolster a stable earnings foundation. At the same time, we are striving to establish a financial constitution capable of withstanding changes in the business environment and realize future business development. Further, we will strengthen our CSR structure in accordance with our Group Management Vision that is based on CSR and strive toward "Harmony and Symbiosis" and "Creating Future Value" to contribute to the sustainable development of society. Specifically, we have established the Consolidated Medium-Term CSR Management Plan in our efforts to promote CSR management.

#### Transitioning to a Growth Strategy

To adapt to changes in domestic and overseas demand structures, we have undertaken efforts to rationalize and enhance the efficiency of operations. At the same time, we are making comprehensive upgrades at refineries, focusing mainly on strengthening linkages between petroleum refining and petrochemicals. Moreover, to expand our business domains, we are working to expand the scale of our oil product exports to Asia and Pacific Rim markets, strengthen ties with petrochemical businesses, and increase our ratio of equity oil produced.

In our credit card business, under a basic agreement for a strategic business alliance with Aeon Credit Service Co., Ltd., in June 2006 we began soliciting members for "Cosmo the Card Opus."

Regarding new business fields, in Japan and Europe we are promoting the commercialization and development of business for 5-aminolevulinic acid (ALA), which is expected to have applications in agriculture, healthcare, and a wide range of other fields. In new energy fields, we are conducting research and development aimed at commercializing and cultivating markets for Gas to Liquids (GTL) and fuel cell systems.



Detailed data Consolidated Group Earnings Targets/Indicators 
 WEB
 Detailed data consolication storp \_\_\_\_\_\_

 http://www.cosmo-oil.jp/eng/sustainable/07/gov/csr.html

## **Participation in the United Nations Global Compact**

In February 2006, the Cosmo Oil Group agreed to participate in the Global Compact. The Global Compact consists of 10 principles defined by the United Nations that are to be honored by corporate participants. Its goal is to realize a sustainable society and solutions to problems related to poverty, human rights, the environment, and other issues confronting international society. Support for these 10 principles represents a commitment to society in demonstrating corporate leadership in advancing CSR-based management. The Global Compact promotes a consciousness of CSR in conducting business among Group management and employees.

Global Compact Initiatives WEB http://www.cosmo-oil.jp/eng/sustainable/07/gl\_cp.html

### Consolidated Medium-Term CSR Management Plan

In keeping with our Group Management Vision, the Cosmo Oil Group strives to carry out thorough management that emphasizes compliance and stable supplies of safe and adequate energy. We also make efforts to achieve "Harmony and Symbiosis" among energy, society, and the Earth's environment through activities that contribute to society and protect the environment. Additionally, through business development focused on customer and societal needs, we strive toward "Creating Future Value" as we contribute to the development of a sustainable society. To share and steadily implement these concepts throughout the Group, we included "strengthening CSR" in the Consolidated Medium-Term Management Plan initiated in fiscal 2005. As a specific initiative, we also formulated the Consolidated Medium-Term CSR Management Plan to be implemented over the same three-year period in our ongoing efforts to promote CSR-based management.

#### Basic Framework and Status of Efforts

Different departments and companies that comprise the Group have different relationships with stakeholders. Accordingly, although the Consolidated Medium-Term Management Plan fundamentally entails the initiatives of respective business sites, the plan establishes five policies shared throughout the Group.

#### 1. Improving the Awareness of CSR

In fiscal 2006, the series of legal violations spurred us to strengthen adherence to corporate ethics. We have worked to achieve an understanding of CSR and a familiarity with the Management Vision and Corporate Activity Guidelines through corporate ethics training and level-based training.

Each affiliated company has developed a structure for internal audits. Crosssectional risk management activities are developed by the Risk Management Committee company-wide. In fiscal 2006, this committee established the Business Continuity Plan (BCP) in conjunction with strengthening the internal corporate structure.

#### 3. Strengthening Safety Control

We formulated our Consolidated Medium-Term Safety Plan, and along with applying the lessons learned from the accident at our Chiba Refinery, in fiscal 2006 we commenced activities meant to prevent a recurrence (Change 21). For details, please refer to the "Safety Report" on page 26.

#### 4. Enhancing Environmental Efforts

We have established the Consolidated Medium-Term Environmental Plan, and in fiscal 2006 we concluded an agreement for the purchase of CO<sub>2</sub> carbon credits. Also, as one element of our environmental communication, we initiated participation-based projects under the Cosmo Oil Eco Card Fund. For details please refer to the "Environmental Report" on pages 27-38.

## 5. Fostering the Protection of Human Rights and Implementing Personnel-Related Measures

We have established the Consolidated Medium-Term Human Rights/Personnel Plan. From fiscal 2007, we are expanding the amount of time that can be taken off work for childcare leave and upgrading Company subsidizations for usage of childcare facilities as we implement measures to promote a balance between work and private life. For details, refer to "Social Report: Relationship with Our Employees" on pages 47-48.

## **Compliance and Risk Management**

#### http://www.cosmo-oil.co.jp/eng/sustainable/07/gov/compliance.html

To realize honest and transparent corporate management and raise the moral standards of Group employees, we strive to promote compliance and strengthen risk management.

## Promotion of Compliance

#### Corporate Ethics Promotion Structure

The Cosmo Oil Group Corporate Activity Guidelines (a corporate code of conduct) are based on the Cosmo Oil Group Management Vision. To facilitate their smooth implementation, we have established the Corporate Ethics Committee, positioned directly below the Board of Directors and chaired by the president of Cosmo Oil Co., Ltd. As an organization subordinate to this committee, we also set up the Refinery Compliance Committee at each refinery. To assist in the operations of the Corporate Ethics Committee, we have established the Corporate Ethics Promotion Office and have set up a Corporate Ethics Consultation Helpline.

#### Corporate Ethics Consultation Helpline

We have set up a helpline where employees or persons outside the Company can discuss or report legal or ethical problems concerning Group operations or other related matters. In addition to the helpline, as part of the Corporate Ethics Promotion Office, we have set up a consultation helpline staffed by external experts. Persons seeking to use the helpline are assured anonymity to avoid any adverse repercussions. In fiscal 2006, six consultation cases were received and responded to immediately. We have also set up a consultation helpline within the Personnel Department to respond to reports of sexual and power harassment.

#### **Raising Awareness**

We conduct annual corporate ethics training for Cosmo Oil Group employees. In addition to stratified training according to rank, training is conducted under the auspices of the general managers of offices and departments and presidents of Group companies. In fiscal 2006, an explanation of the refinery accident and legal process violations was provided together with the *Cosmo Oil Corporate Code of Conduct Textbook*, which was published in the previous fiscal year. Further, surveys are conducted to assess the degree of corporate ethics awareness, and feedback on training themes and other data is obtained.

Related information Corporate Ethics Promotion Organizational Structure http://www.cosmo-oil.co.jp/eng/company/ethics.html Related information Corporate Activity Guidelines http://www.cosmo-oil.co.jp/eng/company/guideline.html

## Risk Management System

Since fiscal 2003, the Cosmo Oil Group has conducted company-wide risk management related activities on an annual basis. Specifically, each year we undertake a cyclical process whereby we identify, organize, and evaluate risk; consider and implement appropriate countermeasures; and evaluate monitoring results. In July 2005, we established the Risk Management Committee with a major emphasis on "considering responses to crisis situations." In fiscal 2006, we devised the company-wide Business Continuity Plan (BCP) to respond to disaster situations.

In fiscal 2007, we are formulating responses to riskrelated situations, with a focus on the core themes of BCP promotion for disaster response and disaster, legal risk, and public relations response measures.

#### Business Continuity Plan (BCP)

In fiscal 2006, we conducted a simulation drill based on a scenario of the expected damage from an epicentral earthquake in the Tokyo area, and this drill provided an opportunity to verify our BCP. In addition to reviewing manuals, each Group company proceeded with drawing up their own BCP. Further, in July 2007, we formulated the Pandemic Influenza Preparedness Action Plan aimed at ensuring stable supplies of oil products, with a priority on safety in the event a new strain of influenza becomes a pandemic.

## Information Management

In accordance with information management regulations, we make efforts to ensure the appropriate management of personal information and the correct handling of all information obtained during the course of business operations. Based on the awareness that the protection of personal information is a social responsibility imposed on the Cosmo Oil Group, as well as the basis of our business operations, we have formulated the Personal Data Protection Policies. We adhere to laws and other regulations on the protection of personal information and comply with our own corporate and related regulations. The Company properly acquires, uses, and provides personal information. Cosmo Oil also safely stores the most recently updated information and also carries out proper disposal. Through such measures, we strive to protect the safety of individuals and personal information.

#### Product Quality Assurance

To offer products that respond to the needs of customers and society, the Cosmo Oil Group has prescribed quality guidelines in the Corporate Activity Guidelines, Chapter 1: "Relation with Consumers/Users," and also undertakes research for the development of high-quality products. Also, at the headquarters we have established the Quality Assurance Committee, an entity that makes decisions on quality-related matters, as well as the Quality Assurance Liaison Committee and Quality Assurance Meeting, both of which work to implement quality assurance promptly and functionally. By setting up these organizational bodies, we have put in place a cross-departmental quality assurance structure.

Further, for our main products, our refineries have obtained ISO 9001 certification, the international standard for quality management systems. In the future as well, we will continually work to further improve quality.



# Toward the Realization of a Sustainable Global Environment

### http://www.cosmo-oil.co.jp/eng/sustainable/07/gov/env01.html

While efficiently providing stable supplies of petroleum as the foundation of our business, the Cosmo Oil Group is working to reduce environmental impacts and protect the environment on a global scale as it promotes initiatives to realize a sustainable global environment.

## **Cosmo Oil Group's Vision**

We believe that "establishing a stable earnings foundation" and "promoting operations that fulfill our social responsibilities" will serve as two key pillars of the Cosmo Oil Group's efforts to realize continued growth and development and a sustainable global environment in the years to come. The basis of our business operations is the execution of "corporate management with integrity," a prerequisite for the existence of any company, and we believe we have a major responsibility for creating environmentally conscious products, technologies, and next-generation energy that reduces impacts on the Earth's environment as well as to develop new energy-related businesses. Through such initiatives, we aim to become a corporate group trusted and chosen by stakeholders.



#### http://www.cosmo-oil.co.jp/eng/sustainable/07/gov/env02.html

By strengthening our amicable ties with oil-producing countries and upgrading our oil refineries to respond to changes in the demand structure, we are striving to provide stable supplies of petroleum products that have minimal environmental impacts.

## Stable Procurement of Crude Oil

The Cosmo Oil Group is working to secure stable supplies of high-quality crude oil by strengthening ties with oil-producing countries and by raising the proportion of equity oil produced. In March 2006, Qatar Petroleum Development Co., Ltd. began crude oil production in Area Block 1, in which we hold an interest, off the southeast coast of Qatar. Reflecting our commitment to environment-friendly operations, all associated gas from extracted oil is injected underground by sour gas injection, a pressurized injection method, rather than being flared into the environment.

In November 2006, Cosmo Oil acquired a 10% equity interest in Laffan Refinery Co. Ltd. from Qatar Petroleum, the national petroleum company of Qatar. Laffan Refinery is constructing a condensate refinery with a refining capacity of 146,000 barrels per day in Ras Laffan Industrial City, aiming for completion of construction in the second half of 2008. Through this equity participation, we will strengthen our amicable ties and partnership with Qatar established through our long-term and stable crude oil transactions and our involvement in exploration and production businesses in that country. In this manner, the entire Cosmo Oil Group is working in unison to ensure energy security for the future.

## Reducing Sulfur in Diesel Fuel Oil

In response to changing restrictions on exhaust emissions, the oil industry has utilized leading-edge technologies to reduce the sulfur content in diesel fuel oil. Cosmo Oil began supplying diesel fuel oil with a sulfur content of 50 ppm in April 2003 and sulfur-free diesel fuel oil (with a sulfur content of less than 10 ppm) in January 2005. Combining the use of sulfur-free diesel fuel oil with environmentally friendly vehicles not only yields reductions in NOx (nitrogen oxides) and PM (particulate matter) emissions, but can also help improve fuel efficiency. Accordingly, reducing sulfur content in this manner is expected to be an effective means of cutting CO<sub>2</sub> emissions and contributing to the prevention of global warming.

#### Diesel Oil Desulfurization Catalyst

Through participation in a development project by the New Energy and Industrial Technology Development Organization (NEDO) and Japan Petroleum Energy Center (JPEC), Cosmo Oil has independently developed a highly active desulfurization catalyst (c-606A). Beginning in 2004, Cosmo Oil has been successively introducing this catalyst in diesel fuel oil desulfurization units at all its refineries. This technology has garnered numerous awards, including the Fiscal 2006 Industry-University-Government Cooperation Meritorious Service Commendation, Minister of the Ministry of Economy, Trade and Industry Prize.

