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Printed in Japan

Color Universal Design
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Profile of the Cosmo Oil Group

Corporate Profile

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: ¥107,246,816,126
Main business: Oil refining and sales
No. of employees: 1,837

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. Asian Oil Co., Ltd. was merged into Cosmo Oil on October 1, 1989. 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. Asian Oil Co., Ltd. was merged into Cosmo Oil on October 1, 1989. 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. Asian Oil Co., Ltd. was merged into Cosmo Oil on October 1, 1989. 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. Asian Oil Co., Ltd. was merged into Cosmo Oil on October 1, 1989. 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. Asian Oil Co., Ltd. was merged into Cosmo Oil on October 1, 1989. 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. Asian Oil Co., Ltd. was merged into Cosmo Oil on October 1, 1989. 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. Asian Oil Co., Ltd. was merged into Cosmo Oil on October 1, 1989. 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. Asian Oil Co., Ltd. was merged into Cosmo Oil on October 1, 1989. 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. Asian Oil Co., Ltd. was merged into Cosmo Oil on October 1, 1989. 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. Asian Oil Co., Ltd. was merged into Cosmo Oil on October 1, 1989. 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. Asian Oil Co., Ltd. was merged into Cosmo Oil on October 1, 1989. 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. Asian Oil Co., Ltd. was merged into Cosmo Oil on October 1, 1989. 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. Asian Oil Co., Ltd. was merged into Cosmo Oil on October 1, 1989. 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. Asian Oil Co., Ltd. was merged into Cosmo Oil on October 1, 1989.

Dealers: 241 offices
Service stations: 3,228 (stationary)
Branch offices: Sapporo, Sendai, Tokyo, Kanto-Minami, Nagoya, Osaka, Hiroshima, Takamatsu, and Fukuoka
Refineries: Chiba, Yokkaichi, and Sakai
Oil depots: 1
Bases outside of Japan: 36 locations (including 33 subcontractors)

Financial Data

Consolidated Net Sales

Consolidated Ordinary and Net Income

Non-Consolidated Sales Volume

Consolidated Shareholders' Equity and Shareholders' Equity Ratio

Consolidated Cash Flows

Consolidated Profit Ratios

As of March 31, 2014

1. As of April 1, 2014
2. As of August 4, 2014
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In this report, this mark indicates that the data has been assured by KPMG AZSA Sustainability Co., Ltd.

Month of Issue
November 2014
Next issue (tentative): November 2015 (previous issue was November 2013; report issued annually)

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Cosmo Oil welcomes your feedback on Corporate Report 2014 and the Group’s CSR activities. Please send feedback by e-mail to the address below.
Email: cosmo_csr@cosmo-oil.co.jp
Overview of Cosmo Oil Group Businesses

**Business Segments**

- **Oil Exploration and Production**
  - The Cosmo Oil Group purchases crude oil from oil-producing countries, promotes independent development of crude oil in cooperation with these countries, and transports crude oil to refineries in Japan.

- **Refining and Sales**
  - The Group produces gasoline, kerosene, and other petroleum products and sells/delivers these products to service stations, oil depots, and users across Japan.

- **Petrochemicals**
  - The Group also manufactures and sells petrochemical products, including xylene and other raw materials used in such everyday household goods as clothing and PET bottles.

- **Environment**
  - In addition to undertaking wind and solar power generation, the Group is focusing on the production of ALA (5-aminolevulinic acid) in the plants and agriculture field.

**Business operations**

- **Crude oil procurement, exploration and production**
  - Procuring crude oil through independent development and from oil-producing countries.

- **Marine transport**
  - Tanker transport of crude oil from procurement sources, and development and transport of imported petroleum products based on supply and demand.

- **Refining and manufacturing**
  - Producing gasoline, diesel, kerosene, and raw materials for petrochemical products to meet market needs.

- **Petrochemicals manufacturing**
  - Maintaining a production system in and outside of Japan and meeting increased demand.

- **Renewable energy**
  - Operating wind and solar power generation facilities across Japan.

- **ALA**
  - Realizing mass production and lower costs for ALA, an important amino acid for promoting plant growth.

### Cosmo Oil Group Companies

**Legend:**
- **●** Consolidated subsidiary
- **○** Equity-method affiliated company
- ***”** Indicates the 25 group companies covered by the CSR Initiative Policy

As of June 30, 2014

**Oil Exploration and Production**

- Crude oil procurement, exploration and production
  - Cosmo Energy Exploration & Production Co., Ltd.*
  - Abu Dhabi Oil Co., Ltd. (Japan)*
  - Qatar Petroleum Development Co., Ltd. (Japan)
  - Cosmo Oil Ashmore Co., Ltd. (Japan)

- Import/Export of crude oil and petroleum products
  - Cosmo Oil K.K. Plc.*
  - Cosmo Oil International Pte. Ltd.*
  - Cosmo Oil of U.S.A. Inc.*

- Storage
  - Okinawa CTS Corp.

**Refining and Sales**

- Refining and manufacturing
  - Cosmo Oil Co., Ltd.*
  - Cosmo Oil Lubricants Co., Ltd.*

- Transport in Japan
  - Taizai Oil Terminal Co., Ltd.
  - Hokuto Kogyo Co., Ltd.*
  - Cosmo Kaiun Co., Ltd.*
  - Cosmo Techno Yokkaichi Co., Ltd.*
  - Kansai Cosmo Logistics Co., Ltd.*

- Sales in Japan
  - Tohoku Cosmo Gas Co., Ltd.
  - Osaka Gas Center Co., Ltd.
  - Chiba Cosmo Koun Co., Ltd.
  - Cosmo Lubricants Services Co., Ltd.
  - Yokkaichi LPG Terminal Co., Ltd.
  - Tosco Car Support Co., Ltd.
  - TOCOS Car Support Co., Ltd.
  - Osaka Gas Center Co., Ltd.
  - Antisco Co., Ltd.
More crude oil exploration and production
- Increasing production in existing lots in Qatar
- Ongoing drilling in promising lots
- Starting early production in the new Hail oilfield in Abu Dhabi

Stronger initiatives for profit stabilization
- Reconstructing the supply system
- Strengthening the retail business (Cosmo Smart Vehicle)

Safe and stable refinery operations
- Revising business continuity plan (BCP)
- Improving safety management systems

Strengthening the para-xylene (PX) business
- Starting full production of PX in South Korea

Strengthening the renewable energy business
- Starting full operation of the solar power generation business
- Expanding profits in the wind power generation business

Expanding the ALA business
- Expanding ALA applications in the healthcare, cosmetics, and health food fields

Export of petroleum products
- Exporting petroleum products from Japan, according to demand

Transport in Japan
- Selecting the means of transport, taking cost, distance and location into consideration

Sales in Japan
- Supporting motoring lifestyles through service station sales, while emphasizing regional characteristics

Distribution and sales
- Stockpiling at least 70 days’ worth of private crude oil reserves

Research and development
- Researching more advanced manufacturing technologies and developing environmentally friendly products

Petrochemicals manufacturing
- Cosmo Matsuyama Oil Co., Ltd.*
- CM Aromatics Co., Ltd.
- Maruzen Petrochemical Co., Ltd.
- Hyundai Cosmo Petrochem Co., Ltd.
- Cosmo Engineering Co., Ltd.*
- Cosmo Trade & Service Co., Ltd.*
- Cosmo Business Associates Co., Ltd.*
- Cosmo Computer Center Co., Ltd.*
- Cosmo Research Institute*
- Cosmo Sea Farming Inc.
- TOCOS Enterprise Co., Ltd.
- Kojima Fureauto Hokkotsu Minami Co., Ltd.
- Sanshinoya Co., Ltd.

Wind power generation
- Aida Wind Power Laboratory Co., Ltd.
- GotoKihoku Wind Power Laboratory Co., Ltd.
- Kita Eco Park Co., Ltd.
- Wakkanai Wind Power Co., Ltd.
- Takahama Wind Power Laboratory Co., Ltd.
- Eco World Kuzumaki Wind Power Co., Ltd.

Petrochemicals

Environment

Other Businesses
- Summit Trading Co., L.L.C.
- Musashi International Co., W.L.L.
- Abu Dhabi Enterprises (Japan) Co., Ltd.
- A.D. Marine Inc.
- Cosmo Oil (Shanghai) Co., Ltd.
- Cosmo Oil Europe B.V.
Message from the President

“The Cosmo Oil Group is united in socially responsible management, working to earn public trust and to help build a more sustainable society.”

Socially Responsible Management at the Cosmo Oil Group

Fiscal 2013 marked the first year of the Fifth Consolidated Medium-Term Management Plan that will guide the Cosmo Oil Group through the next five years. Under the plan, we are redoubling our focus on socially responsible management. As a corporate group that handles petroleum products so important to people’s everyday lives, we must ensure that our business fulfills all of our corporate social responsibilities. We are determined to earn the trust and meet the expectations of our many stakeholders, including customers, shareholders, people in local communities, and the broader society.

In response to the damage that occurred during the 2011 Great East Japan Earthquake and the asphalt leak accident that we experienced in June 2012, we have even further heightened our emphasis on safety and stable operations. One of the priorities that we outlined in the CSR Initiative Policy (Fiscal 2013–2017) is to practice uncompromising safety management. In order to improve our safety and risk management, we established a Refinery Safety Reform Committee and created a Risk Management Unit, adding these into our corporate structure. These measures, together with the initiatives conducted at work sites, have helped to reinforce the safety framework and kept safety practices at our refineries at an all-time high.

