



Ensuring Safety Measures

The Cosmo Energy Group has made safe operations and the stable supply of energy one of its most important material issues.

We have intentionally included ensuring safety measures in the governance items as an important foundation for improving our corporate value. We have set KPIs in the sustainability plan and are reinforcing our safety management structure.

Safe operations and stable supply

Chapter 1 of the Cosmo Energy Group Code of Conduct states, "We are determined to be a safe, accident-free corporate group." Our Consolidated Medium-Term Sustainability Management Plan includes targets of preventing work-related accidents and preventing major accidents in "Priority issue G: Ensuring safety measures," and we have been proactive in implementing safety measures.

We investigated the causes of accidents and took comprehensive measures to prevent their recurrence. As a result, there were no major work-related accidents or major accidents in FY2021. In addition, while the number of work-related accidents increased to 159 in FY2020, it decreased to 113 in FY2021. Our steady safety measures led to a reduction in work-related accidents.

Our refineries and plants achieved zero serious accidents, including zero serious labor-related accidents. In FY2022 Cosmo Oil, which possesses refineries, is continuing to execute safety management procedures by using the frequency rate* of lost-worktime accidents and injuries, the rate of unplanned stoppages, and the number of days of stoppage of incoming and outgoing shipments as management indicators. In addition, the company strives for safe operations and stable supply by establishing good workplaces and work environments and by managing the Operational Management System (OMS).

* Frequency rate represents the number of casualties from work-related accidents and injuries in one million work hours and indicates the frequency of occurrence of accidents and injuries.

Number of work-related accidents at the Cosmo Energy Group

	FY2019		FY2020		FY2021	
	Accidents requiring time off from work	Accidents not requiring time off from work	Accidents requiring time off from work	Accidents not requiring time off from work	Accidents requiring time off from work	Accidents not requiring time off from work
Accidents during work	13	85	33	95	20	60
Accidents during commuting	11	13	12	19	12	21
TOTAL	122		159		113	

(Supplement) Accidents during work include ones that occurred at subcontracting companies.

Quality assurance: enhancing the quality assurance structure

With the objective of the economical, stable supply of safe products that fulfill customers' requirements for quality, Cosmo Oil has a Sustainability Committee to decide on a quality assurance policy and encourage related activities. The Sustainability Committee worked with the Sustainability Strategy Committee of Cosmo Energy Holdings to establish the quality assurance structure of the Cosmo Energy Group.

Cosmo Oil engaged in quality management activities by setting the prevention of serious product (quality) accidents as a KPI. In FY2021, our refineries and plants continued to record

no serious quality-related issues and no shipments of non-conforming products.

It was revealed that proper testing methods and inspection items were not applied for certain products from the Cosmo Energy Group. We announced it on July 13, 2022. We took corrective measures for this matter immediately after it was revealed. We confirmed that it raised no issues with the quality of products that had already been shipped. We will ensure thorough training, review our management of testing methods, and enhance audits, aiming to prevent a recurrence of the problem.

Certified as a certified business operator (tokutei ninteijigyosha/ super ninteijigyosha)

In August 2022, the Yokkaichi Refinery obtained super ninteijigyosha (tokutei ninteijigyosha) certification. In this special certification program, the Ministry of Economy, Trade and Industry certifies businesses which have achieved high-level voluntary safety activities, through activities such as the utilization of IoT

and big data, high-level risk assessment, and the third-party evaluation of safety capabilities. Yokkaichi Refinery is the second in the Group to be certified under the program, following Chiba Refinery that was certified in April 2021.

Benefits of being certified

Category	Conventional certification program	Super Ninteijigyosha certification program
Period of continuous operation	Fixed (2 years/4 years)	Arbitrary with an upper limit of 8 years (The business operator is allowed to set the period on their own in accordance with risks.)
Completion inspection/safety inspection methods	Methods specified by the Minister of Economy, Trade and Industry	Wider inspection method options (To be determined by the business operator)
Equipment renewal (Same specifications)	Prior permission required	Prior permission not needed in a wider range

The benefits described above enable more flexible, efficient business operation than before. They also lead to greater international competitiveness. It also has great meaning that we obtained the certification of the Chiba Refinery, which has the largest refining capacity among Cosmo Oil's refineries and is located close to the Greater Tokyo Area, and of Yokkaichi Refinery, which has been operating for more than 78 years. At Cosmo Oil's refineries, we have been carrying out and continuously improving safety management activities to achieve a level of safety that exceeds the global standard, with an Operational Management System (OMS) that is the foundation of our operating base, in our efforts to improve our safety capabilities. We will continue to take actions to remain a safe, accident-free corporate group as set forth in the Cosmo Energy Group Code of Conduct, as we work to eliminate imperfections. At the same time, we will contribute to the enrichment of customers' lives through safe operations and a stable energy supply.



Yokkaichi Refinery, which was certified as a super ninteijigyosha in August 2022



Use of drone technologies

Operational Management System (OMS)

Cosmo Oil adopted an Operations Management System (OMS) in 2016 to achieve safety operation and stable supply that are superior to the global standard. OMS is an operation system that serves as a basis for the operation of a refinery. Activities under

OMS are based on the keywords/key phrase of "persevering," "risk-based," and "continuous improvement."

Through OMS activities, we will strive to prevent failures and improve the level of operation and maintenance.

Ensuring safety measures by Group companies

Cosmo Eco Power

Cosmo Eco Power, which is engaged in the wind power generation business, performs regular check-ups, responses to malfunctions or issues, and 24-hour remote monitoring to operate wind farms safely and efficiently. Based on past records and experience, we estimate potential issues and timing and focus on preventive maintenance comprising the replacement of certain components ahead of any long suspension in operation.

incidents and prevent their occurrence, thereby continuing operation with zero accidents or incidents.

The entire company, including Chiba Plant and Yokkaichi Plant, is promoting concerted safety management efforts focused on process safety, disaster prevention, labor, and logistics, which are called "the Number One Safety Activity."

In response to the COVID-19 pandemic that began in 2020, the company has been taking thorough safety management measures while controlling infections. Thus, it has completed large-scale regular maintenance without trouble and has maintained safe, stable operations. The company will meet the expectations of all stakeholders by giving top priority to safety at all times and continuing safe, stable operations.

Maruzen Petrochemical

Maruzen Petrochemical declares in its management principles that "Our goal is to be the number one company in safety" and believes that safety is its top priority and its corporate mission. The company also pledges in its Action Standard (CC10), which it has established, to strive to predict risks of accidents or