## Reducing the Environmental Impact of Gasoline

To reduce the environmental impact of gasoline, from 2000 Cosmo Oil has been promoting such measures as using low-benzene gasoline, reducing gasoline vapor pressure, and cutting the sulfur content of gasoline (supplying sulfur-free gasoline).

#### Low-Benzene Gasoline

Recognizing that benzene is a toxic substance that can harm the human body, since January 2000 Cosmo Oil has reduced the benzene content of its gasoline from 5% to below 1%.

#### Reducing Vapor Pressure

Determined to reduce evaporative emissions, a cause of photochemical smog, since 2001 we have reduced gasoline vapor pressure of gasoline produced in summer from less than 78 kPa to less than 72 kPa. From 2005, we have been producing gasoline with a vapor pressure of less than 65 kPa.

#### Reducing Sulfur Content of Gasoline (Sulfur-Free Gasoline)

Reducing the sulfur content of gasoline provides the dual benefits of cutting air pollutants while maximizing performance of automobile exhaust purifying systems. The Cosmo Oil Group has been supplying sulfur-free gasoline (with a sulfur content of less than 10 ppm) since 2005.

## Initiatives for Upgrading Refineries

Growing environmental consciousness, soaring crude oil prices, and the maturing of the Japanese economy have led to a downtrend in domestic demand for petroleum products, especially for heavy fuel oils. Therefore, a crucial task for the petroleum industry is to respond accurately to this changing demand structure to ensure stable supplies of petroleum products. With this in mind, Cosmo Oil is working to upgrade production at its Sakai Refinery through measures that include construction of a heavy oil cracking unit (coker) to be used for converting heavy fuel oil into high value-added products such as naphtha (a raw material for gasoline and petrochemical products), kerosene (jet fuel), and diesel fuel. Our plan for commencing operations of these facilities in 2010 is currently proceeding on schedule.

With the aim of supplying petroleum products to respond to growing demand in overseas markets, mainly in Asia, we are also increasing and strengthening export-related facilities at all our refineries. Concurrently, we are bolstering our structure for producing high-quality petroleum products with minimal environmental impacts that we supply



Sakai Refinery

to Australia and the U.S. West Coast—areas where stringent environmental regulations have been adopted. Looking to the future as well, we will actively upgrade our refineries to provide stable supplies of high-quality products globally.

22

### http://www.cosmo-oil.co.jp/eng/sustainable/07/gov/env03.html

We are working toward practical applications for a wide array of next-generation energy, which includes developing application technologies for biomass fuels, fuel cells, and GTL fuels.

## Bio-Gasoline (Bio-ETBE Blend) Distribution Trials

Japan's petroleum industry has commenced sales (distribution trials) of "bio-gasoline (bio-ETBE blend)," a regular gasoline formulated with bio-ETBE, as part of the Ministry of Economy, Trade and Industry's "FY2007 Introduction of Biomass-Derived Fuel Program." The trials began on April 27, 2007 at 50 service stations in the Tokyo area, six of which were Cosmo Oil service stations. Bio-gasoline (bio-ETBE blend) is used in exactly the same way as regular gasoline, but is a regular gasoline with an additive of bio-ETBE that is synthesized from bio-ethanol—grain alcohol derived from such plants as corn or sugarcane—and isobutene, a petroleum-based gas.



The sale of bio-gasoline is aimed at meeting greenhouse gas reduction targets to which Japan made a global commitment パイオガソリンの under the Kyoto Protocol (international treaty). The oil industry is working in cooperation to meet targets set by the Japanese government. In fiscal 2008, sales will be expanded to 100 service stations, and a full-scale introduction is scheduled for fiscal 2010.

## Wind Power Generation

In December 2004, our first wind power generation plant commenced operation in Sakata City, Yamagata Prefecture. The Cosmo Oil Sakata Wind Power Plant is expected to generate 3.8 million kWh of electric power annually. Wind power is attracting a great deal of attention as a clean energy source, and this plant reduces CO<sub>2</sub> emissions by 1,200 tons annually compared with electric power generated by thermal and other generating methods. Along with continuing to develop new candidate sites for wind power generation facilities, surveys and investigations are being conducted directed toward commercialization.

## Cogeneration

Cosmo Oil engages in the distributed power supply system business. This business involves both generating and supplying electricity with equipment installed at sites where energy is used, including hospitals, plants, and other locations. Cogeneration systems, which utilize exhaust heat produced during electric power generation to produce hot water or steam, enable increased energy usage efficiency and a reduction in CO<sub>2</sub> emissions. As of the end of June 2007, our distributed power supply system business had concluded contracts for approximately 30,000 kW, of which approximately 6,000 kW is from cogeneration equipment.

## Gas to Liquids (GTL) Technology\*

Cosmo Oil partnered with five other private-sector companies to establish the Nippon GTL Technology Research Association. This entity, in collaboration with Japan Oil, Gas and Metals National Corporation (JOGMEC), commenced verification research on GTL technology. The liquid fuel manufactured through GTL technology is expected to be an environmentally friendly clean fuel. Through this research, we will develop the technology to compete with the major oil companies that have taken the lead in this field as we work toward achieving harmonization between ensuring future stable supplies of energy and preserving the global environment.

\*GTL technology is a refinery process that chemically converts natural gas into synthetic gas (mixed CO and H<sub>2</sub> gas). The mixed gas is then converted into liquid fuel using the Fischer-Tropsch process.

## Development of Fuel for HCCI Engines

Homogeneous Charge Compression Ignition, or HCCI, is a method of internal combustion in which a mixture of fuel and air is compressed for auto-ignition rather than ignition by a spark plug. This is an environmentally compatible technlogy capable of simultaneously realizing high efficiency and clean exhaust that is expected to have applications in automobile engines. Currently, in collaboration with automobile makers and universities, we aim to build upon research results attained to the present while progressing with research into next-generation fuels suitable for HCCI engines.

## Fuel Cells



Since fiscal 2005, we have participated in "business for large-scale field trials of stationary fuel cells" and commenced field trials of liquid petroleum gas (LPG) stationary fuel cell systems for general household use. Based on data gathered from these field trials, we are evaluating energy conservation and economy and efficiencies obtained when fuel cells were installed in households and

clarifying issues in the run-up to the widespread use of fuel cells. At the same time, these trials are being used for the commercialization of kerosene-based fuel cells and for the development of related technology.

## Hydrogen Stations



In March 2003, we commenced operation of the JHFC Yokohama-Daikoku Hydrogen Station and are developing hydrogen production and replenishment technologies for fuel cell vehicles. Aiming for the commercialization and spread of hydrogen stations and fuel cell vehicles, we are considering the appropriate form of a

hydrogen supply infrastructure and business models. Further, we are participating in the research and development of high-grade fuel in the future with JPEC and developing highly efficient, compact hydrogen production systems to be installed at service stations.

### http://www.cosmo-oil.co.jp/eng/sustainable/07/gov/env04.html

Cosmo Oil is helping to solve an array of environmental problems through its 5-aminolevulinic acid (ALA) business and is making progress in developing environmental technologies, including those that protect soil and reduce waste materials.

## 5-Aminolevulinic Acid (ALA) Business

One type of amino acid, ALA, is the sole raw material of a substance called porphyrin, which is typified by plant chlorophyll and animal hemoglobin. A global frontrunner in research focused on ALA, Cosmo Oil succeeded in developing a technology for the low-cost mass production of ALA utilizing an environment-friendly fermentation method.

Cosmo Oil has commercialized a liquid fertilizer containing ALA and we are currently selling this product in Japan and overseas. There are numerous locations throughout the world where harsh conditions hinder plant growth. These areas include low sunlight regions, cold regions, dry regions, and regions with alkali soil. Our fertilizer is effective in promoting healthy plant growth in such adverse environments. Beginning with research in Abu Dhabi to determine whether ALA can be used as an ingredient in fertilizer for agriculture and to prevent desertification by utilizing the enhanced salinity tolerance of ALA, we are undertaking joint research in various countries such as China, Poland, and Brazil that is focused on raising environmental stress durability. By deploying agricultural technologies that utilize ALA, we are striving to contribute to the realization of a sustainable global environment in a variety of fields of application that include protecting the environment, increasing food production, and utilizing biomass energy.



The gathering together of 8 ALAs creates a structure such as (I) (porphyrin). When porphyrin is combined with iron (Fe), magnesium (Mg), or cobalt (Co), it becomes chlorophyll, heme or B12 (vitamin B12).



Demonstration testing at UAE University in Abu Dhabi

### Developing Technologies for Groundwater Remediation and Soil Remediation

Technology that utilizes the powers of microorganisms for groundwater remediation and soil remediation is called "bioremediation." Through participation in a JPEC project, Cosmo Oil is developing efficient remediation technologies, including groundwater remediation technologies that use bioremediation and remediation walls, taking into consideration the types and amounts of nutrients needed for activating microorganisms and how decomposition occurs under various conditions such as groundwater flow and soil properties.

#### **Remediation Wall Scheme**



## Developing Technologies for Excess Sludge Reduction

Excess sludge emitted from wastewater treatment facilities accounts for the largest proportion of all industrial waste. To efficiently solubilize excess sludge, Cosmo Oil has developed efficient sludge volumereduction technologies that combine physical crushing using a crusher with alkali chemical treatment. Based on these technologies, in 2001 Cosmo Oil participated in a related JPEC project and in 2002 began operation of sludge reduction facilities at the Sakaide Refinery. Since then, we have been carrying out stable operation of this equipment and have achieved an excess sludge reduction rate of 50%. Additionally, with our Chiba Refinery serving as a demonstration site, we are progressing with research on the development of technologies for operations that achieve an excess sludge reduction rate of over 90%.



#### **Fundamental Principle of Volume Reduction**



# Safety Report

Table of Contents

Initiatives for Safety ----- 26

## **Initiatives for Safety**

## http://www.cosmo-oil.co.jp/eng/sustainable/07/safe/index.html

We aim to raise the level of safety control with company-wide efforts to implement autonomous safety activities that refocus on the fundamentals.

## Safety Control System in Fiscal 2006

The Cosmo Oil Group conducts safety control activities under the management of the Comprehensive Safety Action Headquarters Committee, a group-wide safety control organization chaired by the director in charge of maintaining safety. Every year we set safety targets for the refineries, as well as the production, logistics, and sales sections. Further, based on these targets, each refinery sets its own safety targets.

Our Refining & Technology Department has built its own safety management system that incorporates the concept of ISO 14001 and has been operating this system since fiscal 2004. Our Distribution Department instructs consigned transportation carriers on how to prevent accidents through such measures as making safety inspections as well as implementing inspections for loading and unloading operations. Our Sales Control Department focuses on daily inspections at each service station as the basis of its safety activities and provides training to service station staff to raise safety awareness.



Detailed data Safety Performance http://www.cosmo-oil.co.jp/eng/sustainable/07/safe/index.html

## Activities in Fiscal 2006

The Cosmo Oil Group has formulated the Consolidated Medium-Term Safety Plan, which runs from fiscal 2005 to fiscal 2007, under which we are building a disciplined safety control system and proactively carrying out safety efforts to improve safety throughout our operations while also increasing levels of stable supplies. In carrying out our safety initiatives in fiscal 2006, we established four themes: "construct a framework for a safety control system," "identify, evaluate, and reduce potential risks," "enhance and strengthen our crisis control structure," and "systematically implement education and training." We also set targets for each of these themes and implemented well-planned activities in working to attain these targets. Cosmo Oil placed particularly high emphasis on strengthening our crisis management structure, with all departments implementing measures in preparation for a major earthquake (evaluating earthquake resistance, formulating a Business Continuity Plan (BCP), and undertaking drills and other activities). Additionally, the headquarters conducted systematic safety inspections at eight business sites, including the four refineries.

## **Rebuilding the Refinery Safety Control System (Change 21 Activities)**

In response to the explosion and fire at our Chiba Refinery on April 16, 2006, we initiated Change 21 activities aimed at rebuilding our safety control system. In June 2006, we established the Refinery's Safety Management System Restructuring Committee (currently Change 21 Project Action Committee), chaired by the director in charge of maintaining safety. To rebuild our safety control system, we reviewed the various safety control measures taken to date and added new activities and other measures. By establishing working groups and task teams as organizations under this committee, the headquarters and refineries are now able to carry out activities in unison.