In fiscal 2014, we will continue to position safety front-and-center every day at refineries and all other Group facilities, aiming to build an unshakeable bedrock of safety culture across the Group. Another priority that we have outlined in the CSR Initiative Policy is to make sure everyone always works with integrity. This has brought a renewed focus on rigorous compliance with all regulations and rules, even in the smallest daily tasks, and we are communicating this stance to all stakeholders.

Supply Framework

With petroleum demand in Japan projected to continue declining, we conducted an overall review of our refineries including such factors as location and production volume. As a result, we shut down the refinery operations of the Sakaide Refinery in July 2013, leaving three operating refineries. In April 2014, the former refinery officially became the Sakaide Distribution Terminal. We will fulfill our responsibility to supply Shikoku and other regions from the terminal, which is the Group’s largest logistics facility in western Japan and also serves as an emergency supply point.

Cosmo Oil has signed an MOU with the Tonen General Sekiyu Group on collaboration between our Chiba Refinery and the Chiba refinery operations of Kyokuto Petroleum.

Keizo Morikawa
President, Cosmo Oil Co., Ltd.
Industries, a subsidiary of Tonen. Under the MOU, the partners will form a joint company to pursue synergies that will enhance international competitiveness, taking concrete measures such as constructing a pipeline linking the refineries and achieving joint facility optimization.

Alliances with Japanese and International Partners

The Cosmo Oil Group will pursue alliances with ideal business partners in each business segment and region, as we seek to maximize corporate value. We regularly meet with IPIC to explore potential joint projects. This led to a strategic comprehensive cooperation agreement with CEPSA of the IPIC Group in fiscal 2013 aimed at expanding petroleum exploration. In the LP gas business, the Group has been discussing integrating the wholesale operations of Cosmo Oil, Showa Shell Sekiyu K.K., Tonen General Sekiyu K.K., Sumitomo Corporation, and Enensance Holdings Co., Ltd., which was established in 2008 by Showa Shell Sekiyu (51% stake) and Sumitomo Corporation (49% stake). Through these efforts to strengthen revenues in our business segments, we are aiming to become a vertically integrated global energy company.

A Trusted Corporation That Contributes to the Larger Community

The Cosmo Oil Group has pledged its commitment to the United Nations Global Compact since 2006, under which we are advancing initiatives that adhere to its basic principles in the areas of human rights, labor standards, the environment and anti-corruption. These basic principles are conveyed in our Cosmo Oil Group Code of Conduct to guide the conduct and shape the attitudes of our employees. We expect each employee to contribute to our mission of ensuring the safe operation of refineries and a stable supply of petroleum products. This is the foundation of our effort to earn public trust as an energy company that helps build a more sustainable society.

In fiscal 2014, the Group will work as one to practice socially responsible management as we work toward the overall objective for fiscal 2017 in the CSR Initiative Policy: “Earning social trust and always making a positive contribution to society.”

Corporate Organization

Cosmo Oil Co., Ltd. has been reviewing its organizational structure to better position the Group to deliver on the Fifth Consolidated Medium-Term Management Plan. Under the plan, the Company spun off its oil exploration and production business, forming Cosmo Energy Exploration & Production Co., Ltd. in February 2014 to facilitate nimble reengineering and expanding the scope of its influence across the Group. The Company also consolidated sales services and strengthening industry operations. The subsidiary functions like a department within the Cosmo Oil Head Office, implementing ongoing business process reengineering and expanding the scope of its influence across the Group. The Company also consolidated sales promotion for Cosmo Oil Group service stations and auto leasing operations under Cosmo Trade & Service Co., Ltd., to strengthen support.

New Organization (As of June 30, 2014)

1. The International Petroleum Investment Company (IPIC) is a sovereign wealth fund wholly owned by the Emirate of Abu Dhabi, the largest member of the oil-producing United Arab Emirates (UAE). It was established with the aim of constructing an oil industry value chain funded by the country’s own crude oil. IPIC mainly invests in oil and petrochemical companies outside the Emirate of Abu Dhabi.

2. Compañía Española de Petróleos, S.A.U. (CEPSA) is an integrated petroleum company based in Spain.
In order to realize the Management Vision of the Cosmo Oil Group, all employees are conscientiously engaged in CSR activities. CSR management is being promoted under the Consolidated Medium-Term Management Plan and the CSR Initiative Policy, based on the Cosmo Oil Group Code of Conduct.

### 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.

### Cosmo Oil Group Code of Conduct

**Chapter 1** We strive to deliver stable energy supplies

**Chapter 2** We aspire to become a safe, accident-free company

**Chapter 3** We value people

**Chapter 4** We take care of the global environment

**Chapter 5** We value communications with society

**Chapter 6** We strive to maintain our position as an honest company

### Fifth Consolidated Medium-Term Management Plan


Under the Fifth Consolidated Medium-Term Management Plan (Fiscal 2013–2017), the Group intends to improve its position mainly by increasing profitability in the oil refining and marketing business, while working towards a resumption of dividend payments. Over the long term, the Group aims to become a vertically integrated global energy company that contributes to society.

### CSR Initiative Policy

**Filling Up Your Hearts and Safety**


While promoting CSR management based on the Management Plan and CSR Initiative Policy, all employees of the Cosmo Oil Group perform their work conscientiously in order to realize the Management Vision and meet the expectations of society.
Corporate message to customers
“Filling Up Your Hearts, Too”

Corporate message to society
“Living with Our Planet”

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

“Six Programs” under the Basic Policy

1. Further Enhancement of Safe Refinery Operation and Stable Supply
   See Special Feature 1 on p. 9

2. Extensive Rationalization Focusing Mainly on the Supply Division
   Related information

3. Strengthening the Retail Business
   See Special Feature 3 on p. 11

4. Petrochemical Business
   See Special Feature 2 on p. 12

5. Oil Exploration & Production Business
   See Special Feature 2 on p. 11

6. Renewable Energy Businesses
   See Special Feature 4 on p. 15

Five Priority Items in the CSR Initiative Policy

1. Strict safety management
   Priority Item
   p. 18

2. Working with integrity
   Priority Item
   p. 22

3. Enhancing human rights/personnel policies
   Priority Item
   p. 25

4. Promoting environmental initiatives
   Priority Item
   p. 29

5. Implementing better internal and external communication
   Priority Item
   p. 32

1. See p. 12 for more information concerning Hyundai Oilbank.

Basic Policy
Five years to establish a solid business foothold for further expansion

- Regain profitability in the oil refining and marketing sector
- Secure stable income from investments made during the previous medium-term management plan
- Further strengthen alliances with IPIC and Hyundai Oilbank
- Further enhance CSR management

Long-term goal
Vertically integrated global energy company

Initiative Themes

- Safety and Integrity (Restore social trust)
- Sharing and Self-driven (Share across the organization until established as routine)

Goal for Fiscal 2017
Cosmo Oil Group—Earning social trust and always making a positive contribution to society
New Group Business Continuity Plan Covers the Supply Chain to Ensure Preparedness for a Large-Scale Disaster

Cosmo Oil has revised its original business continuity plan (BCP) and developed a new Group BCP that covers its supply chain. This effort is part of its commitment to ensuring a stable supply of petroleum products even after a large-scale disaster. The new BCP will help to ensure that the Group is positioned to quickly supply petroleum products even if a large-scale disaster hits, such as a major earthquake in Tokyo or the Nankai Trough.

Comprehensive Review of BCP and BCP Manual

Cosmo Oil originally developed a BCP and BCP manual in June 2006 based on the scenario of a major earthquake in Tokyo, to secure business execution in a large-scale disaster. Subsequent events—such as the Great East Japan Earthquake in 2011 and an organizational change that saw the creation of the CSR & Environmental Affairs Department (now the CSR Management Department) under the Risk Management Unit in June 2013—necessitated a comprehensive review of the risk management framework and BCP manual. Meanwhile, the Company developed a new Group BCP that covers the whole supply chain, from refineries to service stations. These efforts are consistent with guidelines from the Petroleum Association of Japan that aim at public-private cooperation for energy security.

Systematic Targets for Securing Rapid Delivery of Petroleum Products

A new manual was also created for the Group BCP based on the latest scenario from the Cabinet Office of Japan concerning a major earthquake in Tokyo or the Nankai Trough. Risk assessments were conducted at each division using the manual, and specific targets were set for the length of time needed to rapidly restore shipments from refineries and reopen service stations in disaster areas. These targets were adopted as company-wide targets, in order to facilitate business continuity efforts at the divisional level by clearly identifying the actions to take and challenges to overcome.
Cosmo Oil has reviewed its organizational framework for the response to a large-scale natural disaster based on the newly developed Group BCP, and reorganized the Crisis Response Headquarters (see the chart at left) in order to achieve targets for rapidly restoring shipments. The headquarters includes specialized teams such as a refinery restoration team which would collaborate with the Cosmo Oil Head Office and refineries to achieve quick operational recovery. Each team has designated personnel to work on initial response and securing business continuity.

### Group BCP for Securing the Entire Supply Network

Under the Group BCP, which sets unified business continuity policies, the Group will conduct joint drills aimed at securing the product supply in an emergency throughout its entire supply network including refineries, oil depots, transport companies, and service stations. The Group is additionally installing portable fuel pumps, satellite phones, and emergency power generators at some 400 service stations across Japan. As of March 2014, the equipment had been supplied to 257 stations.
Expanding International Partnerships as a Vertically Integrated Global Energy Company

Cosmo Oil has formed a strategic agreement in the oil-related business with Compañía Española de Petróleos, S.A.U. (CEPSA) in order to look into the potential for joint business in oil and gas exploration.

Cosmo Oil has been involved in oil exploration and production for more than 40 years in the Middle East, specifically in the Emirate of Abu Dhabi, United Arab Emirates (UAE).