# Slogan : "Let's build a safe and secure refinery that employees can be proud of and that will enable us to earn the continued trust of society"

#### Vision of Goal: "Achieve and maintain zero accidents"—Achieve over 90% reduction in unsafe and failure incidents by 2010 compared with the base year<sup>1</sup>

To achieve our goals, we will change our previous awareness, which focused on "early detection," toward an emphasis on "prevention (zero failures)." In tandem, to ensure that these efforts are not limited to top management and extend to the front lines of operations, we are carrying out activities based on a fundamental policy of self-initiated actions with an understanding of the "spirit" of measures.

## **Details of Activities**

#### Improve level of maintenance

- Improve coverage: review scope of maintenance, review all regular inspections of machinery, complete early diagnosis of age-related deterioration, review parameters of inspections for any expansion of erosion and corrosion<sup>2</sup>, etc.
- Improve predictability: review structural changes over the past 10 years, etc.
- Improve reliability: develop equipment with durability to withstand operational variations and disturbances
- Improve control: organize basic maintenance materials, etc.

#### Solid initiatives and operations

- Optimize regulations and standards: review control of modifications, etc.
- Ensure implementation of initiatives: rebuild framework for the lateral promotion of initiatives
- Strengthen initiatives: implement an array of ongoing safety evaluations and other actions

#### Notes

1. Base year: September 1, 2006 to August 31, 2007

2. Repeated collisions of fluid with material results in a thinning effect due to the synergy of erosion, the physical damage caused by the surface being worn down, and corrosion, brought on by acid and other corrosive materials.



# **Environmental Report**

## Table of Contents

Comprehensive Overview of Environmental Activities	28
Environmental Management System	29
Environmental Impacts from Business Activities	31
Prevention of Global Warming	33
Pollutant Control and Waste Management	35
Soil Preservation	36
Environmental Preservation Measures	37

## **Comprehensive Overview of Environmental Activities**

## http://www.cosmo-oil.co.jp/eng/sustainable/07/env/index.html

Under the Consolidated Medium-Term Environmental Plan, the Cosmo Oil Group is carrying out environmental activities with the dual goals of "Reducing Environmental Impacts," and "Creating Future Value." The purpose of the latter is to realize a sustainable society on a global scale.



#### To implement the plan

Environmental Management System

Themes		Main Targets	Performance and Evaluations in FY2006		Future Challenges
Reducing Environmental Impacts	Prevention of Global Warming	●Cosmo Oil: Reduce unit energy consumption for 2008-2012, the first commitment period of the Kyoto Protocol, by 15% from FY1990 levels through the implementation of energy conservation initiatives at refineries and the utilization of the Kyoto mechanisms.	<ul> <li>Cosmo Oil: Achieved 11.6% reduction through energy conservation initiatives at refineries.</li> <li>Compliance with the revised Energy Conservation Law</li> <li>Kyoto mechanisms: Conclusion of contract for the acquisition of carbon credits</li> </ul>	0	<ul> <li>Respond to strengthened regulations and invest in energy conservation/consider acquisition of additional carbon credits.</li> </ul>
	Pollutant Control and Waste Management	<ul> <li>Cosmo Oil: Maintain average industrial waste landfill rate of less than 1%.</li> <li>Execute comprehensive environmental management (pollutants, harmful substances, and industrial waste).</li> </ul>	<ul> <li>Cosmo Oil: Achieved average landfill rate of 0.7%<sup>1</sup>.</li> <li>Some affiliated companies did not achieve targets.</li> <li>Positive results in environmental management realized by Cosmo Oil and affiliated companies with work sites.</li> </ul>		<ul> <li>Further reduce landfill rate.</li> <li>Review targets of affiliated companies and follow up on attainment.</li> <li>Implement a high level of environmental management based upon results of environmental inspections.</li> </ul>
	Soil Preservation	<ul> <li>Reduce risk with preventative and post-facto countermeasures according to site (refineries, oil depots, service stations, and idle land).</li> </ul>	<ul> <li>Completion of internal system for detection of irregularities.</li> <li>Conducted soil surveys at service stations.</li> <li>Conducted inspections and repairs of wastewater pipes containing oil.</li> <li>Conducted soil surveys of decommissioned oil depots.</li> </ul>	0	<ul> <li>Continue soil surveys.</li> <li>Conduct soil surveys at refineries and continue countermeasures.</li> <li>Continue soil surveys at decommissioned oil depots.</li> <li>Implement similar measures at business sites of affiliated companies.</li> </ul>
Creating Future Value	Environmental Preservation Measures	<office activities="" clean=""> Cosmo Oil (Base year: FY2003; Target year: FY2007): Copy paper to be cut by 16%; company car fuel consumption to be cut by 18%; office electricity consumption to be cut by 10% Affiliated companies (Base year: FY2004; Target year: FY2007): Copy paper to be cut by 14%; company car fuel consumption to be cut by 12%; office electricity consumption to be cut by 11%</office>	<ul> <li>Cosmo Oil:</li> <li>Copy paper cut by 10%; company car fuel consumption cut by 15%; office electricity consumption cut by 11%</li> <li>Affiliated companies<sup>8</sup>:</li> <li>Copy paper increased by 2%; company car fuel consumption cut by 9%; office electricity consumption cut by 3%</li> </ul>		Boost "Team Minus 6%" activities, achieve "Office Clean" targets, and raise environmental awareness.
		<green purchasing=""> Promote green purchasing of office supplies and other consumable goods as well as the "greening of suppliers."</green>	<ul> <li>Purchased office supplies and other consumables according to our green purchasing standard and assessed suppliers.</li> </ul>		<ul> <li>Expand the scope of goods procured through green purchasing.</li> </ul>
		<activities and<br="" contribute="" society="" that="" to="">the Environment&gt; ●Further strengthen cooperation with communities.</activities>	<ul> <li>Conducted environmental education at Yokkaichi Refinery.</li> <li>Established criteria and implemented testing for "service stations that are friendly to people, society, and the Earth."</li> </ul>		<ul> <li>Strengthen environmental and social-related contributions made by service stations, refineries, and other facilities.</li> </ul>
	Environmental Communication	<ul> <li>Disseminate information to society and our stakeholders and promote two-way communication.</li> </ul>	<ul> <li>Eco-products that utilize experimental</li> <li>CO2 absorber displayed at Eco-Products</li> <li>2006 and Abu Dhabi exhibition.</li> <li>Offered eco tour and experiential program through the Cosmo Oil Eco Card Fund.</li> <li>Conducted environmental advertising on TV and radio.</li> </ul>	0	<ul> <li>Strengthen participation-oriented programs (eco tour and others).</li> <li>Expand venues where opinions can be exchanged with stakeholders.</li> </ul>

\*Fiscal 2006 performance evaluation:  $\bigcirc$  achieved;  $\triangle$  partially not achieved; × not achieved

#### Notes

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

2 The scope of fiscal 2006 affiliated company results was expanded to include additional affiliated companies, and the base year results for fiscal 2004 include estimates.

## **Environmental Management System**

## http://www.cosmo-oil.co.jp/eng/sustainable/07/env/management.html

Through its own environmental management system, the Cosmo Oil Group implements an array of environmental initiatives to fulfill its crucial social responsibilities as an energy company.

## Environmental Management System

The Cosmo Oil Group has established its own environmental management system that also encompasses affiliates. This system features a framework under which each business division specifies its own targets based on the Consolidated Medium-Term Environmental Plan, with the results of activities for attaining targets used as feedback. The nucleus of our environmental management system is the Global Environment Committee, which links all departments horizontally as the organization for promoting environmental preservation. This committee discusses plans and activity performance results and reports the discussion results to the Executive Officers' Committee. This approach enables the effective implementation of the Plan-Do-Check-Act (PDCA) cycle and adoption of a framework that allows environmental initiatives to be shared throughout our operations in areas ranging from top management to front-line workers. We also carry out environmental inspections to ascertain the status of environmental management activities at each business site. Also, to ensure thorough on-site environmental management, each business site has developed its own environmental management system and provides employees with environmental education to raise their environmental awareness.



#### Environmental Inspections

In efficiently implementing our environmental management system, it is important not merely to ascertain results but also to verify whether proper environmental control is being carried out and to correct any problems identified. The Cosmo Oil Group has entrusted the members of the Global Environment Committee with the task of undertaking environmental inspections at each site. As a rule, these inspections are carried out once per year and cover the production, distribution, sales, and project development departments. At business sites such as refineries, which exert a large environmental impact, the director in charge of the Safety and Environment Control Department serves as the inspection leader and the persons in charge of environmental management at other sites participate as observers. The inspectors report the results to the Executive Officers' Committee via the Global Environment Committee.

In fiscal 2006, we carried out environmental inspections between October 2006 and February 2007, as we inspected the state of daily environmental management and the status of progress in attaining the targets of the Consolidated Medium-Term Environmental Plan. As a result of these inspections, we confirmed that Cosmo Oil and its affiliated companies are properly implementing environmental management and did not find any violations of environmental-related laws and ordinances.

## Sites where environmental inspections were implemented in fiscal 2006

Cosmo Oil	Chiba Refinery	
	Yokkaichi Refinery	
	Sakai Refinery	
	Sakaide Refinery	
	Retail Marketing Department	
	Distribution Department	
	Project Development Department	
Cosmo Matsuyama Oil Co., Ltd.		

## Employee Environmental Education

To ensure the smooth functioning of our environmental management systems, we believe that all employees of the Cosmo Oil Group must correctly understand the background and purpose of environmental activities. With this in mind, we provide environmental education as part of position-based training and allow employees to take educational courses at each professional development stage of their career. Refineries also provide their employees with ISO-related training at production sites.

## Environmental Management System at Respective Business Sites

In addition to a cross-departmental environmental management system implemented throughout the Group, we are also introducing frameworks for environmental management at each business site.

#### ISO Certification for Production and Distribution

The Cosmo Oil Group works to obtain ISO 14001 certification at business sites that exert a significant environmental impact. In the past, we have secured this certification at eight business sites, including at four refineries. In fiscal 2006, the Research & Development Center and Yokkaichi LPG Terminal Co., Ltd. obtained ISO certification. As a result, 10 business sites in the Cosmo Oil Group have now secured ISO 14001 certification. Based on ISO 14001, each business site thoroughly implements PDCA in working to make continuous improvements. Additionally, each business site carries out internal audits apart from regular external audits undertaken by external certification bodies.

#### **Environmental Management (EM Point) at Services Stations**

The Cosmo Oil Group has been implementing the NAVI service station sales promotion program. Under this program, we have used the Service Station Environmental Management (EM) Point Checklist since April 2003 for reviewing performance indicators, including for such categories as measures against leaks, facility inspections, and industrial waste treatment, to ascertain the actual state of operations at service stations and to improve any areas of deficiency.

In fiscal 2006, we implemented EM Point surveys of actual conditions on two occasions at approximately 4,300 Cosmo Oil service stations throughout Japan. The checklist rate and the resulting scores have been improving each time we implement our surveys. In the first half of fiscal 2006, surveys were implemented at 4,333 services stations (checklist rate of 99.7%), and the average score was 80.3 points. In the second half of fiscal 2006, surveys were implemented at 4,285 services stations (checklist rate of 99.4%), and the average score was 82.6 points, an all-time high, with 670 service stations recording perfect scores of 100 points. In the future as well, we will strive to ascertain the actual state of safety control at our service stations and strive for improvements in our control capabilities.

WEB Detailed data Environmental Management Point (EM Point) http://www.cosmo-oil.co.jp/eng/sustainable/07/env/management.html

## Environmental Accounting

To effectively carry out environmental conservation initiatives, in fiscal 2000 the Cosmo Oil Group initiated environmental accounting to ascertain environmental conservation costs, environmental conservation benefits, as well as economic effects.

#### Summary of Tabulated Results for Fiscal 2006

#### Scope of Coverage

The scope of environmental accounting covers Cosmo Oil's four refineries, the Yokkaichi Kasumi Power Station, the head office and branch offices, the Research & Development Center, Cosmo Matsuyama Oil Co., Ltd. (affiliate), and Cosmo Oil Lubricants Co., Ltd. (affiliate). With regard to affiliates, we have ascertained and tabulated the costs and benefits of environmental conservation measures that are closely related to our refineries.

#### Summary

Environmental conservation costs in fiscal 2006 consisted mainly of business area costs as well as upstream/downstream costs. During the fiscal year, expenses amounted to ¥82.8 billion and investments totaled ¥7.4 billion. The economic benefits totaled ¥700 million. As a result of environmental investments over the long term, our aggregate acquisition costs as of the end of fiscal 2006 reached ¥174.3 billion. Breakdown of Environmental Conservation Costs (%)



**Acquisition Costs at Fiscal Year-End** 



 Figures for fiscal 2002 through fiscal 2004 are restated as a result of a re-examination of upstream/downstream costs and R&D costs.



For detailed information on environmental accounting http://www.cosmo-oil.co.jp/eng/sustainable/07/info/ev\_accounting.html

# **Environmental Impacts from Business Activities**

## http://www.cosmo-oil.co.jp/eng/sustainable/07/env/lca.html

To offer products with less environmental impacts, we work to reduce the environmental load throughout oil's life cycle, including when used by customers. We not only ascertain the environmental impacts at each stage but also strive to reduce impacts through continuous improvements.



Chemical substance control

Wastewater management

Air pollution control Wastewater management

On-site tree planting

Soil preservation

TJ: Terajoule (1012 joules)

31 Cosmo Oil Group Sustainability Report 2007 OFigures include estimates based on the actual production volumes of petroleum products in fiscal 2006.

- OFigures for "Crude Oil Extraction," "Crude Oil Transportation," and "Product Transportation and Stockpiling (Oil Depots) \*SOx and NOx only," are estimated based on LCI for Petroleum Products by Fuel and Environmental Impact Assessment for Petroleum Products published in March 2000 by the Japan Petroleum Energy Center (JPEC). OCO<sub>2</sub> emissions for Refining (Refineries) and Product Transportation were calculated in accordance with the Guidelines for Accounting
- Greenhouse Gas Emissions from the Industry (Draft) published by the Ministry of the Environment and the Ministry of Economy, Trade and Industry. OSee website for methods and basis of "Product Use" calculations.
- Detailed data Environmental Accounting http://www cosmo-oil.co.jp/eng/sustainable/07/info/ev\_accounting.html Energy consumption is calculated in accordance with the stipulations of the Energy Conservation Law regarding the rational use of energy. "Refining (Refineries)" includes data from the Yokkaichi Kasumi Power Station and Cosmo Matsuyama Oil Co., Ltd.
- OElectricity sold refers to power sold by Chiba Oil Refinery, Yokkaichi Kasumi Power Station, and Cosmo Matsuyama Oil Co., Ltd. CO2 emissions from refining (refineries) is the amount after deducting the portion of CO2 emissions that results from generating electricity sold. Conversely, the purchased power portion of CO2 emissions is included in "Refining (Refineries)" data.
- OSteam sold refers to steam sold by the Chiba Refinery and Cosmo Matsuyama Oil Co., Ltd. CO2 emissions from refining (refineries) is the amount after deducting the portion of CO2 emissions that results from generating steam sold.
- OCO2 emissions attributable to the construction of facilities are not included.

Production

(by-product)

Steam sold

1,788 TJ

OCO₂ sold

tons-CO<sub>2</sub>

- O"Product Use" SOx emission data is for reference. It is estimated from the sulfur content of products without taking sulfur reduction
- during use into consideration. Accordingly, actual SOx emissions are lower than the estimate.
- With regard to "Product Use" CO2, in addition to CO2 emissions resulting from the use of products, CO2 emissions attributable to generating electricity and steam sold are estimated separately.
- products when the "Product Use" CO2 and SOx emissions are calulated

#### ONaphtha used mainly as a petrochemical material does not directly emit CO2 or SOx. However, naphtha is treated in the same way as the other petroleum 90.3% **Product Transportation and** Product **Product Use** Stockpiling (Oil Depots) 27,622 thousand kl Sulfur recovered 226 thousand kl Electricity sold 1,526,907 thousand **INPUT** kWh (14,903 TJ) Energy Fuel---2,326тJ 137 thousand 🗲 Ουτρυτ OUTPUT Emissions to air Emissions to air CO2....**68,253** thousand tons-CO2 (Does not include CO2 emissions of 1,039 thousand CO2...161 thousand tons-CO2 SOx...1.740tons tons-CO2 attributable to generating electricity sold or CO<sub>2</sub> emissions of 85 thousand tons-CO<sub>2</sub> NOx....3,370tons attributable to generating steam sold.) SOx...152,393tons CO2 emissions unit: thousand tons-CO2 Environmental measures FY2004 73,452 Maritime transportation (ships) FY2005 77,015 FY2006 68,253 Oil spill prevention Energy conservation (increased efficiency through mutual accommodations, larger tankers for coastal routes) Environmental measures Land transportation Service stations Energy conservation (larger vehicles and high Energy conservation stowage rate) Resource conservation/recycling Industrial waste management Chemical substance control Stockpiling (oil depots) Energy conservation/Resource conservation Air pollution control Chemical substance control/Soil preservation Wastewater management Oil spill prevention Soil preservation

## CO<sub>2</sub> Emissions throughout Oil's Life Cycle



http://www.cosmo-oil.co.jp/eng/sustainable/07/env/gl\_warming.html

We work to prevent global warming through the promotion of energy conservation at every stage of our business.

## Policy

Because the Cosmo Oil Group is involved in the production and sale of petroleum products, we believe that addressing global warming is a crucial issue. Efforts in this area are particularly important at our refineries, which account for more than 60% of total CO<sub>2</sub> emissions produced by the Cosmo Oil Group. Accordingly, our refineries are undertaking energy conservation initiatives with an autonomous target of achieving a 15% reduction in unit energy consumption versus fiscal 1990 levels by fiscal 2010. We are also promoting energy conservation by executing efficient modes of delivery in logistics and introducing solar cell panels at service stations. Additionally, we are promoting efficient global warming countermeasures that utilize mechanisms under the Kyoto Protocol. To augment these initiatives implemented in our business activities, significant efforts are also dedicated to environmental activities that extend beyond our corporate boundaries as part of our total commitment to contribute to the prevention of global warming.

## Kyoto Mechanisms

Greenhouse gas emissions trading, one of the Kyoto mechanisms, serves as a framework for international cooperation to efficiently and effectively address global warming issues. To reduce greenhouse gas emissions, the Cosmo Oil Group participates in GG-CAP<sup>1</sup>, the first private scheme for purchasing carbon credits set up by Natsource LLC, a major emissions brokerage, with the aim of acquiring carbon credits arising from CDM<sup>2</sup>/JI<sup>3</sup> projects. By July 2013, we plan to acquire one million tons of CO<sub>2</sub> emission credits.

#### N o te s

- 1. GG-CAP: Scheme for acquiring emission credits operated by a subsidiary of Natsource LLC, an organization that specializes in emissions trading
- 2. Clean Development Mechanism (CDM): A Kyoto mechanism that allows industrialized countries to generate emission credits through investment in emission reduction projects in developing countries 3. Joint Implementation (JI): A Kyoto mechanism that allows developed countries to invest in other developed countries to earn carbon allowances that can be used to meet their emission reduction commitments

## Initiatives at Refineries

Our oil refineries conserve energy by introducing such measures as high-efficiency equipment and improving operating control. In fiscal 2006, we increased and strengthened thermal insulation for heat exchange equipment while also reviewing operating conditions, reducing the volume of steam consumption, and undertaking other measures to improve operating methods. Nonetheless, the refinery fire and other factors caused a decrease in efficiency. In fiscal 2006, unit energy consumption\* was 9.15 kl-crude oil/thousand kl, a slight deterioration from the previous year. However, compared with fiscal 1990, this represents an 11.6% reduction, which exceeds the Petroleum Association of Japan's target of attaining a 10% reduction versus fiscal 1990 levels by fiscal 2010.

\* Unit energy consumption is expressed as the total energy consumption divided by crude oil equivalent throughput taking into account the complexity of refining techniques. The unit is kl-crude oil/thousand kl. Note that different types of energy consumed are converted into a common denominator of kl-crude oil equivalent.

#### **Energy Consumption and CO2 Emissions at Four Refineries**



Beginning with fiscal 2006 results, the method of  $CO_2$  calculation was revised as stipulated by the Law Concerning the Promotion of the Measures to Cope with Global Warming.

WEB Detailed data

http://www.cosmo-oil.co.jp/eng/sustainable/07/env/gl\_warming.html

## Activities at Service Stations

Installing solar cell panels is one approach being taken to realize more environmentally compatible service stations. Currently, 37 service stations use solar energy. In fiscal 2006, we installed and measured the effect of energy-efficient lighting to illuminate service stations.

## Initiatives in Distribution

The Cosmo Oil Group has long pursued energy conservation voluntarily by achieving greater efficiency in its logistics system. In fiscal 2006, amendments to the Energy Conservation Law were enacted to clearly define cargo shippers' responsibility.

Adhering to the revised law, Cosmo Oil firmly ascertained the volume of its domestic shipping (ton-kilometers) and the volume of CO<sub>2</sub> emissions. During fiscal 2006, we were engaged in the transport of 6,395,890 ton-kilometers of freight, and CO<sub>2</sub> emissions amounted to 160,535 tons.

We will continue to pursue energy conservation based on safe and reliable transportation.

#### Land Transportation: Tanker Trucks

Utilizing large trucks and maintaining a high stowage rate resulted in a 30% increase in transportation volume per vehicle versus fiscal 1990 levels. To further conserve energy, our efforts to promote efficiency will focus on systematic delivery and independent unloading.

#### Domestic Marine Transportation: Coastal Tankers

Coastal tankers used to deliver our main and semi-processed products between sites are affected by the operational status of refineries, weather conditions, and other factors. To meet our dual objectives of preventing accidents and making environmental considerations, we work to reduce energy consumption by using larger tankers and maintaining a high stowage rate.



### **Tanker Truck (White Oil)**



### **Coastal Tanker**



## COLUMN

## Preventing Impacts on the Marine Environment from Crude Oil Transportation

#### **Ballast Water**

When sailing without a load from Japan and other oilconsuming countries to oil-producing countries, crude oil tankers must hold sea water inside as ballast to maintain ship stability. This sea water is then discharged before crude oil is loaded. To prevent the disruption of the coastal ecosystems and pollution of oil-producing countries, this ballast water is discharged off the coast in accordance with local regulations and requirements.

#### **Double-Hull Structure**

The Cosmo Oil Group employs 10 Very Large Crude Carriers (VLCCs) with a double-hull structure as protection against accidents. These tankers, under a long-term charter, are equipped with both inner and outer hulls. In the event the outer hull is breached, this double-hull structure diminishes the risk of damage to the inner crude oil tank to prevent oil leaks.



Detailed data Trends in Regularly Chartered Double-Hull Tankers http://www.cosmo-oil.co.jp/sustainable/eng/07/env/gl\_warming.html

# Environmental Measures at Service Stations

### Introducing Hydrocarbon Vapor Recovery Units

To prevent hydrocarbon vapor from being diffused when being unloaded from tanker trucks, we promote the installation of hydrocarbon vapor recovery units.

## Hydrocarbon Vapor Recovery Unit



## **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.



#### WEB

35

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
## **Soil Preservation**

### http://www.cosmo-oil.co.jp/eng/sustainable/07/env/soil.html

We are promoting soil preservation by preventing soil contamination and by responding quickly to minimize the environmental impacts of any oil leaks.

## Policy

"Soil preservation" is one of the crucial themes of the Consolidated Medium-Term Environmental Plan. In August 2004, we set up a specialist department that has been efficiently and systematically promoting initiatives for soil preservation. To reduce the risk of contaminating soil, particularly at service stations, we take preventive measures and strive to minimize the environmental impact in the event of an oil leakage. In fiscal 2002, we carried out interviews about the operating status of service stations affiliated with the Cosmo Oil Group. Based on these interviews, we began systematically surveying the soil environment at service stations owned by Cosmo Oil, placing priority on service stations with a higher risk profile, including those possessing older facilities such as single-shell tanks. We also provided instructions and guidance to our dealers when necessary. In fiscal 2006, we surveyed soil at approximately 160 service stations and plan to continue to implement surveys at around 100 to 140 service stations annually, with completion of all currently company-owned service stations scheduled by around 2010. In fiscal 2006, approximately ¥1.0 billion was expended for these soil preservation measures at our service stations and other sites.

## Early Detection of Soil Contamination at Services Stations and Preventive Measures

#### **Reinforcing Facilities**

At our new service stations, we are proceeding with the installation of equipment and facilities that have an extremely low risk of a leak, including double-hull tanks that prevent oil leakage and plastic pipes that do not corrode. Meanwhile, at our older service stations, we are working to upgrade facilities and equipment by replacing and reinforcing pipe materials and using electrical anti-corrosion treatment. We have also built a communication contact structure that prevents failures or delays in making necessary contact. For example, this structure ensures that engineering staff immediately contact the department in charge if an irregularity is discovered during inspections. In the future, we plan to install high-performance oil-surface meters as needed at our new and remodeled services stations in tandem with working to further strengthen early discovery and preventive measures.



#### **Educational Activities**

We carry out Environmental Management Point (EM Point) surveys at all service stations twice per year. By doing so, we can objectively evaluate inspections undertaken at service stations, while service stations can reaffirm their awareness of daily environmental management and raise their awareness of preserving the soil environment.