Promoting Independent Oil Exploration and Production

Cosmo Oil has been involved in oil exploration and production for more than 40 years in the Middle East, specifically in the Emirate of Abu Dhabi, United Arab Emirates (UAE).

Joint Projects in Oil and Gas Exploration

Cosmo Oil has formed a strategic agreement in the oil-related business with Compañía Española de Petróleos, S.A.U. (CEPSA) in order to look into the potential for joint business in oil and gas exploration.

Strategic Comprehensive Cooperation Agreement with CEPSA

In January 2014, Cosmo Oil reached agreement with CEPSA, a leading integrated petroleum company based in Spain that is part of the IPIC Group, to identify and develop mutually beneficial opportunities for exploration and business. Under the agreement, the companies will focus on jointly obtaining new oil and gas concessions to reinforce their growing exploration and production businesses. The two companies will jointly pursue new business opportunities created by their cooperation.

In January 2014, Cosmo Oil reached agreement with CEPSA, a leading integrated petroleum company based in Spain that is part of the IPIC Group, to identify and develop mutually beneficial opportunities for exploration and business. Under the agreement, the companies will focus on jointly obtaining new oil and gas concessions to reinforce their growing exploration and production businesses. The two companies will jointly pursue new business opportunities created by their cooperation.
Cosmo Oil is actively pursuing business outside of Japan by further strengthening alliances with IPIC and Hyundai Oilbank, as a basic strategy under the Consolidated Medium-Term Management Plan. Seeking to increase corporate value, Cosmo Oil is expanding upstream development to better position itself to secure stable energy supplies and address increased global demand for petrochemical products.

Ramping Up the Paraxylene Business in South Korea

Cosmo Oil operates a joint venture with Hyundai Oilbank. In January 2013, the venture opened new manufacturing facilities with an annual production capacity of 800 kilotonnes, making the venture one of the world’s leading paraxylene manufacturers.

Responding to Growing Global Demand for Petroleum Products

The venture, Hyundai Cosmo Petrochemical Co., Ltd., was established in November 2009 and then acquired paraxylene manufacturing facilities (380 kt of annual production capacity) in Daesang, South Korea from Hyundai Oilbank in February 2010. New 800 kt facilities were built and commercial production started in January 2013. The joint venture is now a world leader in paraxylene manufacturing, with a total annual production capacity of 1,180 kt.

Cosmo Oil will respond to growing demand for petrochemical products in China and the rest of Asia, pursuing opportunities for business partnerships and joint ventures in a wide range of fields.

Employee Viewpoint

Hyundai Cosmo Petrochemical operates Cosmo Oil’s only petrochemical plant outside of Japan. The joint venture manages paraxylene manufacturing facilities and develops strategies to improve revenues. The cooperation of our South Korean colleagues is vital, but cultural gaps can get in the way. Internally, we all communicate in English, but since neither Japanese nor Korean staff speak English natively, we have to choose our words carefully.

I am studying the Korean language, history and culture so that I can better understand our local staff. Going forward, our goal is to become the leading petrochemical company in our region. Looking ahead, I want to keep developing my international and cross-cultural communication skills so that I can tackle new challenges.
Cosmo Smart Vehicle

Offering a New Way to Own a Car to Support Motoring Lifestyles

Cosmo Smart Vehicle—A New Way to Own a Car

Cosmo Smart Vehicle is a car lease product offered via the Cosmo Oil Group's service stations. Consumers make fixed monthly payments to use a vehicle for a fixed term, which includes all costs such as mandatory inspections, insurance, taxes, and maintenance. The product is ideal for consumers who find it bothersome to deal with these costs separately. Consumers also receive discounts on fuel, as the product more broadly supports everyday motoring lifestyles than a conventional car lease can. Cosmo Smart Vehicle offers an entirely new way to own a car, adding new energy to motoring lifestyles.

New Business Model Developed in a Group Effort

Cosmo Smart Vehicle is a lease product unlike any other car lease, developed collectively by the Cosmo Oil Group in an effort to create a completely new business. It also represents a new business model that leverages Cosmo Oil's network of service stations across Japan to provide total support for the motoring lifestyles of consumers. Numerous hurdles had to be overcome in bringing the product to market, including the difficulty in partnering with a leasing company. The eventual success is a credit to the dedication of the employees involved in developing the product and the corporate support they received. The Cosmo Oil Group is working hard to energize motoring lifestyles and further expand the services provided by Cosmo Smart Vehicle.

Cosmo Smart Vehicle Tops 10,000 Vehicles Leased

Cosmo Smart Vehicle, an independent service targeting service station users, was launched in earnest in April 2011. Since then, the service has proven to be particularly popular among women and seniors, who often find it bothersome to deal with the various formalities required by car ownership. In February 2014, the service reached a landmark as the 10,000th vehicle was leased. Cosmo Oil will keep working to enhance the service and respond to the motoring lifestyle needs of consumers.

1. The departmental assignment is current as of March 2014.
Cosmo Oil is working on several initiatives to transform its business model to one of providing value for motoring lifestyles by tailoring solutions to consumers. Cosmo Smart Vehicle, at the center of this strategy, offers a new way to own a car. Cosmo Oil aims to enrich the lives of consumers with this new business.

We use our Cosmo Smart Vehicle as a second car. My wife mainly uses it to take the kids to daycare and back. I learned about the service when I was given a flyer while refueling at the Shin-Kashiwa Service Station. I was already thinking about replacing the car that I had driven for the last five years. I compared the service with what car dealers were offering, but the fact that the product included all maintenance costs was the deciding factor. We can get all the maintenance work done when we have to stop in to refuel, so it helps my wife who doesn’t like to deal with these things and also means less bother for me.

The service gives a discount of ¥5 off every liter of gas, so it is also budget-friendly. I think this, combined with the better fuel economy of a mini-car, has reduced our gasoline costs considerably. Cosmo Smart Vehicle is perfect for what we need in a second car—it saves us money and reduces the hassle of owning a car.

Cosmo Oil has gained a following among women and seniors who are less informed about cars and find it bothersome to deal with the formalities of owning a car. In addition to raising service recognition among consumers, the Group is seeking to expand the service by offering more options such as exclusive car models available only through Cosmo Smart Vehicle, in order to appeal to a broader range of consumers. We are working to reshape the motoring lifestyles of consumers through the service—selling the concept of using cars instead of owning them.

Cosmo Smart Vehicle is a new type of car lease service offered at service stations that customers regularly visit and use. Service station staff had to be trained to offer the service, since their customer support was crucial to the success of the service. Following the full-scale launch of the service in April 2011, the Group conducted ongoing and systematic training for some 3,000 service station employees across Japan to ensure product understanding and show them how to share information using success stories of offering and selling the service. Thanks to the effectiveness of this training, the Group exceeded its first-year target for the number of vehicles leased.

Training 3,000 Service Station Employees

Reshaping the Motoring Lifestyles of Consumers

Cosmo Smart Vehicle is working on several initiatives to transform its business model to one of providing value for motoring lifestyles by tailoring solutions to consumers. Cosmo Smart Vehicle, at the center of this strategy, offers a new way to own a car. Cosmo Oil aims to enrich the lives of consumers with this new business.

We use our Cosmo Smart Vehicle as a second car. My wife mainly uses it to take the kids to daycare and back. I learned about the service when I was given a flyer while refueling at the Shin-Kashiwa Service Station. I was already thinking about replacing the car that I had driven for the last five years. I compared the service with what car dealers were offering, but the fact that the product included all maintenance costs was the deciding factor. We can get all the maintenance work done when we have to stop in to refuel, so it helps my wife who doesn’t like to deal with these things and also means less bother for me.

The service gives a discount of ¥5 off every liter of gas, so it is also budget-friendly. I think this, combined with the better fuel economy of a mini-car, has reduced our gasoline costs considerably. Cosmo Smart Vehicle is perfect for what we need in a second car—it saves us money and reduces the hassle of owning a car.

Cosmo Smart Vehicle is a new type of car lease service offered at service stations that customers regularly visit and use. Service station staff had to be trained to offer the service, since their customer support was crucial to the success of the service. Following the full-scale launch of the service in April 2011, the Group conducted ongoing and systematic training for some 3,000 service station employees across Japan to ensure product understanding and show them how to share information using success stories of offering and selling the service. Thanks to the effectiveness of this training, the Group exceeded its first-year target for the number of vehicles leased.

Reshaping the Motoring Lifestyles of Consumers

Cosmo Smart Vehicle has gained a following among women and seniors who are less informed about cars and find it bothersome to deal with the formalities of owning a car. In addition to raising service recognition among consumers, the Group is seeking to expand the service by offering more options such as exclusive car models available only through Cosmo Smart Vehicle, in order to appeal to a broader range of consumers. We are working to reshape the motoring lifestyles of consumers through the service—selling the concept of using cars instead of owning them.

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Training 3,000 Service Station Employees

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Actively Developing the Renewable Energy Business as an Integrated Energy Company

Cosmo Oil has moved aggressively into the mega-solar business in an effort to provide a clean and safe supply of renewable energy in Japan.

Solar Power Plant Built on Former Sites of Oil Depots

In March 2013, Cosmo Oil established CSD Solar, a joint venture with Showa Shell Sekiyu K.K. and the Development Bank of Japan Inc., marking the Company’s full-scale entry into the mega-solar power business. Solar panels will be installed on eight sites, including the Company’s former oil depots whose operations were ended due to streamlined logistics. The panels were made by Solar Frontier K.K., a subsidiary of Showa Shell Sekiyu.

The eight mega-solar sites, which will start operation sequentially as construction is completed, are expected to output a total of 24,000 kW.

Planned Power Generation Facilities

Cosmo Oil is surveying areas with favorable wind conditions and negotiating with local governments and community residents to develop new wind farms.

Cosmo Oil will be a wholesaler of power generated at eight solar power generation facilities across Japan, including five facilities that are scheduled to start operation in fiscal 2014 by the joint venture CSD Solar.

Special Feature 4 Initiatives in the Power Generation Business

Moving into the Mega-solar Power Business

Cosmo Oil has moved aggressively into the mega-solar business in an effort to provide a clean and safe supply of renewable energy in Japan.
Since the Great East Japan Earthquake, renewable energy has been in the spotlight for its potential to help improve public energy security and serve as a major energy source for the future. As an integrated energy company, Cosmo Oil is contributing to the stable supply of energy by proactively expanding its power businesses encompassing wind and solar power generation.

Expanding the Wind Power Generation Business

Cosmo Oil is actively expanding the wind power generation business as a cornerstone of its future growth strategy, endeavoring to increase earnings at EcoPower Co., Ltd. in its renewable energy business under the Fifth Consolidated Medium-Term Management Plan.

Building New Wind Farms

Cosmo Oil is working to achieve the best mix of energy procurement to meet its responsibilities as an integrated energy company. The Company moved aggressively into the wind power generation business in 2010 with the acquisition of EcoPower Co., Ltd., a pioneering wind power generation company with a proven track record. The acquisition of EcoPower is part of Cosmo Oil’s focus on renewable energy as a clean energy solution.

EcoPower currently operates 128 wind turbines across Japan, including in Hokkaido and Tohoku, with a total power generation capacity of some 145,000 kW. Responding to public expectations, Cosmo Oil and its group companies are expanding the wind power generation business by building new wind farms.

Group Effort to Realize Wind Power Generation

The Cosmo Oil Group works on the entire process of wind power generation, from initial surveying of potential wind farm sites to construction, operation, and maintenance, through the collaboration of EcoPower and Cosmo Engineering Co., Ltd., which also oversees plant construction.

Report on Wind Turbine Accidents

On December 5, 2013, the wind turbine blade and other parts fell from the No. 1 turbine at the Ororon Wind Farm in Hokkaido operated by EcoPower. EcoPower formed a committee including an outside expert to investigate the accident. Below is a summary of the causes of the accident and preventative measures that were recommended.

Causes of Accident
1. Lightning conductor inside of blade broke and was no longer functional.
2. Lightning hit, causing the other lightning conductor to melt.
3. Pressure inside of turbine blade rose due to electric discharge, damaging the blade.

Preventative Measures
1. Improve the lightning protection system.
2. Improve the inspections to enhance safety.
3. Suspend turbine operation when indicated by lightning forecasts.

On January 31, 2014, the No. 2 turbine at the Oiwake Soran Wind Farm in Hokkaido was found to have a damaged blade tip and fallen parts. With input from outside experts, the inspection concluded that the damage was caused due to inadequate maintenance, and possible preventative measures were proposed. These accidents are being taken seriously by EcoPower, which is working to improve operational safety by implementing preventative measures.
Under the CSR Initiative Policy (Fiscal 2013–2017), the Group prioritizes the following five areas: strict safety management, working with integrity, enhancing human rights/personnel policies, promoting environmental initiatives, and implementing better internal and external communication. Specific action themes for each priority item have been identified to ensure socially responsible management.

<table>
<thead>
<tr>
<th>Fiscal 2013–2017</th>
<th>Initiative Themes</th>
<th>Fiscal 2013 Initiative Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Strict safety management</td>
<td>Safety management initiatives for refineries by Refinery Safety Reform Committee</td>
<td>Enhanced PDCA-based management, Set management indicators, identified issues at each refinery and set tasks, evaluated execution and progress, Executed priority measures for safety, maintenance and operational management, Created detailed handover rules between construction and operation, prepared reference materials to improve maintenance precision, and modified manuals to facilitate technology transfer.</td>
</tr>
<tr>
<td></td>
<td>Group-wide safety management initiatives by Group Safety Promotion Committee</td>
<td>Implemented safety initiatives for each division, Implemented safety and environmental inspections, Reviewed committee contents and frequency of meetings.</td>
</tr>
<tr>
<td>2. Working with integrity</td>
<td>Emphasize CSR, ensure compliance, and increase employee understanding of Code of Conduct</td>
<td>Revised the corporate ethics training, Revised the BCP to account for possibility of major earthquakes in Tokyo and Nankai Trough, Reviewed the risk matrix.</td>
</tr>
<tr>
<td></td>
<td>Restructure risk management structure</td>
<td>Group-wide quality management by Quality Assurance Committee, Comprehensively executed measures to eliminate quality problems.</td>
</tr>
<tr>
<td>3. Enhancing human rights/personnel policies</td>
<td>Increase work efficiency and better manage working hours</td>
<td>Reduced the total hours worked per year (1,966 hours/person versus target of 1,900 hours/person).</td>
</tr>
<tr>
<td></td>
<td>Encourage work-life balance</td>
<td>Launched the Cosmos Project, Encouraged employees to utilize programs and benefits.</td>
</tr>
<tr>
<td></td>
<td>Create workplaces with respect for diversity</td>
<td>Maintained and improved employment rate of people with disabilities (2.07% versus legal requirement of 2.00%), Encouraged hiring of persons aged 60 years and over (employed 100% of persons who wished to keep working).</td>
</tr>
<tr>
<td></td>
<td>Maintain/improve mental and physical health</td>
<td>Provided online health management tool (34% of employees received an A rating, up from 31% over previous year).</td>
</tr>
<tr>
<td></td>
<td>Eliminate power/sexual harassment</td>
<td>Training to secure comprehensive awareness.</td>
</tr>
<tr>
<td>4. Promoting environmental initiatives</td>
<td>Respond strategically to prevent global warming</td>
<td>Reduced annual CO2 emissions (by 833 kt, through efficiency improvements to refinery operations).</td>
</tr>
<tr>
<td></td>
<td>Reduce environmental impact</td>
<td>Operation of wind and solar power generation facilities, Reduced industrial waste (achieved final disposal rate of 0.35% at Cosmo Oil and 4.01% for Group).</td>
</tr>
<tr>
<td></td>
<td>Promote environmental contribution activities</td>
<td>Promoted Eco Office activities (Cosmo Oil reduced copy paper by 10.9%, company car fuel consumption by 13.5%, and office electricity consumption by 7.8% compared to goals, and achieved green purchase rate of 89.4%).</td>
</tr>
<tr>
<td>5. Implementing better internal and external communication</td>
<td>Community initiatives</td>
<td>Conducted Cosmo Forest activities (five events in Chiba, Sakai and Matsuyama cities).</td>
</tr>
<tr>
<td></td>
<td>Social initiatives</td>
<td>Conducted cleanup campaigns (held at 39 locations, with 14,772 participants).</td>
</tr>
<tr>
<td></td>
<td>Internal and external corporate communications</td>
<td>Held CSR liaison meeting of CSR managers from affiliated companies.</td>
</tr>
</tbody>
</table>
Fiscal 2013 Safety Initiatives

<table>
<thead>
<tr>
<th>Divisions</th>
<th>Highlights of Main Safety Initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 refineries and Cosmo Matsuyama Oil</td>
<td>• Working group activities of Refinery Safety Reform Committee in four areas</td>
</tr>
<tr>
<td>Cosmo Oil Lubricants (manufacturer of lubricating oil)</td>
<td>• Review of work manuals and securing adherence to manuals</td>
</tr>
<tr>
<td>Cosmo Petroleum Gas (LPG storage/delivery)</td>
<td>• Enhancement of safety education to raise safety awareness, increase safety, and eliminate work-related accidents</td>
</tr>
<tr>
<td>Crude Oil &amp; Tanker Dept. and Petroleum Product Dept. (product import/export)</td>
<td>• Safety inspections, legal compliance inspections</td>
</tr>
<tr>
<td>Cosmo Kaiun (sea shipments)</td>
<td>• Safety training for employees and dealers</td>
</tr>
<tr>
<td>Cosmo Delivery Service (ground shipments)</td>
<td>• Biannual on-site audits of delivery companies (for all 75 garages)</td>
</tr>
<tr>
<td>Oil depots</td>
<td>• Various training</td>
</tr>
<tr>
<td>Sales &amp; Marketing Coordination Dept. (Service Station)</td>
<td>• Collection of 20,000 cases of near-miss accidents and provision of feedback</td>
</tr>
<tr>
<td>Research and Development Center</td>
<td>• Emergency drills on leaving the berth</td>
</tr>
<tr>
<td>Cosmo Engineering</td>
<td>• Preparation of work manuals for each oil depot</td>
</tr>
</tbody>
</table>

Main Safety Initiatives at Refineries

Refinery Safety Reform Committee Established

In March 2013, the Cosmo Oil Group established a Refinery Safety Reform Committee headed by the president, operationalizing the Group’s strong management emphasis on refinery safety and stable operations. The committee focuses on safety management, maintenance management, operation management and human resources development. In each area, the committee identifies and analyzes issues to improve safety infrastructure, and reviews and verifies initiatives and measures.

In fiscal 2013, the committee established a system for ensuring the implementation of plan-do-check-act (PDCA) cycles, emphasizing the visualization of initiatives. Moving forward, the committee will advance practical safety activities and prepare frameworks for accident prevention. In addition, a Safety Caravan program was launched to carry out dialogue between the committee secretariat and production floor employees at each refinery.
Safety and Environmental Inspections at Refineries
The Cosmo Oil Group has established the Group Safety Promotion Committee in the Cosmo Oil Head Office in order to advance safety management across the Group. The committee implements safety and environmental inspections for refineries and for Head Office divisions and Group companies. In fiscal 2013, inspections were conducted at 12 sites and divisions, including four refineries.