WEB Detailed data EM Point http://www.cosmo-oil.co.jp/eng/sustainable/07/env/management.html



Number of Soil Surveys at Our Service Stations

Data for previous years has been restated along with a change in the method for calculating the number of surveys implemented.

## COLUMN

# Measures Taken after a Service Station is Closed

When a service station owned by Cosmo Oil is closed or when there is a change of ownership or management, we always carry out a soil survey at the site. If any contamination is detected, we properly carry out soil improvement through measures that include treating contaminated soil and recycling it for use in cement or bioremediation.

## **Environmental Preservation Measures**

## http://www.cosmo-oil.co.jp/eng/sustainable/07/env/plan.html

Reducing environmental impacts and creating a sustainable society are issues that concern everyone. In accordance with this thinking, we are steadily expanding our environmental preservation activities.



Recycle box installed within the headquarters

## "Office Clean" Activities Involving All Personnel

We promote "Office Clean" activities throughout the Cosmo Oil Group, specifically focused on the 3R (Reduce, Reuse, and Recycle) concept for such resources and energy as materials and lighting used daily in our offices. In fiscal 2006, we made preparations to link these activities with our "Team Minus 6%" activities.

	Results in FY2006		Medium-term targets in FY2007			
	Cosmo Oil Increase/ decrease from FY2003	Affiliates <sup>1</sup> Increase/ decrease from FY2004	Cosmo Oil Increase/ decrease from FY2003	Affiliates <sup>1</sup> Increase/ decrease from FY2004	Consolidated <sup>2</sup> Increase/ decrease from base year	
Reduction of copy paper	<b>▲</b> 10%	2%	<b>▲</b> 16%	<b>▲1</b> 4%	▲15% <sup>*2</sup>	
Reduction of company car fuel consumption	▲15%	▲9%	<b>▲</b> 18%	▲12%	<b>▲1</b> 4%	
Reduction of office electricity consumption	<b>▲</b> 11%	▲3%	<b>▲10%</b>	▲11%	<b>▲</b> 10%	

#### Notes

1. The scope of fiscal 2006 affiliated company results was expanded to include additional affiliated companies, and the base year results for fiscal 2004 include estimates.

2. Since fiscal 2003 is the base year for Cosmo Oil and fiscal 2004 is the base year for affiliates,

consolidated targets are for respective base years. The A mark refers to minus/decrease.



http://www.cosmo-oil.co.jp/eng/sustainable/07/env/plan.html

## "Team Minus 6%"\* Initiatives

In October 2005, we began participating in the government-sponsored "Team Minus 6%" activities to prevent global warming. From 2007, the entire Cosmo Oil Group has been actively undertaking these activities.

As key categories, we are reducing consumption of copy paper, fuel for company cars, and electricity as well as promoting green purchasing of designated consumables (such office consumables as OA paper and writing utensils), while also establishing numerical targets for each category. We monitor the monthly results for paper, fuel, and electricity reductions, and for consumables, we hold reviews every six months to determine strict adherence to green purchasing standards. We are also linking our green purchasing of consumables with our "Office Clean" initiatives as we strengthen our overall activities in this area. We also establish guidelines and apply green purchasing standards for printed documents and exhibition materials required for communications

Additionally, information on the progress of these activities is disseminated through COSMO WISE PLACE, the Company's internal portal site, as well as the Company's internal newsletter. In the future as well, we will make efforts to ensure that each employee maintains an awareness of the importance of reducing greenhouse gas emissions as well as using resources with care not only at business sites but also throughout their daily lives.

\* "Team Minus 6%" is a national project promoted by the Japanese government to achieve the 6% reduction target in Japan's greenhouse gas emissions as established under the Kyoto Protocol. The Cosmo Oil Group has participated since October 2005.





Eco drive sticker



COSMO WISE PLACE internal portal site

and BAATERCORE	8 H	11.111日1日日	2.85	aminan.	100
P 1 199945	* TH *				-
Contraction of the local division of the loc		1			
	* 2083 W				
Office	-44A				
	* #81379.8d			10.020	28.1
	*47.8				
all ogga	* 378328a-8	26,393	95.5		24.1
18,11,02,004		91,309	54.2	255.000	10.5
BRAS	<ul> <li>372-5823</li> </ul>	26,000	23 1	1003761	1963
	<ul> <li>m26 map thr 4 m 2.6</li> </ul>				
	<ul> <li>コスモモ油ルウル大和工作</li> </ul>			10.604	25.5
COLUMN 1	<ul> <li>当74石油(h) 大將王峰</li> </ul>	6,500		21000	28.7
	<ul> <li>(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)</li></ul>			127 638	
に対象第三日	###=74%#	1.500	33.3	8.000	- 23.
21	<ul> <li>NEXTERS</li> </ul>	1500		ALC: NO.	1000
	<ul> <li>#E#Ild'-5</li> </ul>				
(1) 人間(-) (1)	*##				
and the second designed and	<ul> <li>316 2.0 + 0</li> </ul>	12,100	167.2	10000	2014.1
	1 374-Vin 414-mB	99,305	95.5	M 000	-108
100-004-0	<ul> <li>378 14 This</li> </ul>	81,303	85.1	1 84 8 10	100.0
	* 314 Marth	42 100	48.6	116.605	12630
1111年間 1	<ul> <li>HTTELEVAL FRIEM</li> </ul>				
11. COM 11.	1078 Elevity 4818.	8,800	87	14 000	1000
DISCOURA-1	-14.000	45,399	12/55	187600	
29-38A	* ##x27F###	2535	23.8	6.000	147
104.1	<ul> <li>R04274.008</li> </ul>	12300	8.5	100.06	22
1. 12.1	◆ 前展発生えが→U				1.01
1 444	-41.8				
	<ul> <li>3273241+5</li> </ul>	25,202	13.5	41000	162
EXTENDATE		00016	23.9	21000	63
Al	<ul> <li>STERM HEAT</li> </ul>	\$4,500	48.0	121.606	100.0
一般語言を見て	-781.4473	21500	24.4	618.00	18.2
	+ 二2年初後について第三条	0.00		1000	
清洁清晰(1+1)	<ul> <li>314 Gian 27 ABE#</li> </ul>	0.000		11000	12.7
	<ul> <li>_77484</li> </ul>	#5,500	18.2	257.604	

"Office Clean" activity database

activities.

## Promoting Green Purchasing with Our Suppliers

#### **Green Purchasing**

With regard to green purchasing, we have established a set of green purchasing criteria covering a wide range of product categories that not only include general office supplies but also encompass catalysts, containers, and building materials. In fiscal 2007, "Team Minus 6%" activities will drive our efforts to achieve our target of a 100% green purchasing rate for consumables. Furthermore, we will establish new green purchasing criteria for communications activities covering all departments that purchase printed documents or exhibition materials, as we progress with green procurement for these materials along with the undertaking of communications activities.

#### **Green Suppliers**

The Cosmo Oil Group asks suppliers to abide by our environmental management policies and establishes a set of criteria for green suppliers to ensure that suppliers employ environment-conscious management practices. Moreover, we give priority to conducting business with suppliers that proactively promote activities that contribute to the environment. Also, for those partners not yet meeting relevant criteria, we take a concentrated, bottom-up approach that encourages these partners to become green suppliers.

## Activities to Contribute to Local Communities at Refineries and Other Facilities

The Cosmo Oil Group works to promote an understanding of its environmental efforts and raise the level of trust among the residents of local communities. In fiscal 2006, the Yokkaichi Refinery invited 88 fifth graders from a local elementary school to its facilities for a new activity carried out from the perspective of "the environment and the next generation." Together with a tour of the refinery, a lecture and demonstration promoted a deeper understanding of such issues as mass consumption of oil and environmental problems and enabled the students to learn about the importance of conserving oil. We are also considering carrying out activities that integrate energy and environmental education at our other refineries as well.



## Initiatives by Cosmo Oil Service Stations

From fiscal 2006, we have promoted improvements at service stations with the objective of operating "service stations that are friendly to people, society, and the Earth." Specifically, we are promoting these activities from three perspectives, namely, establishing barrier-free stations (friendly to people); cooperating with local communities in times of disaster (friendly to society); and preserving the environment from the perspective of facilities and various measures (friendly to the Earth). Regarding environmental preservation, we have introduced energy-saving lighting and car wash facilities that utilize recycled wastewater. Additional efforts include raising environmental awareness among service station staff.





# **Communications Report**

#### Table of Contents

Activities through the Cosmo Oil Eco Card Fund	40
Sending Out an Environmental Message	41
Activities Centered on Children, the Environment, and Society	42

Internet Movie & DVD	Cosmo Oil Eco Card Fund
Ken Noguchi Ogasawara	South Pacific Countries
Environmental School	Support Project
Art Program for Daddies and Kids	Cosmo Waku Waku Camp

## Activities through the Cosmo Oil Eco Card Fund

### http://www.cosmo-oil.co.jp/eng/sustainable/07/com/eco\_card.html

Cosmo Oil uses donations from customers for activities that contribute to the environment at locations around the world.

## Cosmo Oil Eco Card Fund



#### What is the Cosmo Oil Eco Card Fund?

The Cosmo Oil Eco Card Fund supports contributions to the Earth's environment through "Living With Our Planet" projects. The fund operates with donations from sources that include Cosmo the Card Opus "Eco" and Cosmo the Card "Eco" cardholders along with a portion of sales donated by the Cosmo Oil Group. We promote projects backed by the fund in partnership with non-profit organizations (NPOs), non-governmental organizations (NGOs), research organizations, and others to reach out directly to local communities and governments.

Established in fiscal 2002, the Cosmo Oil Eco Card Fund marked its sixth anniversary in April 2007. As of July 2007, there were approximately 86,000 "Eco" card members from both Cosmo the Card Opus "Eco," issued in 2006, and Cosmo the Card "Eco," issued in 2002.

## Cosmo o:l Eco Card Fund



#### **Click Fundraising for "Living with Our Planet" Projects**

Click fundraising for "Living with Our Planet" projects is conducted via the Cosmo Oil homepage. Cosmo Oil will donate one yen each time a visitor to the site clicks on a project he or she wishes to support.



#### **Project Theme**

"Living With Our Planet" projects are centered on the prevention of global warming, which is the most critical issue related to oil. Our efforts therefore focus on two types of activities. First, we promote the sustainable development of regions, mainly developing countries, predicted to endure hardships as a result of factors that include soaring levels of CO<sub>2</sub> emissions and climate changes such as global warming. Secondly, we support environmental education for children as the leaders of the next generation.

### Income and Expenditures of the Cosmo Oil Eco Card Fund in Fiscal 2006



## Sending Out an Environmental Message

### http://www.cosmo-oil.co.jp/eng/sustainable/07/com/message.html

Cosmo Oil is providing opportunities for people to think about the environment through various events and public relations activities with environmental themes.

## Cosmo Earth Conscious Act



#### Concept

Cosmo Oil has formed a partnership with 38 broadcasting stations affiliated with the Japan FM Network (JFN). This partnership is aimed at protecting and preserving the Earth's environment by advocating the concept of "Let's all do what we can for the Earth now" via year-round environmental activities based on the theme "Earth Conscious—Hearts to Love & Feel the Earth."

#### **Clean Campaign**

While promoting a familiarity with nature, we conduct environmental activities throughout the year in areas such as mountains, rivers, ocean beaches, lakes, parks, and other locations across Japan. Through a diverse menu of activities, including cleanup activities, live concerts by various artists, and sports events, this campaign allows people of all ages, from children to adults, to enjoy nature as they participate in environmental activities. Additionally, in August we hold our trademark event, the "Cosmo Earth Conscious Act Cleanup Campaign on Mt. Fuji," for cleanup activities and eco-trekking on Mt. Fuji.



Results to Date (2001 to July 2007) Number of locations-----250 Number of participants------98,201 Liters of waste collected---2,059,767

#### **Ken Noguchi Lectures**

We hold lectures across Japan featuring Ken Noguchi, an Alpinist active in cleanup efforts in the Himalayas and on Mt. Fuji in addition to the preservation of Japan's precious nature and promotion of environmental education.

#### **Earth Day Concert**

Since Earth Day on April 22, 1990, Cosmo Oil has hosted the annual Earth Day Concert as the year's main event geared toward sending out an environmental message through music to young people around the world.

#### "Living with Our Planet" Radio Program

This program, which is broadcast live, introduces the natural environment of various regions and other Earth-conscious topics.

•Airs every week, Monday through Friday, from 6:40 a.m. to 6:45 a.m. on JFN's 38-station network.