Cosmo Oil Small Group Initiatives and Proposals
Refineries operate small safety circles in every workplace to facilitate improvements, aiming to achieve safer operations, stable supply, and even better competitiveness. Representative groups from each refinery then gather at an annual presentation meeting to share the results of their activities. The fiscal 2013 meeting included a safety group from Qatar Petroleum Development Co., Ltd.

Safety Initiatives in Transport

Crude Oil Tanker Emergency Drills
An emergency drill was conducted under the scenario of a pirate attack on a crude oil tanker traveling from the Middle East to Japan. The drill was triggered by a simulated emergency call from the company that operates Cosmo Oil’s private vessels, with staff assembling on short notice to verify the emergency response and information sharing. Issues that arose during the drills were studied and used to strengthen the emergency response framework.

Safety Initiatives at Service Stations

Group-wide Inspection for Sign Poles at Service Stations
In July 2011, the Cosmo Oil Group started inspection of sign poles at all service stations to prevent topple or collapse of signage. The Group inspected 3,000 poles in two years and conducted repairs and replacement of poles as necessary.

The Group also has established response frameworks for typhoons and other major natural disasters in order to rapidly ascertain damage at service stations, prevent secondary damage from occurring, and quickly restore operations.

Key Improvements to Safety and Environmental Inspections at Refineries in Fiscal 2013
- A specialist on the Fire Service Act was added to the refinery inspection team, to provide a valuable third-party perspective so that the team can make effective improvements and provide guidance.
- Instead of conducting separate summary meetings on inspection results for each site, employees of four refineries and Cosmo Matsuyama Oil gathered at the Cosmo Oil Head Office to jointly discuss issues and solutions. This will effectively strengthen the safety and environmental management.

Strict Safety Management
Representing the petroleum refining and wholesaling industry, the Petroleum Association of Japan formulates voluntary action plans to secure industrial safety in Japan. Cosmo Oil is committed to implementing these industry action plans, developing and implementing initiatives to fulfill its social responsibility as a petroleum company.

### Industry Collaboration on Industrial Safety

#### Highlights of Initiatives Implemented by Cosmo Oil

**Group-wide Voluntary Safety Initiatives**

The secretariat of the Refinery Safety Reform Committee conducts “Safety Caravan” dialogs with production floor employees at each refinery, aiming to improve communication between the Head Office and refineries. Refineries also develop safety frameworks driven by group leaders to ensure their voluntary initiatives perform well.

**Setting Targets for Industrial Safety**

- Fiscal 2014 Cosmo Oil Group Safety Policy: Establish “a culture of safety” for compliance in good faith
- Fiscal 2014 Safety Goal for Refineries: Maintain a record of zero fires, explosions, off-site leaks, major leaks, and serious work-related accidents

**Management Commitment to Industrial Safety**

The Cosmo Oil Group stands united in its mission to ensure the safe operation of refineries and a stable supply of petroleum products. We are working harder than ever on our CSR initiatives with the goal of earning the complete trust of the public.

(The management commitment was communicated through the Cosmo Oil Corporate Report and other avenues.)

**Preventing Industrial Accidents Related to Natural Disasters**

- Revision of business continuity plan (BCP) manual: The original plan was redesigned to be applied to the entire supply chain including refineries and service stations, in consideration of disaster scenarios involving the possibility of major earthquakes in Tokyo and the Nankai Trough.
- Upgraded seismic standards for high-pressures gas facilities: Facilities were assessed in order of priority, from the standpoint of preventing damage from a major earthquake and based on experiences in the Great East Japan Earthquake. Necessary seismic upgrades are underway.

#### Safety Management by Cosmo Oil Head Office

The Refinery Safety Reform Committee headed by the president was launched in March 2013. The committee is responsible for securing safe operations and stable supply through management involving the execution of Plan-Do-Check-Act (PDCA) cycles for the progress of refinery safety measures, and to evaluate and improve the measures.

#### Survey and Assessment of Target Achievement and Execution of Measures

Based on the revised target framework, which links group-wide safety targets with refinery measures, the Refinery Safety Reform Committee receives regular reports from refineries and conducts assessments.

#### Implementation Plan for Industrial Safety Measures

**A. Concrete measures to reduce accidents**

1. **Facility management (corrosion, etc.)**
   - Collection of reference materials to improve maintenance precision.

2. **Preventing human errors**
   - Hazard prevention meetings to identify potential risks in irregular operations, and initiatives to increase safety awareness such as calling out before carrying out operations.

3. **Preparation of procedures and manuals**
   - Expansion of existing manuals with the addition of diagrams, photographs, and past troubleshooting examples to facilitate technology transfer to younger operators.

**B. Training and drills**

- Hands-on and emergency drills to raise hazard awareness and case-study meetings on internal and external accidents.
Chiba Refinery: LPG Tanks Rebuilt

LPG tanks at the Chiba Refinery, which were damaged in a fire that occurred in the Great East Japan Earthquake (March 2011), restarted operation in July 2013 after completing reconstruction in May 2013 with modifications to address the causes of the fire. The tanks were originally full at the time of the earthquakes and toppled over, causing piping to break and leaking LPG which caught fire. The eight LPG tanks that were not damaged in the earthquake also received the same modifications.

Modifications to Prevent Future Accidents

- Raised the seismic standards for full tanks
- Redesigned the piping to have greater tolerance for expansion and contraction
- Separated areas where pipes branch off, so that the sections are independent of each other
- Added piping cutoffs for when tanks are full
- Improved the sprinkler piping
- Redesigned emergency shutoff valves to operate independently
- Installed a flammable gas detection and warning panel
- Improved the emergency operation system
- Improved the footing to address liquefaction

Chiba Refinery: Centralized Smokestack Repainted

After accidents in 2011 and 2012, the Chiba Refinery suspended operation for an extended period before recently restarting. To show again the determination to ensure safe and stable operations, the centralized smokestack was repainted for the first time in 20 years. Under the six programs of the Consolidated Medium-Term Management Plan, the Group is investing ¥28 billion in refurbishments of the Chiba Refinery to address overall infrastructure aging.

Sakaide Refinery: Dismantling of Refining Equipment

As part of changes to the Group’s supply framework, all refining operations at the Sakaide Refinery were shut down in July 2013 to convert the facility into a distribution terminal. The refining equipment will be dismantled in two years. Very rare in Japan, this is the first such project to be undertaken by the Cosmo Oil Group. Now called the Sakaide Distribution Terminal, the facility will partner with Cosmo Engineering Co., Ltd. to take every safety precaution in carrying out the project, working closely with administrative agencies and business partners.

Voice

Mitsuharu Matsumoto
Oil Terminal Section, Sakaide Distribution Terminal, Cosmo Oil Co., Ltd.

The dismantling project is already one-third completed as of June 2014. I was involved with operating the refining equipment for some 40 years since joining the company, so it is somewhat sad to be dismantling it.

When we first started the project, the dismantling subcontractors were not familiar with the refining equipment or the rules at our site, causing repeated unexpected actions. We corrected these actions by training and ensuring adherence to our site rules, for everyone from the foremen and supervisors of the general contractor to the workers. We are now working smoothly together with excellent communication, sharing information at daily progress meetings and construction safety meetings for key operations.

The dismantling project requires a lot of cutting using gas burners. Despite our initial concerns about residual hazardous substances such as petroleum and flammable gases, almost none have been detected through residual oil checks and gas detection. The dismantling is going smoothly because our colleagues took great care in shutting down the equipment, knowing the purpose and methods by which we would be dismantling the operations. We will make every effort to see that their efforts do not go to waste and finish the project without accidents.
Compliance Promotion

Corporate Ethics Promotion Framework

As the organization responsible for the execution of matters under the CSR Promotion Committee, the Corporate Ethics Committee has been established to decide, promote, and implement basic policy relating to corporate ethics. The Corporate Ethics Promotion Office has also been set up to serve as a facilitator for the Committee.

Additionally, the Cosmo Oil Group has set up helplines within the Group and at an outside law firm by which employees or persons outside the Group can discuss legal or ethical problems concerning Group operations. Details of the report and the Group’s response to the reported issues are forwarded to the Corporate Ethics Committee and are reflected in future activities. There is also a consultation helpline within the Human Resource Department for matters related to sexual and power harassment.

Corporate Ethics Training

The Cosmo Oil Group conducts annual corporate ethics training for employees. In fiscal 2013, the training focused on keeping consistent personal/organizational awareness of corporate ethics; raising sensitivity to underlying issues; and promoting identification, discussion, and correction of problems. The format was changed from a lecture format to a participatory workshop. Employees were asked to discuss everyday situations that might happen at the Cosmo Oil Group to raise their ethical awareness. The new format was welcomed, and participants found the content easy to understand and stated that it improved their ability to think through situations and exposed them to new points of view.

Fiscal 2013 Results for Corporate Ethics Training

<table>
<thead>
<tr>
<th>Training Category and Theme</th>
<th>Participants</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>New employees</td>
<td>66</td>
<td>2–3</td>
</tr>
<tr>
<td>Newly promoted line managers</td>
<td>29</td>
<td>1.5</td>
</tr>
<tr>
<td>Training at work sites</td>
<td>3,250</td>
<td>1.5</td>
</tr>
</tbody>
</table>

1. Conducted 73 sessions at all 36 work sites
Pursuing Customer Satisfaction

Securing Trust in Petroleum Products

Initiatives to Eliminate Quality Problems
The Quality Assurance Committee operates out of the Cosmo Oil Head Office and is responsible for establishing the group-wide framework for quality assurance. For fuel oils, the committee is focusing on safety management in two areas: thorough measures to secure safety and stable supply, and ensuring prompt and appropriate response if a product issue arises.