## Participation in Eco-Products 2006

Cosmo Oil operated a booth at Eco-Products 2006, Japan's largest general environmental exhibition held at Tokyo Big Sight from December 14-16, 2006. Our booth featured an experimental CO<sub>2</sub> absorber to reflect the main theme of the Cosmo Oil Group's exhibition in fiscal 2006, "Experimental and hands-on environmental education program with a focus on plants." We used this CO<sub>2</sub> absorber to provide an actual demonstration of plants absorbing CO<sub>2</sub>, thereby promoting a deeper awareness of the role played by plants in protecting the global environment while fostering an understanding of how this device is related to the activities of the Cosmo Oil Group. We also provided numerous visitors with a close-up look at the environment-friendly characteristics of "Penta Garden<sub>®</sub>," a product for use in home gardening offered by the ALA Marketing Center.



## Communicating Our Initiatives to Society

# Environmental Advertising: "Something Good for the Earth" and "A Desk by the Seashore"

Together with customers who want to "do something for the Earth," Cosmo Oil is supporting a variety of environmental preservation activities and environmental education programs both in Japan and overseas. As part of these efforts, in 2006 we created and launched a series of advertisements based on the two themes of "Something good for the Earth" and "A desk by the seashore." The latter introduced a scene from a documentary movie about an environmental school that was produced in cooperation with Ken Noguchi. This advertisement was made into a television commercial, which prompted numerous people to watch the documentary and also spurred an increase in the number of people hoping to participate in this environmental school.

#### Environmental Culture Magazine TERRE

We actively present our message based on the concept of "thinking about the environment through people, seeing people through the environment." This enables us to consider the environment and to take action together with even more people.



41

## Activities Centered on Children, the Environment, and Society

### http://www.cosmo-oil.co.jp/eng/sustainable/07/com/contribute.html

Cosmo Oil undertakes various activities aimed at fostering a spirit that encourages employees to make social contributions as well as at enriching the hearts of children to whom the future of our planet will be entrusted.

## Policy

In 1992, we formulated our basic policy for contributing to society and initiated social contribution activities. As one of our social contribution activities, in 1993 we held the first Cosmo Waku Waku Camp, a nature experience program for schoolchildren orphaned by traffic accidents that is run mainly by Cosmo Oil employee volunteers.

Since then, Cosmo Oil has conducted various next-generation education programs with the participation of employees. Through such programs, we have been able to fully utilize our accumulated know-how and build partnerships with NPOs at the forefront of activities in specialized fields.

WEB Details of Social Contribution Activities http://www.cosmo-oil.co.jp/eng/sustainable/07/com/contribute.html

## Cosmo Waku Waku Camp

This is a nature program lasting three days and two nights for schoolchildren orphaned by traffic accidents. This camp is run mainly by Cosmo Oil employees from around Japan, who learn about safety control and psychological childcare through training courses prior to participation. In fiscal 2006, 37 children learned the importance of teamwork through experiencing "forest life" at Sai-no-kuni Chichibu Green Village in Saitama Prefecture. Specific activities included observing nature, chopping wood, igniting a fire using sticks, and drawing water from a river via a bucket relay.



## Art Program for Daddies and Kids

With the aim of supporting the participation of fathers in child rearing, we hold the Art Program for Daddies and Kids, a workshop that enables fathers and children to enjoy communication and art. The program takes place at Cosmo Oil branch offices throughout Japan. Fathers talk about their own childhood experiences, and children expand upon these images to make their own drawings that go into a "one-of-a-kind book of art."



## Environmental Education Tools

#### econets

We established the "Cosmo Children's Earth School 'econets'" website, which allows adults and children to think together about such issues as what actions should be taken to protect the global environment.



#### Earth Environment Book

We produce the *Earth Environment Book*, a publication for primary schoolchildren that conveys messages from persons involved in environmental protection activities and that is available upon request free of charge.





# **Social Report**

### Table of Contents

Relationship with Our Customers	44
Relationships with Our Shareholders and Investors	46
Relationship with Our Employees	47
Relationships with the International Community and Oil-Producing Countries	49

## **Relationship with Our Customers**

#### http://www.cosmo-oil.co.jp/eng/sustainable/07/soc/index.html

We strive to offer safe and reliable service to ensure that our slogan "Filling Up Your Hearts, Too" is meaningful to all our customers.

### Cosmo Oil Self-Service Stations

A notable trend in customer consumption has been a shift toward the use of self-service stations. As of the end of March 2007, the ratio of self-service stations in Japan was 13.1%, as compared with 18.1% of self-service stations operated by the Cosmo Oil Group, which is well above the industry average. Moreover, amid intensifying market competition among self-service stations, we aim to establish Cosmo Oil self-service stations that possess superb car care sales capabilities to meet diversifying customer needs.



The Cosmo Academy supports the development of service station staff, who are the main point of contact with our customers. The academy provides training that enables employees at every level, from new employees to managers, to acquire qualifications as well as gain other skills such as technical sales. Additionally, through establishing a call center for car maintenance and providing the latest auto-related information via the Internet, the academy supports the efforts of service station staff to swiftly respond to customer needs.



Customers have become keenly aware of gasoline prices due in part to the rise in gasoline prices caused by soaring crude oil prices. Amid such circumstances, our Cosmo the Card credit card enables customers to purchase gasoline at a more economical members' rate, thus supporting our efforts to build long-term relationships with customers. Further, in June 2006 we launched a membership drive for Cosmo the Card Opus through an alliance with Aeon Credit Service Co., Ltd., a member company of the AEON Group, which is the leading operator of integrated supermarkets. This has enabled us to maximize revenues through the acquisition of new cardholders.

Detailed information Cosmo the Card/Self-Service Stations http://www.cosmo-oil.co.jp/eng/sustainable/07/soc/index.html

## "Filling Up Your Hearts, Too" Declarations

In fiscal 2007, service stations in the Cosmo Oil Group made a set of declarations known as the "Filling Up Your Hearts, Too" Declarations. We make and fulfill these promises to our customers to strengthen our commitment to Cosmo Oil's motto of "Filling Up Your Hearts, Too." In the current fiscal year, we will conduct surveys to confirm whether these three declarations are being put into practice.

- O Cosmo Oil service station outlets will be clean and customers will be greeted with a smile.
- O Cosmo Oil service stations will offer quality assured products and services.
- O Cosmo Oil service station staff will be responsible for their answers to customers' queries.

## Customer Center

In October 2000, we opened the Cosmo Customer Center to facilitate two-way communication with our customers. In fiscal 2006, customers contacted the center on 5,778 occasions via a toll-free telephone number or e-mail. We collect, classify, and analyze customer feedback to respond accurately, quickly, and politely, as well as convey such input as soon as possible to the relevant departments. In this way, we work to ensure that comments are reflected in improvements to our services and business operations, and in turn further increase customer satisfaction.

0120-530-372 (Japan only)

## Service Evaluation at Our Service Stations

To ensure that the four basic requirements of friendliness, cleanliness, high quality, and sense of security are put into practice to the greatest extent possible, we implement monitoring surveys from the customer's point of view. In fiscal 2006, we conducted these surveys four times. Results were analyzed quickly and provided as feedback to be used in initiatives geared toward improving service stations.



## **Relationship with Our Customers**

http://www.cosmo-oil.co.jp/eng/sustainable/07/soc/customer.html

## CSR at Cosmo Oil Service Stations

Cosmo Oil Group service stations undertake the following initiatives as part of CSR-based management.

#### **Thorough Implementation of Compliance**

The Cosmo Oil Group publishes the NAVI Guidebook, a pamphlet for Cosmo Oil service stations and dealers that lists and describes major laws that pertain to service stations. The guidebook instructs employees involved in the retail business as well as dealers and Cosmo Oil service stations in thoroughly adhering to these laws.

Keeping in mind the importance of adhering to all of these laws, we undertake the following activities with regards to the Act on the Protection of Personal Information, the Fire Defense Law and Soil Contamination Countermeasures Ordinance.



Wheelchair access ramp

#### Activities that Contribute to Society and the Environment

Act on the Protection of Personal Information We utilize the following Personal Information Protection Text Personal Information Protection Manual Personal Information Leak Incident Response Manual

Personal Information Protection Privacy Policy Point (PP Point) Survey

Every six months we conduct a point-based privacy policy point (PP point) survey and a survey on the status of personal information management. With 100 points being a perfect score, we take action to realize improvements in categories as required. In the latter half of fiscal 2006. the average score was 76.4 points, an improvement of 3.9 points from the first half of the fiscal year.



Detailed data Personal Information Protection Privacy Policy Point (PP Point) 
 Detailed data
 Personal information Procedure P

Fire Defense Law and Soil Contamination Countermeasures Ordinance

Inventory Management and Checkups based on the Safety Inspection Logbook

Environmental Management Point (EM point) Survey

Use of various types of Management **Tools and Manuals** 

Environmental management point (EM point) inspections are carried out every six months. We conduct inspections of service stations as well as examine the state of inventories industrial waste countermeasures, and facilities. In the latter half of fiscal 2006, we achieved a record-high 82.6-point average out of a perfect score of 100 points



45

Detailed data Environmental Management Point (EM Point) http://www.cosmo-oil.co.jp/eng/sustainable/07/env/management.html

Service Stations that are Friendly to People, Society, and the Earth Recognizing that service stations are the primary point of contact with customers, we are initiating measures to develop service stations that are friendly to people, society, and the Earth. In preparation for the full-scale launch in fiscal 2007, Cosmo Oil introduced the following initiatives on a trial basis at its service stations during fiscal 2006 in accordance with its own established standards.

#### Friendly to People

We are operating barrier-free service stations with ramps for wheelchair access and rest rooms with wide stalls as standard features.

#### Friendly to Society

We are cooperating with local communities through the establishment of a distribution structure to ensure stable supplies of petroleum products for emergency vehicles (Business Continuity Plan).

#### Friendly to the Earth

In terms of physical resources, we are installing energy-saving lights and reusing wastewater in car wash equipment. Regarding systems and processes, we are implementing environmental management point (EM point) surveys and risk management training to raise awareness of environmental preservation.

#### Stable Supplies of Petroleum Products in the Event of a Disaster

To secure stable supplies of petroleum products in the event of a disaster, we have undertaken efforts to develop our Business Continuity Plan (BCP). With respect for human life being our highest priority, we will maintain stable supplies of petroleum products to the greatest extent possible, while providing support for the prevention of secondary disasters and the recovery and restoration of damaged areas. As one aspect of our BCP, we are developing stations that respond to disasters as "lifeline support service stations." In October 2007, we will introduce this plan at approximately 50 directly operated service stations in the Tokyo metropolitan area. Lifeline support service stations will further strengthen our ability to respond to disasters with physical resources as well as systems and processes, as we make preparations to ensure stable supplies of petroleum products in the event of a disaster.

We will also install generators or pumps at these lifeline support service stations to provide stable supplies of petroleum products in the event that electricity or other essential services fail. We are also considering the installation of large-sized generators and water storage facilities with a view to supporting the lifelines of local communities.

## **Relationships with Our Shareholders and Investors**

### http://www.cosmo-oil.co.jp/eng/sustainable/07/soc/ir.html

Cosmo Oil strives to disclose accurate information to our shareholders and investors in a timely manner and to improve corporate management.

### Composition of Shareholders

Regarding the composition of Cosmo Oil's shareholders, at the end of March 2007 financial institutions (including trust companies) and securities companies held 49.7% of Cosmo Oil's outstanding shares, individuals and others 18.8%, foreign investors 19.3%, and domestic corporations 12.2%. To provide shareholders and investors with a clear overview of Cosmo Oil's operations and to ensure they fully understand our business strategies, we carry out investor relations (IR) activities that utilize media, gatherings, and other tools that meet shareholder needs.



The number of shares held and distribution of shareholdings includes shareholders who hold less that one unit.

## SRI Information

There has been increased focus on Socially Responsible Investment (SRI)\*, a generic term for investments that enable investors to decide on which companies to invest in based not only on a company's financial performance but also taking into consideration whether that company fulfills its environmental and social responsibilities. Cosmo Oil has been included in the FTSE4Good Global Index since March 2003 and in the Morningstar Socially Responsible Investment Index since July 2003. Additionally, Cosmo Oil is incorporated into numerous SRI funds.

\* SRI (Socially Responsible Investment) funds: Funds that invest in companies that fulfill their social responsibilities in terms of social justice, ethics, environmental considerations, consumers, employees, and local communities



Detailed information Investor Information http://cosmo-oil.co.jp/eng/ir/index.html

## Communications

#### **Basic Policy of Our IR Activities**

The basic policy of our IR activities is to foster a deeper understanding of the Cosmo Oil Group and build relationships of long-term mutual trust with our shareholders and investors by appropriately disclosing our management philosophy and policies, financial condition, and business strategies in a timely manner.