In fiscal 2013, there was a mixed-oil accident at a Cosmo Oil service station caused by human error during unloading. The rapid initial response prevented further escalation. In order to prevent similar accidents, the Group enforced a procedural checklist for loading and unloading operations that all employees must follow, improving mutual checks with the receiving station.

“Filling Up Your Hearts, Too” Declaration
Under the “Filling Up Your Hearts, Too” Declaration, the Cosmo Oil Group is working hard to give customers a true sense of comfort, peace of mind, and trust when they visit service stations.

Cosmo Oil Group Promises
True to the “Filling Up Your Hearts, Too,” Declaration, Cosmo Oil is working to fulfill the following three brand promises to customers.

<table>
<thead>
<tr>
<th>Comfort</th>
<th>Customers will be greeted with a welcome and a smile at clean Cosmo Oil service stations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peace of mind</td>
<td>Cosmo Oil service stations will offer quality-assured products and services.</td>
</tr>
<tr>
<td>Trust</td>
<td>Cosmo Oil service station staff will be responsible for their answers to customers’ queries.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Evaluation for Three Promises</th>
<th>Customer Center</th>
<th>Securing compliance and environmental consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation for CSR</td>
<td>Cosmo Oil Eco Card Fund</td>
<td>Business continuity planning</td>
</tr>
</tbody>
</table>

Providing value for motoring lifestyles
Under the brand promises of providing comfort, peace of mind, and trust, the Group is transforming its business model from that of petroleum sales focusing on fuel oils, to one of providing broad-based value for motoring lifestyles.
Ensuring Customer Support

The Cosmo Oil Customer Center facilitates communication with customers through a support phone line, which has been available 24 hours a day since 2010.

In fiscal 2013, the overall number of inquiries to the support line remained about the same as the previous year. Calls with customer feedback, however, were down by 104, or 15%, to 619 calls.

Sample Comments Received by Customer Center

- **Praise**: When I went to fill up at around 9:00 p.m., the service station staff came out to greet me even though it was night. They bowed to every single departing car. I was quite impressed and it put me in a good mood.

- **Feedback**: I chose to fill up at a full service station, but when I pulled in, the three employees were taking amongst themselves, and they didn’t bother to greet me or guide me into a bay. They didn’t act friendly and I had a poor experience.

Response from the service station operator: Our staff always take the effort to make our customers happy, so it is great to receive this kind of praise.

Response from the service station operator: We verified that this took place using surveillance camera footage. We have addressed the topic with all of the staff.

Service Evaluations for Fulfillment of Three Promises

The Cosmo Oil Group focuses intently on customer satisfaction. The Group surveys its customers to assess the level of comfort, peace of mind and trust provided by service stations and reviews the fulfillment of the Three Promises made to customers.

The assessment approach was updated in fiscal 2013 to emphasize customer intention to return to the same service station. The survey was conducted at 2,144 service stations and found that 24.7% of those surveyed earned both a very high customer revisit intention and high satisfaction with operations (both 9 or more points out of a possible 10).

Survey of CSR at Service Stations

The Cosmo Oil Group conducts annual privacy policy (PP) surveys and environmental management (EM) surveys to check and improve regulatory compliance at service stations. In fiscal 2013, inspectors visited 1,174 service stations, and more than 1,800 service stations conducted their own self-assessments.
Enhancing Human Rights/Personnel Policies

Respect for Human Rights and Better Working Conditions

Under the Consolidated Medium-Term Human Rights/Personnel Plan (Fiscal 2013–2017), the Cosmo Oil Group is providing even better working conditions for employees, focusing on five areas: increasing work efficiency and better managing working hours, encouraging work-life balance, respecting diversity, maintaining and improving mental and physical health, and eliminating power and sexual harassment.

Global Human Resources Development

There are 109 Cosmo Oil Group employees stationed in eight countries outside Japan, engaging in resource development, crude oil and petroleum product transactions, and project operations in the petrochemical and ALA businesses. With the aim of becoming a vertically integrated global energy company, the Group has an urgent need to develop human resources that can respond to a variety of challenges both in and outside Japan. Building on the strengths of the current international employees, the Group is developing more global human resources with a diverse range of experience and skills. The Group will actively promote the transfer of young and mid-career employees to international offices to increase the number of personnel that can operate effectively outside Japan.

Respecting Diversity and Providing Equal Opportunity

The Cosmo Oil Group set the goal of maintaining and improving its employment rate of people with disabilities under the theme of sustaining fair employment practices. In fiscal 2013, the Group achieved Japan’s legally mandated rate of 2.00% or more, with an actual result of 2.07%. Accordingly, the Group is striving to ensure that it maintains and improves the employment rate of people with disabilities through measures that aim to create workplace environments where diverse human resources can demonstrate their respective abilities to the fullest extent.

Launch of the Cosmos Project

One of the Cosmo Oil Group’s top priorities is encouraging active participation of women in the workplace. In January 2014, the Group launched the Cosmos Project, which is led by a panel of 11 women from various departments, to propose ways to facilitate more active involvement of women. The Cosmos Project aims to create working conditions that enable all employees to flourish and develop their careers.

1. Reference information: Stakeholder Dialog p. 27–28

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### Number of Employees Stationed Outside Japan by Country: Fiscal 2013

<table>
<thead>
<tr>
<th>Country</th>
<th>No. of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>UAE</td>
<td>75</td>
</tr>
<tr>
<td>Bahrain</td>
<td>1</td>
</tr>
<tr>
<td>Qatar</td>
<td>16</td>
</tr>
<tr>
<td>China</td>
<td>2</td>
</tr>
<tr>
<td>USA</td>
<td>3</td>
</tr>
<tr>
<td>UK</td>
<td>2</td>
</tr>
<tr>
<td>Singapore</td>
<td>3</td>
</tr>
<tr>
<td>South Korea</td>
<td>7</td>
</tr>
</tbody>
</table>

### Number of Employees Stationed Outside Japan: Fiscal 2009–2013

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>No. of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>84</td>
</tr>
<tr>
<td>2010</td>
<td>91</td>
</tr>
<tr>
<td>2011</td>
<td>89</td>
</tr>
<tr>
<td>2012</td>
<td>94</td>
</tr>
<tr>
<td>2013</td>
<td>109</td>
</tr>
</tbody>
</table>

1. The number of employees includes those dispatched from Cosmo Oil and full-time employees of Cosmo Engineering Co., Ltd., Cosmo Trade & Service Co., Ltd., and Cosmo Research Institute.

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### Employment of People with Disabilities (data reported to Japan’s Ministry of Health, Labour and Welfare)

<table>
<thead>
<tr>
<th>Total number of employees with disabilities</th>
<th>June 2010</th>
<th>June 2011</th>
<th>June 2012</th>
<th>June 2013</th>
<th>June 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Number with severe disabilities)</td>
<td>25</td>
<td>23</td>
<td>23</td>
<td>21</td>
<td>20</td>
</tr>
<tr>
<td>Employment rate of people with disabilities</td>
<td>2.1%</td>
<td>2.1%</td>
<td>2.3%</td>
<td>2.1%</td>
<td>2.07%</td>
</tr>
<tr>
<td>Shortfall in the mandatory number of employees with disabilities</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

1. For Cosmo Oil Co., Ltd., as of June 1 in each year
2. Legally mandated employment rate: 2.00% (rounded to the second decimal place)
Facilitating Work-Life Balance

The Third Consolidated Medium-Term Human Rights/Personnel Plan identifies child/family care leave and leisure activities as important elements for employees to balance work and home life, and it focuses on enhancing various systems to provide better support. The Cosmo Oil Group is committed to creating positive and dynamic work environments for all employees and respects the values and life perspectives of each employee. The Group is implementing initiatives to enable employees to achieve a work-life balance with the flexibility to tailor their desired lifestyles.

The fifth action plan required for general business owners for fiscal 2013–2014 was submitted to Japan’s Ministry of Health, Labour and Welfare, as part of Cosmo Oil’s support for the raising of the next generation of children.

### Number of Employees Taking Childcare Leave: Fiscal 2010–2013

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Women</td>
<td>9</td>
<td>12</td>
<td>15</td>
<td>17</td>
</tr>
</tbody>
</table>

### Physical and Mental Healthcare

The Cosmo Oil Group has been working with the Cosmo Oil Health Insurance Society to fully implement the special check-ups. The Cosmo Oil Health Insurance Society operates a Group Health and Counseling Online Hotline that is staffed by specialists in psychiatry and psychosomatic medicine, which employees and their families can access to receive immediate counseling on a variety of subjects.

### Reducing Long Working Hours

The Cosmo Oil Group has set limits on the number of overtime hours on a monthly and yearly basis in order to promote work-life balance among employees and maintain employee health. Under the Consolidated Medium-Term Human Rights/Personnel Plan, Cosmo Oil has set a goal of reducing the total number of hours worked per year and seeks to improve performance in a number of different categories. However, the performance in fiscal 2013 declined in many categories, due to overtime hours that were logged from the Company reorganizing its supply framework.
Creating Working Conditions That Enable All Employees to Realize Their Full Potential

The Cosmo Oil Group’s new Cosmos Project, led by a panel of women, aims to incorporate input from women workers into the Group’s vision for the future. More men than women work for the Group, so it is making a special effort to ensure women’s voices are heard. Meetings and interviews with employees started in January 2014, and by late July 2014, the project will submit its proposals on how the Group can encourage more active participation of women in the workplace.

On February 12, 2014, the project team invited an expert in this area, Akiko Fukuda, to provide her input on the Cosmos Project’s efforts to encourage the active involvement of women. Fukuda is vice executive chairperson of the labor union of Mitsubishi Tanabe Pharma Corporation, and is also a member of Gender Equality Office of the Japanese Federation of Energy and Chemical Workers Unions.

Note: Names of project members are not displayed below in order to protect the privacy of interviewed employees.

Sending a Corporate Message to Encourage Active Participation of Women

Employee A: Ms. Fukuda, you have said that it is necessary to shrink the gender gap in domestic roles, as well, in order for women to play an equally active role as men in society.

Fukuda: The workplace should not have to compensate for gender inequalities in the home. For example, if a woman (mother) has to leave work early every day to pick up her child at daycare, she needs to make use of support from her husband, relatives, and community to ensure gender equality at home, and then use the programs offered at her workplace.

Employee B: Does gender equality at home need to be explicitly stated?

Fukuda: When will the Cosmo Oil Group send a message encouraging the active participation of women? If you believe gender equality at home needs to be explicitly stated, that would be a good opportunity to do so.

Employee A: The report from the Cosmos Project will probably include a request for senior management to issue a clear message on the active participation of women. The company will decide on the content of the message.

Fukuda: It is very important for the company to make a clear statement of its position. When Mitsubishi Tanabe Pharma started a project encouraging women’s active participation in the sales departments, many women employees were unsure if the company really wanted them to continue and have careers. They saw the project in a different light, even though the company actually wanted women to stay with the company. So the company gave a progress report on the project at every meeting of branch GMs, who in turn briefed all employees—not just women—on the project. Over time, this sent the message that the company wanted to see women continue their careers. It took five years to put the rules and programs in place, and two years for it to be accepted.

Enabling Women to Talk about the Home at Work

Fukuda: In Japanese companies, it is still frowned upon to talk about the home at work.

Employee C: I felt that talking about the home was just seen as an excuse in the workplace.

Fukuda: Attitudes need to change. At the Cosmo Oil Group, do you usually talk about your personal situation only if your workload becomes too much to handle because of circumstances at home?

Employee E: Yes, it is hard to tell others about private matters unless it is a situation like your kids being sick or hospitalized.

Employee F: Sometimes we will talk about our personal situation if we go out to eat after work, but generally we do not talk about it, until it gets to the point where it affects the work of others.

Employee G: I wish that others would let us know about their home situation, because we would be better prepared if that person had to take time off from work. But I am not so sure that I could volunteer this information myself.
Fukuda: When we talk about this subject, the conclusion is invariably that people need to talk about their home situation. But it is surprising when you say that you are unable to talk about your personal affairs or home situation at work.

Employee C: Nowadays, I get emails from male colleagues saying that they are taking a day off because they are expecting a baby. I am happy for them and do not think bad of them, so I wonder why we hesitate to talk about these things.

Employee D: There are workplaces that only have the bare minimum number of staff, where it can be a problem if one person is not there.

Employee H: As part of the Cosmos Project, we interviewed women at different workplaces and found that their views differed depending on their particular situation.

Employee E: When we are covering for colleagues working shorter hours for child/family care, our workload may increase at peak periods.

Fukuda: It is great that you are conducting interviews to get raw feedback. But you also need to understand the background of the people you are interviewing.

Employee H: Our project is just starting, and we are not always sure of how to organize our efforts.

Fukuda: It is hard to include every opinion, so you need to thoroughly discuss and consider what your emphasis will be.

Employee I: Some women are happy with the way things are.

Fukuda: I can understand that. I worked for 19 years at the Hiroshima office of Mitsubishi Tanabe Pharma. Back then, I might have convinced myself that I was satisfied with not being given challenging work.

Employee C: From our interviews, we sensed a gap between Tokyo and other areas. If we push for changes, it will reflect our perspective from Tokyo but not the wishes of women outside of Tokyo.

Fukuda: That is an important consideration. You need to think about exactly how the company wants women to work. Rather than elevating every single woman to management, the company needs some women to continue doing their current work. Some women may wish to make small strides, while others might wish to make large strides in their careers. Either way is fine. The important thing is to provide avenues for those who want to move ahead. As members of the Cosmos Project, you need to consider how you yourselves want women to work at the Cosmo Oil Group, and let this guide your efforts.

Cosmo Oil conducts annual training on human rights and personnel policies for officers of Cosmo Oil and its group companies, and department GMs at the Head Office. Under the Consolidated Medium-Term Human Rights/Personnel Plan, one goal is to create a corporate culture conducive to the active participation of women. So the Group invited Yoko Yajima, a senior research analyst with Mitsubishi UFJ Research and Consulting Co., Ltd., to speak at the Cosmo Oil Head Office on April 9, 2014. An expert on diversity in the workplace, Yajima spoke about active participation of women and the shift in emphasis from “balancing work and home life” to “being actively involved in the workplace.” Cosmos Project members participated in the lecture and had many questions for Yajima, a pioneer in advocacy for the active participation of women.
Environmental Initiatives

The Cosmo Oil Group has been focusing on strengthening its environmental initiatives since fiscal 2002. Under the Consolidated Medium-Term Environmental Plan (Fiscal 2013–2017), the Group has three priorities: responding strategically to prevent global warming while ensuring continuation of business, reducing environmental impact, and promoting environmental contribution activities. All of these efforts are aimed to realize Cosmo Oil’s corporate message, “Living with Our Planet.”

Environmental Management Structure

The Cosmo Oil Group has acquired ISO 14001 certification for 10 sites, including refineries, which have significant environmental impact. In addition to internal audits, external audits are conducted by certification verification agencies to regularly confirm that environmental management systems are operating effectively. The Group operates a cross-divisional Global Environment Committee which drives its overall environmental management, formulates the Consolidated Medium-Term Environmental Plan, reports on performance and evaluates results under the plan, and provides feedback to business divisions.

Consolidated Medium-Term Environmental Plan (Fiscal 2013–2017)

<table>
<thead>
<tr>
<th>Theme 1: Respond strategically to prevent global warming while ensuring continuation of business</th>
<th>Theme 2: Reduce environmental impact</th>
<th>Theme 3: Promote environmental contribution activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Enhance internal/external audits for thorough environmental management</td>
<td>4. Adopt rigorous measures to ensure soil preservation</td>
<td></td>
</tr>
<tr>
<td>5. Promote Eco Office activities and green purchasing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reducing Industrial Waste

Cosmo Oil Co., Ltd. has set a goal of keeping final landfill disposal of industrial waste generated from refineries, oil depots, and the Research & Development Center to less than 0.5%, in an ongoing effort to reduce waste. In fiscal 2013, only 0.35% of this waste was disposed in landfills.

Addressing Soil Contamination

The Cosmo Oil Group conducts soil surveys for service stations and sites, seeking to prevent soil contamination and to ensure a quick response if an oil leak is detected. If needed, soil remediation and monitoring are undertaken to address environmental impacts.
Initiatives in Response to Global Warming

Energy Conservation in Refining and Manufacturing

Approximately 80% of the Cosmo Oil Group’s CO2 emissions are generated by refining. The Group is working to reduce this figure and conserve energy by introducing high-efficiency equipment and improving operational performance.

The Group’s unit energy consumption and CO2 emissions per crude oil equivalent throughput improved in fiscal 2013 due to recovery of production volume at the Chiba Refinery and review of group-wide operational efficiency. The rise in total energy consumption and total CO2 emissions was impacted by the restart of the Chiba Refinery, which had been mostly shut down since 2011. Compared with fiscal 2010 data, the shutdown of refining operations at the Sakaide Refinery and energy-savings measures at other refineries resulted in a decrease of 633 kilotones of CO2 emissions.

Reducing Transport-related Energy Consumption

The Cosmo Oil Group continues to transition to larger vessels and transport trucks and is securing higher stowage rates, seeking to improve energy efficiency in distribution. The unit energy consumption for marine transport using coastal tankers decreased to 6.70 kiloliters per million tonne-kilometers (kl/Mt-km), down 0.07 kl/Mt-km year-on-year due to reduced transport between refineries made possible by the restart of the Chiba Refinery. For truck-based ground transport, the volume transported per vehicle was flat year-on-year at 19.12 kiloliters, but unit energy consumption was 35.43 kl/Mt-km, up 0.18 kl/Mt-km due to steps taken to improve transport efficiency.

Eco Office Initiatives

The Cosmo Oil Group engages in Eco Office initiatives in an effort to conserve energy and resources in offices. Focusing on four areas listed in the table at right, the Group tracks performance at each site, with each office and affiliated company responsible for achieving targets set for each fiscal year.