#### Promoting a Deeper Understanding of Cosmo Oil

Besides publishing annual reports and quarterly shareholder reports, we also work to upgrade information disclosure via our website, including providing streaming videos of our shareholders' meetings and posting all documents that have been distributed. Of particular note, we have upgraded our Web pages for individual investors to familiarize them with our company as part of efforts to promote a deeper understanding of Cosmo Oil among a broad range of shareholders. By taking this approach, we have continually earned high regard from IR consulting companies and other external institutions that survey IR websites.

As an additional measure, every year we send questionnaires to our shareholders via the shareholder report *C*'s *Mail* and use the opinions of shareholders as feedback that is reflected in our management policies and the contents of our reports.



Annual Report



Shareholder report C's Mail



Website

## **Relationship with Our Employees**

#### http://www.cosmo-oil.co.jp/eng/sustainable/07/soc/employee.html

Cosmo Oil's operations are supported by each of its employees. With this in mind, we strive to create working environments in which all employees can maintain an awareness of their social responsibilities through their own work while fully utilizing their capabilities.

## Consolidated Medium-Term Human Rights/ Personnel Plan

### WEB

Detailed information Consolidated Medium-Term Human Rights/ Personnel Plan http://www.cosmo-oil.co.jp/eng/sustainable/07/soc/employee.html

In fiscal 2005, we formulated the Consolidated Medium-Term Human Rights/ Personnel Plan, and have promoted initiatives in the six categories of human rights, respect for diversity and equal opportunity, health and safety in the workplace, welfare, education and skills development, and creation and guarantee of employment. As we press ahead with these initiatives, we are also working in close cooperation with the employees' labor union.

Under this plan, we will continue implementing personnel-related measures that emphasize fundamental human rights, while adhering to a spirit of respect for diversity and focusing on "people" as we strive to create vibrant and comfortable working environments and raise employee motivation.

#### **Human Rights**

On February 7, 2006, we expressed our support for the United Nations Global Compact and are now progressing with various initiatives as we strive to realize the principles of this compact.

In May 2007, we held human rights enlightenment training for toplevel managers, including managers at affiliated companies. We also held human rights enlightenment training on 34 occasions at various business sites, with 1,632 employees participating. In addition, we continue to implement level-based human rights enlightenment training, including for new employees and employees who have recently assumed new management positions. A total of 176 employees received this training.



#### **Respect for Diversity and Equal Opportunity**

Aiming to expand the number of workplaces where women can play active roles, Cosmo Oil continually promotes fair employment initiatives. For example, in fiscal 2006 Cosmo Oil hired six women from among the 40 new graduates hired as career track employees. As of July 2007, we have assigned a total of 17 women to the Sales Department as sales representatives and two women to refineries as engineers.

Our employment rate of persons with disabilities is 2.0%, which exceeds the legally mandated 1.8% employment rate. To ensure that persons with disabilities can work comfortably in the Cosmo Oil Group, we have focused our efforts on normalization, which includes improving the awareness of staff and creating a good working environment.

In fiscal 2006, we also carried out training on sexual harassment and power harassment as we worked to raise awareness of these issues. In conjunction, we established consultation counters for sexual harassment and power harassment and instituted follow-up countermeasures. Also, to support greater diversity in the ways employees work, we established a system for allowing employees meeting certain criteria to choose where they will work. Numerous employees have chosen to participate in this system, thus providing employees with even more comfortable working environments.

#### Health and Safety in the Workplace

As part of our mental health care, we prepare and distribute two types of pamphlets for regular employees and line managers, respectively. Utilizing these pamphlets, we have also held mental health training for all line managers covering such issues as the early detection of illnesses, responding to subordinates, and using consultation counters.

#### Welfare

Responding to the Law for Measures to Support the Development of the Next Generation, in April 2005 we submitted a General Business Owner's Action Plan to the Ministry of Health, Labour, and Welfare. With the principal target of at least one male employee and more than 70% of the eligible female employees taking child care leave, we revamped our employee leave system to enable more flexibility for utilizing accumulated paid vacation (expired annual vacation days) and for allowing these days to be used for childcare leave. By making this revision, we have established a system that allows paid vacation days to be used for a portion of the childcare leave period. In addition, as a measure for encouraging employees to use their annual paid vacation days, we are implementing a campaign that promotes the long-term consecutive use of paid vacation days. Through such initiatives, the employee vacation day usage rate has reached approximately 80%.

In fiscal 2006, one male employee and six female employees (usage rate of 83%) utilized childcare leave and one employee used our nursing care leave system.



By taking initiatives that respond to the "Law for Measures to Support the Development of the Next Generation," in May 2007 Cosmo Oil received certification from the Ministry of Health, Labour, and Welfare as a "criteriacompliant business."

#### Number of Employees

	(persons				
		Males	Females	Total	
	Employees	1,337	195	1,532	
	Management	356	5	361	
Cosmo Oil	Others <sup>1</sup>	23	0	23	
	Subtotal	1,716	200	1,916	
Affiliates <sup>2</sup>	Employees	981	98	1,079	
	Management	359	0	359	
	Others <sup>1</sup>	19	0	19	
	Subtotal	1,359	98	1,457	
Tot	al	3,075	298	3,373	

#### Notes

1. Seconded employees from other companies and full-time labor union staff 2. Number of employees seconded from Cosmo Oil

#### Work/Life Balance

To create comfortable workplaces that enable employees to achieve a balance between their work and private lives, from fiscal 2007 Cosmo Oil has implemented a new vacation day leave system and has introduced measures to support the care of children, who represent the next generation.

**Preset vacation days**: To encourage employees to use their paid vacation days, we have designated specific times when all employees company-wide must take three days of their annual paid holidays. **Vacation days for volunteer activities**: We have set up a vacation day leave system for supporting employee participation in volunteer activities and social contribution activities.

**Measures to support child rearing**: To allow employees to devote themselves to childcare, we have adopted measures that enable employees to take childcare leave until the end of a fiscal year in which his or her child reaches three years of age. We also allow employees to reduce their working hours by up to two hours per day until his or her child has begun the fourth year of elementary school. Also, for employees choosing to continue working during child rearing, Cosmo Oil subsidizes up to one half of the costs, with an upper limit of ¥25,000, for the use of childcare facilities until the end of the fiscal year in which a child reaches three years of age.

#### **Education and Skills Development**

In fiscal 2000, we introduced an in-house recruiting system that allows employees to apply for jobs offered by other departments or affiliates without having to notify his or her superior, and to accept such positions if the applicant and respective department can reach an agreement. In fiscal 2006, there were jobs offered by 10 departments, and four employees successfully found new positions.

Regarding our education system, for position-based training, we added a CSR training course to our existing skills development training in fiscal 2005 and have made it mandatory for employees to undergo training covering environmental issues, respect for human rights, and corporate ethics (compliance).

As part of efforts to develop the capabilities of employees, we also actively support self-initiated employee education with measures that include expanding the scope of monthly financial support for participation in correspondence courses and external training courses.

Employment of Persons with Disabilities ubmitted to Ministry of Health, Labour and Welfare in June 2007

(person			
	June 1, 2006	June 1, 2007	
Number of persons with disabilities	43	45	
Persons with severe disabilities among the number of persons with disabilities	21	23	
Employment rate of persons with disabilities*	1.9%	2.0%	
Number of persons with disabilities still to be hired	0	0	

\* Statutory employment rate: 1.8%. (Figure rounded at the second decimal.)

#### **Creation and Guarantee of Employment**

In response to the Law concerning Stabilization of Employment of Older Persons, on April 1, 2006 we adopted a senior employee employment system for rehiring employees after they reach the mandatory retirement age of 60. In this manner, we are upgrading our existing re-employment support measures to enable these older employees to continue working for the Cosmo Oil Group.

In addition to "life design" training, a pre-retirement course that employees take at the age of 55, we also support re-employment by providing "second career" training that enables employees seeking re-employment after retirement at age 60 to learn how to write resumes and receive advice on job interviews.

In fiscal 2006, 106 employees participated in life design training and 44 employees participated in second career training.

#### Management and Labor

Our labor-management contract clearly stipulates that management and the labor union shall meet for discussions before any work conditions, such as employees' positions and employment, are altered. Top management from Cosmo Oil and representatives from the labor union gather and engage in discussions at regular meetings and within a variety of committees at the headquarters or at individual business sites.

In addition, the Committee for Optimum Working Hour Management strives to prevent health problems caused by overwork and to reduce working hours appropriately. The committee has prepared the pamphlet *Guide for the Complete Understanding of Working Hours* and distributes this to employees. At the same time, the committee has provided training on working hours for persons in charge of monitoring work hours (line managers), which included such issues as ensuring compliance with the 36 Agreement (an agreement between labor and management per Article 36 under the Labor Standards Act) and the using of vacation days.

#### Number of Employees Taking Maternity and Childcare Leave and Taking Support Course for Returning to Work

				(persons)
	FY2005		FY2006	
	Females	Males	Females	Males
Maternity leave	6	0	6	0
Childcare leave*	8(11)	0	6(8)	1(1)
Childcare leave rate	100%	_	83%	_
Support course for returning to work	3	0	3	0

★ Number of employees who applied for leave in the corresponding fiscal year. The figures with parentheses show the number of employees who applied for actual leave in the corresponding fiscal year.

(noreone)

## **Relationships with the International Community and Oil-Producing Countries**

## http://www.cosmo-oil.co.jp/eng/sustainable/07/soc/international.html

As a member of the international community, our activities also extend beyond the boundaries of our regular business operations to include human resource, cultural, and technological exchanges with developing and oil-producing countries.

## Overseas Technology Cooperation

Through the International Cooperation Center, Cosmo Oil strives to maintain and develop good relationships via technology exchanges with oil-producing and developing nations utilizing public training service systems offered by the Japan Cooperation Center, Petroleum (JCCP) and Japan External Trade Organization (JETRO).

#### **Principal Activities in Fiscal 2006**

In fiscal 2006, we exchanged technologies with 22 organizations (national oil refining companies and petroleum-related research centers) in 13 countries, mainly such Middle Eastern countries as the United Arab Emirates and Qatar, as well as China and other Asian countries. We received 155 trainees from overseas countries for training in Japan. The Cosmo Oil Group also dispatched 58 of our engineers to overseas countries as we strengthened our relationships for carrying out technology exchanges locally while also building human-resource networks in developing and oil-producing countries. In programs under the direct control of JCCP, we accepted and provided training at Cosmo Oil refineries and at the Research & Development Center for a total of 128 trainees from overseas countries. Regarding trends in training themes, there has been a shift away from demand for training in refining technology, production and quality control, and facility maintenance and rising demand for training related to technologies for preserving the environment and conserving energy.

#### Training for Iraqi Engineers Corresponding to JETRO's Oil-Producing Country Training Programs

As part of activities for supporting reconstruction that covers oil facilities, Cosmo Oil has provided training on a commissioned basis in Japan for Iraqi engineers solicited by JETRO in accordance with a 2004 bilateral joint communiqué between the governments of Iraq and Japan. During a one-month period from September to October 2006, Cosmo Oil received 20 engineers from oil refineries owned by the Iraqi Oil Ministry and provided training on practical environmental protection technologies and methods based on the theme of oil refinery environmental protection technology management.





http://www.cosmo-oil.co.jp/eng/sustainable/07/soc/international.html

#### Aid and Support for Overseas Plant Construction and Operation

We collaborate with JGC Corporation, Chiyoda Corporation and other engineering companies for private-sector cooperative ventures in oil-producing countries. Our track record of over 20 years of providing construction assistance and operational support for plant facilities has earned Cosmo Oil's technology high praise from partner countries. One recent example is the support and other measures we have provided for constructing and operating the Sohar Refinery in Oman that commenced operation in August 2006.



#### Efforts to Create a Foundation for the Oil Industry in Oil-Producing Countries

With funding assistance from the JCCP, we are involved in such activities as dispatching specialists to oil-producing countries, accepting trainees to Japan, and providing technological cooperation for a variety of project feasibility studies. In fiscal 2006, we conducted an environmental preservation and operations optimization survey at the Bandar Abbas Refinery for the National Iranian Oil Refining and Distribution Company (NIORDC). The proposal for environmental improvements we submitted to JCCP was also highly regarded by NIORDC, leading to a planned feasibility study in fiscal 2007.

In Oman, for the three years from fiscal 2004, we submitted an action plan to Oman Refinery Company LLC (ORC) for improving operating technology for wastewater treatment equipment and sour water treatment (SWT) units at its Mina al Fahal refinery. In fiscal 2006, we were also involved in making improvements to such facilities as seawater desalinization units, and these efforts resulted in a number of noteworthy achievements.