Performance Criteria:
- Copy paper, fuel consumption of company vehicles, office electricity consumption:
  - (Achieved) 
  - (Not achieved, but down year-on-year) 
  - (Not achieved)

Green purchasing (percentage purchased): 
- 70% or above
- Below 70%

<table>
<thead>
<tr>
<th>Area</th>
<th>Unit</th>
<th>Goal</th>
<th>Result</th>
<th>% Compared to Goal</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copy paper</td>
<td>Thousand sheets</td>
<td>1,122</td>
<td>1,000</td>
<td>–10.9%</td>
<td>(Achieved)</td>
</tr>
<tr>
<td>Company car fuel consumption</td>
<td>kl</td>
<td>2011</td>
<td>179</td>
<td>–13.5%</td>
<td>(Achieved)</td>
</tr>
<tr>
<td>Office electricity consumption</td>
<td>MWh</td>
<td>2011</td>
<td>680</td>
<td>–7.8%</td>
<td>(Achieved)</td>
</tr>
<tr>
<td>Green purchasing</td>
<td>%</td>
<td>50.0</td>
<td>80.4</td>
<td>–10.2%</td>
<td>(Achieved)</td>
</tr>
</tbody>
</table>

Note: In addition to the figures shown in the graph, N2O released from the catalyst regeneration tower amounted to 18 kt of CO2 equivalent in fiscal 2013.
Environmental Impact of Business Activities

Environmental Impact in Fiscal 2013

**INPUT**

- **Energy**
  - Fuel .................................. 21,704 TJ
  - Fuel .................................. 10,649 TJ
- **Raw materials**
  - Crude oil .................................. 21,853 Ml
  - Others .................................. 1,657 Ml
- **Energy**
  - Purchased power .................................. 4,133 TJ
  - Private-use fuel .................................. 59,733 kt (1.541 Ml of crude oil equivalent)
- **Water**
  - Industrial water .................................. 41,899 kt
  - Seawater .................................. 344,848 kt

**OUTPUT**

- **Emissions into atmosphere**
  - CO₂ .................................. 1,210 kt
  - SO₂ .................................. 16,683 t
  - NOₓ .................................. 2,677 t
- **Emissions into atmosphere**
  - CO₂ .................................. 728 kt
  - SO₂ .................................. 15,852 t
  - NOₓ .................................. 19,637 t
- **Emissions into atmosphere**
  - CO₂ .................................. 4,451 kt
  - Private-use fuel .................................. 3,864 kt
  - Purchased power .................................. 229 kt
  - Hydrogen production process .................................. 359 kt
  - SO₂ .................................. 4,208 t
  - NOₓ .................................. 2,255 t
- **Wastewater**
  - Wastewater .................................. 356,836 kt (incl. 344,848 kt of seawater)
  - Chemical oxygen demand (COD) .................................. 113 t
  - Nitrogen .................................. 60 t
  - Phosphorus .................................. 1 t
- **Industrial waste/PRTR substances**
  - Generated .................................. 65,430 t
  - Recycled .................................. 23,304 t
  - Final disposal .................................. 229 t
  - PRTR Law designated chemical substances
    - Released .................................. 140 t
    - Transferred .................................. 42 t

**Production**

- Products
  - Production .................................. 22,779 Ml
  - Sulfur recovered .................................. 214 kt (by-product)
  - Electricity sold .................................. 1,319,966 MWh
  - Steam sold .................................. 973 TJ
  - CO₂ sold .................................. 90 kt

**Energy**

- Fuel (transport) .................................. 2,332 TJ
  - Fuel (storage) .................................. 27 TJ
  - Purchased power (storage) .................................. 14 TJ
  - Fuel/Purchased power .................................. 490 TJ
- Fuel .................................. 46 TJ
  - Purchased power .................................. 57 TJ
  - Purchased power .................................. 26 TJ

**Detailed information**

Environmental accounting

**Promoting Environmental Initiatives**

- SOx and NOx figures for “Crude Oil Extraction,” “Crude Oil Transport,” and “Product Transport and Storage at Oil Depots” 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.
- For “Manufacturing” and subsequent stages, energy consumption is calculated in accordance with the Act on the Rational Use of Energy.
- CO₂ emissions for “Manufacturing,” “Product Transport,” and “Offices (Service Stations),” which is based on data from Cosmo Oil Sales Co., are calculated in accordance with a manual for GHG emissions accounting, reporting, and disclosing systems published by Japan’s Ministry of the Environment and Ministry of Economy, Trade and Industry.
- Figures given for “Manufacturing” include data from the Cosmo Oil refinery, Yokkaichi Kaumi Power Station, Cosmo Matsuura Oil, and Cosmo Oil Lubricants. However, data from Cosmo Oil Lubricants is not included in the figures for water, wastewater, SOx, and NOx.
- “Industrial waste” refers to waste generated during business activities, which includes waste that could be sold.
- “Electricity sold” refers to electricity supplied externally by the Chiba Refinery, Yokkaichi Kaumi Power Station, and Cosmo Matsuura Oil. CO₂ emissions from “Manufacturing” were calculated by deducting the portion of CO₂ emissions attributable to electricity sold. CO₂ emissions from utility (power) were included in the CO₂ emissions from “Manufacturing.”
- “Steam sold” refers to steam sold by the Chiba Refinery and Cosmo Matsuura Oil. CO₂ emissions for “Manufacturing” were calculated after deducting the portion of CO₂ emissions that results from the generated steam sold.
- CO₂ emissions from product transport include data from the specified consigners in accordance with the Act on the Rational Use of Energy.
- CO₂ emissions for “Consumption (Product Use)” are calculated by multiplying the shipped volume of fuel products (such as gasoline and heavy fuel oil) by CO₂ emission coefficient. CO₂ emissions attributable to generated electricity and steam sold are calculated separately.
- SOx emissions for “Consumption (Product Use)” are included for reference, and were estimated from the sulfur content of products without accounting for sulfur reduction during use. Accordingly, actual SOx emissions are lower than the estimated.
- Data for “R&D Centers” includes the R&D Laboratory of Cosmo Oil Lubricants.
- Figures given for “Offices” include data from the Cosmo Oil Head Office and branch offices.
- The Cosmo Oil Group’s total direct (Scope 1) emissions from business activities were 3,896 kt CO₂ equivalent, and its indirect (Scope 2) emissions were 314 kt CO₂ equivalent.

**Environmental Impact Assessment for Petroleum Products by Fuel and**

**Rational Use of Energy**
Environmental Activities Promoted with Society

Cosmo Earth Conscious Act Cleanup Campaign

Since 2001, the Cosmo Oil Group has been promoting Cosmo Earth Conscious Act initiatives for the preservation and conservation of the global environment. The effort includes cleanup campaigns, where participants enjoy nature while cleaning up mountains, rivers, and beaches throughout Japan. At 514 locations over the past 13 years, these campaigns have involved 201,883 participants who collected a total of 5,353,617 liters of garbage. As a part of the initiative, a clean campaign is also held at Mt. Fuji each summer. In fiscal 2013, the event drew 187 participants who collected 20,475 liters of garbage while enjoying Mt. Fuji trekking.

Cosmo Forest Activities for Satoyama Preservation

The Cosmo Forest Initiative is a program that works with local governments to preserve satoyama (managed woodlands near populated areas) close to Cosmo Oil Group sites across Japan. The aim is to maintain these forests for future generations. The Sakai Refinery and Cosmo Matsuyama Oil Co., Ltd. hold Cosmo Forest conservation activities twice a year, with the participation of employees and their families. The Chiba Refinery holds events at a nearby Cosmo Forest for local children throughout the year.
Various Social Contribution Activities

United Nations Global Compact

The Cosmo Oil Group has pledged its commitment to the United Nations Global Compact since 2006, supporting ten principles (listed at right) in the areas of human rights, labor standards, the environment and anti-corruption. The Group’s embrace of the Global Compact shows that it is committed to CSR from an international perspective and that it is striving to improve its initiatives for social responsibility.

International Technology Exchanges

The Cosmo Oil International Cooperation Center maintains and develops positive relations with oil-producing nations through technical cooperation and training projects. These efforts have earned high praise from the countries with which the Center conducts exchanges. The Center also utilizes subsidies offered by the Japan Cooperation Center, Petroleum (JCCP) and other organizations to conduct projects.

In the area of technical cooperation, the Group participated in a fiscal 2013 study of environmental improvements of equipment and operations in a refinery in Oman, under a JCCP-led project to develop oil industry infrastructure in oil-producing nations. For training projects, the Group accepted trainees for six sessions and sent instructors for one session, working with six organizations in four countries including the UAE, Qatar, Oman, and Vietnam. The Group also conducted five training seminars led directly by JCCP.

Main Social Initiatives

Cosmo Oil pursues social initiatives under a management vision to achieve harmony and symbiosis between companies and society. These initiatives focus on educating children for the future development of society, conservation of the global environment, and cultural development.

Since 1993, the annual Cosmo Waku Waku Camp has been organized for elementary-school-aged children who have been orphaned due to car accidents, giving them the opportunity to experience and consider the importance of nature. Cosmo Oil remains committed to these and many other social initiatives.
Report on Independent Assurance Work

This report begins with an overall business summary of the Cosmo Oil Group, leading into special features on the Group’s business tie-ups for oil and gas development, paraxylene business in South Korea, and wind power generation business, helping to give a balanced picture of the Group’s diverse businesses. At the same time, there is a slight bias toward the petroleum refining and sales business in the performance data and initiatives that are described. More could be written about performance data and initiatives for businesses other than petroleum refining and sales, to provide a more accurate overall picture of the Group.

With regard to quantitative data, there is an increasing emphasis today on creating shared value through business that creates both corporate and social value at the same time. In that respect, the report could provide quantitative data on the CO₂ emissions that are being saved by the wind power generation business and the supply of bio-gasoline.

In terms of qualitative information, the report describes how the Group is sending more employees from Japan to its international offices, aiming to become a vertically integrated global energy company. It is important to similarly provide qualitative information on the training that employees receive before they are sent abroad.

Shinichiro Akasaka
KPMG AZSA Sustainability Co., Ltd.
The design and printing of the Cosmo Oil Group Corporate Report 2014 incorporates the following materials, processes and principles.

Printed in Japan

Color Universal Design
This report incorporates Color Universal Design principles to convey information to people who see color differently, in addition to people with normal color vision, and is certified by the non-profit Color Universal Design Organization (CUDO).