#### UAE: Oil Refining Technical Training for HCT Students

The Higher Colleges of Technology (HCT) in Abu Dhabi is an educational institution that supplies human resources for Abu Dhabi National Oil Company (ADNOC) and the Abu Dhabi Oil Refining Company (TAKREER). Since 1999, the International Cooperation Center has regularly received HCT students in Japan. The center provides three training seminars annually on refining technology-related subjects such as the refining process, the environment, and testing and evaluation.

## COLUMN

### Locally Oriented Philanthropic Activities

Overseas-based offices of the Cosmo Oil Group carry out exchanges with local communities through communityfocused social contribution activities that include charitable and environmental protection related activities.

#### Main Activities in Fiscal 2006

Cosmo Oil (U.K.) Plc. makes an annual donation to St. Elizabeth's Centre, a special care facility. Established more than 100 years ago, the center provides care to those with epilepsy, autism, and other special needs. Funds for these donations are procured by converting some of our year-end season's greetings cards to an e-mail version.

Meanwhile, another Group company, Abu Dhabi Oil Co., Ltd., provides volunteers for Japanese language classes sponsored by the local Japanese embassy. Abu Dhabi Oil also strives to preserve the environment of local communities and garners a great deal of local attention for its efforts. In 1983, a barren island was transformed into an island with lush greenery after the planting of mangrove trees. Ospreys, an endangered species, built nests on the island and even laid eggs.



Planting mangrove trees contributes to greenification of island (Mubarraz Oil Field, Abu Dhabi)

## **Third Party Opinion**

http://www.cosmo-oil.co.jp/eng/sustainable/07/comment.html

## Upon Reading the Cosmo Oil Group Sustainability Report 2007



## Toshihiko Goto

Chair of the Environmental Auditing Research Group Representative Director, Social Investment Forum Japan

At the beginning of this report, Cosmo Oil clearly recognizes that it "is supported by numerous stakeholders." Today, there is also a rapidly rising global recognition that humankind lives amid the blessings provided by the Earth's environment and ecosystems. Although this recognition is embodied in various principles and initiatives of Cosmo Oil, I think it will be crucial as a stakeholder to firmly keep in mind the Earth's environment and ecosystems when undertaking any re-evaluations in the future.

At the G8 Summit in Heiligendamm, Germany, an agreement was reached to seriously consider achieving a 50% global reduction in greenhouse gas (GHG) emissions by 2050. This agreement indicates that there is now recognition that life on Earth could have the high probability to become extinct if the current "business as usual approach" is maintained. I believe this agreement also means that if Japan fails to attain a 90% reduction in GHG emissions, it will be unable to gain the acceptance of the international community. Thus, initiatives to be implemented over the next 10 to 20 years, specifically by businesses, will be extremely crucial. Cosmo Oil is steadily executing its Consolidated Medium-Term Management Plan. However, I believe that "now is the time" to move quickly to formulate radical and unprecedented new innovation strategies and contemplate a significant change in direction for making the precious resource of petroleum beneficial to society rather than merely something to be burned.

Instead of whistle-blowing to an outside party concerning the internal incident at Cosmo Oil, the employee who utilized the Company's Corporate Ethics Consultation Helpline demonstrated an act of loyalty that ultimately helped the Company. Nonetheless, I feel that Cosmo Oil's top management must thoroughly elucidate and reflect upon the true reasons why the Company's investigation committee failed to properly function in the first place. Compliance is essential, however, making errors when trying to strengthen compliance will inevitably have adverse ramifications on workplaces. As I mentioned in the Sustainability Report 2006, compliance carries the risk of increasing morale hazard because it can create an illusion among workers that "safety could be guaranteed merely by rigorously following laws and rules." Rather than matters that "should be adhered to," rules and corporate ethics must be put into practice to function as a source of pride for an organization and its people. This concept represents the genuine essence of "Filling Up Your Hearts, Too." A truly outstanding statement was made by the manager of the Safety and Environment Office of the Chiba Refinery, who said, "I would like to make as many on-site confirmations as possible and confirm safety using my own five senses."

Cosmo Oil is taking various approaches to internal control systems. Nonetheless, no matter how many managers are assigned to internal control, there is only one work site. Thus, it is of paramount importance to avoid duplications by building a management system that utilizes the PDCA cycle. In doing so, I believe that Cosmo Oil can benefit greatly by utilizing experience gained from building its environmental management systems (EMS).

Regarding the environment, Cosmo Oil's environmental initiatives are steadily taking hold, and I have high hopes that the Company will implement dramatic policies and initiatives within the sphere of next-generation energy.

Although Cosmo Oil has created various frameworks as described in "Relationship with Our Employees," a key point is whether these frameworks will lead to employee satisfaction (ES). A high level of employee satisfaction is a prerequisite for raising corporate quality and customer satisfaction levels. I believe Cosmo Oil needs to disclose the steps it is taking for raising and measuring employee satisfaction or to steadily formulate such measures if none currently exist.

Cosmo Oil is making truly outstanding social contributions as described in "Relationships with the International Community and Oil-Producing Countries." However, I feel it would be even better if Cosmo Oil could make these contributions when developing its regular business activities abroad.

I can see that Cosmo Oil is enhancing and further advancing activities undertaken through the Cosmo Oil Eco Card Fund. Nonetheless, the dynamic activities of the entire Group, which includes service stations, and the faces and voices of front-line employees are not readily apparent in the report. Also, although favorable relations with local communities are an essential element of corporate social license, Cosmo Oil's report provides only sporadic information on this subject, with no detailed descriptions, even though the Company regards local communities as stakeholders. In this case, I believe there is some room for improvement of this aspect of the report.

Next, I would like to mention Cosmo Oil's use of their website, which I discussed last year. Cosmo Oil has significantly improved the use of its website in the report from the previous year and I feel very positive about this. Still, I believe the text size of the URLs contained in the report should be larger.

Finally, there are various types of publications. However, I believe that Cosmo Oil could have further improved its report by including a graphic illustration showing an overall image and the means in which this relates to the Company's disclosure tools in addition to clear descriptions of disclosure strategies as well as the positioning and significance of each strategy.

## Independent Review Report

http://www.cosmo-oil.co.jp/eng/sustainable/07/assurance.html



#### Independent Review Report on "Cosmo Oil Group Sustainability Report 2007"

To the Board of Directors of Cosmo Oil Co., Ltd.,

1. Purpose and Scope of our Review

We have reviewed "Cosmo Oil Group Sustainability Report 2007" ("the Report") of Cosmo Oil Co., Ltd. ("the Company") for the year ended March 31, 2007. Our engagement was designed to report to the Company, based on the results of our review, whether the environmental, social and economic performance indicators and the environmental accounting indicators ("the Indicators") for the period from April 1, 2006 to March 31, 2007 included in the Report are collected, compiled and reported, in all material respects, rationally and in conformance with the Company's policies and standards, and whether all the material environmental information defined by the Japanese Association of Assurance Organizations for Environmental Information ("J-AOEI") is included in the Report. The indicators disclosed on the websites to which the Report refers are outside the scope of the Independent Review Report.

The report, including the identification of material issues, is the responsibility of the Company's management. Our responsibility is to independently report the results of our procedures performed on the Indicators.

2. Procedures Performed

We have performed the following review procedures:

- Interviewed the Company's responsible personnel as to the Company's policies for compilation of the Report.
- Assessed the Company's standards used for collecting, compiling and reporting the Indicators.
- Interviewed the Company's responsible personnel with respect to the way of collecting the Indicators and the process flow of calculating them, and reviewed the systems and processes used to generate the values of the indicators
- Compared the Indicators on a sample basis with the supporting evidences to test the conformity in collection, compilation and reporting of the Indicators to the Company's policies and standards, and recomputed the Indicators.
- Made an on-site inspection of the Sakai Refinery.
- Assessed whether all the material environmental information defined by J-AOEI is included in the Report.
- Evaluated the overall statement in which the Indicators are expressed.

We conducted our engagement in accordance with the Assurance Standard for Environmental Reports (pilot version) of the Ministry of the Environment (March 2004) and the Practical Guidelines of Environmental Information Assurance of J-AOEI (January 2006).

#### 3. Results of the Procedures Performed

Based on our review, nothing has come to our attention that causes us to believe that the Indicators in the Report are not collected, compiled and reported, in all material respects, rationally and in conformance with the Company's policies and standards, and that all the material environmental information defined by J-AOEI is not included in the Report.

KPMG Azsa Lustainability Co., Ltd. KPMG AZSA Sustainability Co., Ltd.

Tokyo, Japan August 31, 2007

> The reliability of environmental information contained in this report meets the criteria for granting an environmental report assurance and registration mark stipulated by The Japanese Association of Assurance Organizations for Environmental Information (http://www.j-aoei.org/). This report has therefore been duly granted this assurance and registration mark.



## **GRI Content Index**

http://www.cosmo-oil.co.jp/eng/sustainable/07/gri.html

		Report	Content	Page
,	Vision and Strategy	Statement of the organization to sustainable development	on's vision and strategy regarding its contribution	5
	Statement from the CEO (or equivalent senior manager) describing key elements of the report			5~6
		Organizational Profile (Name of reporting organization, head office address, number of employees, list of stakeholders)		2,3~4,47
2	Profile	Report Scope (Contact pers	son(s), reporting period, boundaries of report)	1,54
			t to apply GRI protocols, Policy with regard to rance, Means by which report users can obtain	1,41,42,46,51,52
			Processes for management of economic, sks, Policies relevant to economic, social, and )	18,19,20,21,26,29,47
3	Governance Structure and Management	Stakeholder Engagement (lo stakeholder consultation)	dentification of stakeholder, Approaches to	1,2,13~16,44,46 47~48,49~50
	Systems	Overarching policies and management systems (whether and how the precautionary approach or principle is addressed, Policies for supply chain management, programmes and procedures pertaining to economic, environmental, and social performance, Status of certification pertaining to economic, environmental, and social management systems)		7~8,19,20,28, 29~30,33,38,45,47
4	GRI Content Index			53
		Economic Performance Indicators	Customers	4
			Suppliers	—
			Company Staffs	—
			Providers of Capital	_
			Public Sector	_
			Indirect Economic Impacts	_
			Materials	31
			Energy	31~32,33~34
			Water	31
	Performance		Biodiversity	34
5	Indicators	Environmental Performance	Emissions, Effluents, and Waste	31~32,33,35
		Indicators	Suppliers	_
			Products and Services	22,32
			Compliance	_
			Transport	31~32,34
			Overall	30
			Labor Practices and Decent Work (Employment, Labour, Health and Safety, Training and Education)	47~48
		Social Performance Indicators	Human Rights (Non-discrimination, Freedom of Association)	20,47
			Society (Community, Bribery and Corruption)	_
			Product Responsibility (Customer Health and Safety, Products and Services)	20,22,44,45

### Indices for Figures, Graphs, and Tables

Figures	
Gas-liquid separation tank	P7
Corporate Governance Organization Chart	P18
Corporate Ethics Promotion Structure	P20
Cosmo Oil Group's Vision	P21
5-aminolevulinic acid (ALA)	P24
Remediation Wall Scheme	P24
Fundamental Principle of Volume Reduction	P24
Environmental Initiatives under the Consolidated Medium-Term Environmental Plan	P28
Environmental Management System	P29
Average Stowage Rate	P34
Hydrocarbon Vapor Recovery Unit	P34
Double-Hull Tank	P36
"Living With Our Planet" Projects	P40

Graphs	
Financial Data	P4
Breakdown of Environmental Preservation Costs (%)	P30
Acquisition Costs at Fiscal Year-End	P30
CO <sub>2</sub> Emissions throughout Oil's Life Cycle	P32
Energy Consumption and CO <sub>2</sub> Emissions at Four Refineries	P33
Trends in the Volume of Industrial Waste at Four Refineries	P35
Flow of Industrial Waste at Four Refineries	P35
Number of Soil Surveys at Our Service Stations	P36
Income and Expenditures of the Cosmo Oil Eco Card Fund in Fiscal 2006	P40
Service Evaluation Results at Service Stations	P44
Composition of Shareholders	P46

Tables	
Environmental Initiatives under the Consolidated Medium-Term Environmental Plan	P28
Sites where environmental inspections were implemented in fiscal 2006	P29
"Office Clean" Activities Involving All Personnel	P37
Number of Employees	P47
Employment of Persons with Disabilities	P48
Number of Employees Taking Maternity and Childcare Leave and Taking Support Course for Returning to Work	P48

November 2007 Contact:



CSR Office, Corporate Communication Dept. Telephone: +81-3-3798-3105 Fax: +81-3-3798-3841 http://www.cosmo-oil.co.jp/eng/index.html

# Cosmo oil co., ltd.



This report is printed on FSC-certified paper using soy ink and a waterless printing process.

F

