

Building an Operation Management System to Realize Safe Operations and Stable Supply Exceeding International Standards

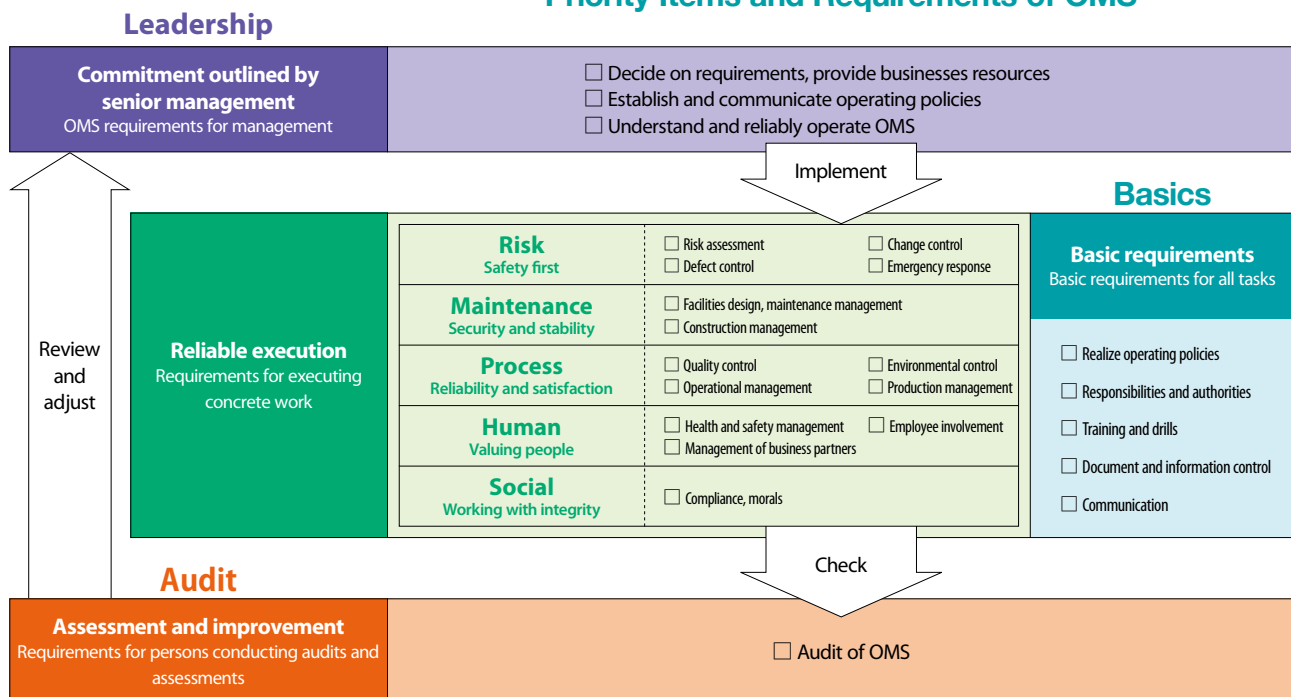


Operation Management System

The Cosmo Oil Group's Change 21 Activities for refineries have been helping to reduce unsafe and failure incidents since 2006. In 2013, the new Refinery Safety Reform Committee took over the overall implementation of plan-do-check-act (PDCA) cycles for safety at refineries.

With the Chiba Refinery initiating a plan for collaborative operations with TonenGeneral Sekiyu K.K., Cosmo Oil is preparing a company-wide, unified Operation Management System (OMS), based on a comprehensive review of management frameworks and systems. It will launch in January 2016. The OMS will prescribe initiatives for 23 essential requirements for realizing safe operations and stable supply. The Company will use it to take steps at its Head Office and refineries, and strengthen collaboration among them. The Cosmo Oil Group will continuously operate and enhance the OMS to realize operational safety and stable supply exceeding international standards.

Priority Items and Requirements of OMS



(To be appointed on October 1, 2015)

Cosmo Oil's business platform revolves around refining, and includes R&D, crude oil procurement, petrochemicals, lubricants, and international trading. Petroleum refining is considered a capital-intensive industry, but our greatest asset is the creativity of employees and their eagerness to take on new challenges in today's changing social and economic conditions.

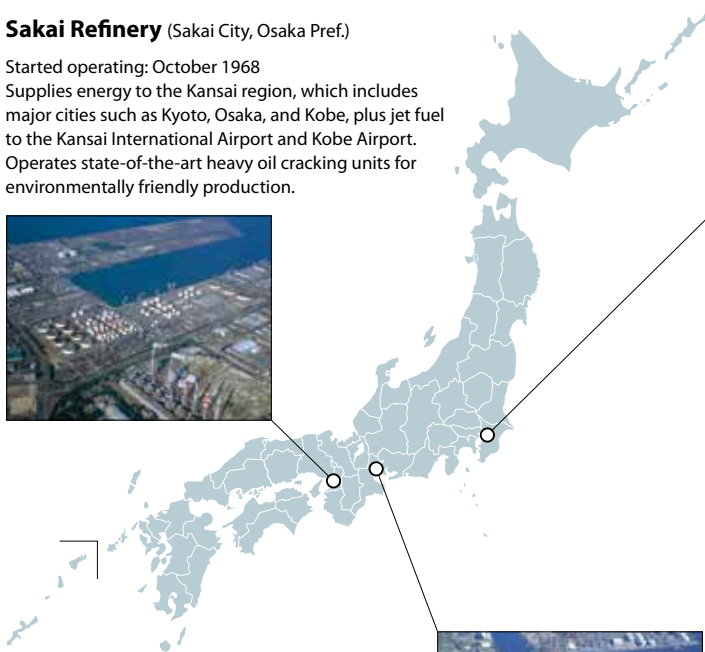
Cosmo Oil is pioneering major structural changes in Japan's petroleum industry, aiming to meet customer needs and stakeholder expectations. This means achieving world-class operational safety and stable supply; it also calls for creative collaboration with other companies in each business sector and region. At Cosmo Oil, we are unleashing the collective wisdom and strength of our people to enhance growth potential across our diversified business portfolio.



Cosmo Oil Group Refineries Near Three Major Markets

Sakai Refinery (Sakai City, Osaka Pref.)

Started operating: October 1968
 Supplies energy to the Kansai region, which includes major cities such as Kyoto, Osaka, and Kobe, plus jet fuel to the Kansai International Airport and Kobe Airport. Operates state-of-the-art heavy oil cracking units for environmentally friendly production.



Yokkaichi Refinery (Yokkaichi City, Mie Pref.)

Started operating: July 1943
 Supplies energy to the Chubu, Hokuriku, and Kinki regions. Built a new mixed xylene distillation unit in 2011 and exports petrochemicals to international markets.



Chiba Refinery

(Ichihara City, Chiba Pref.)

Started operating: February 1963
 Cosmo Oil's largest refinery, with a crude oil processing capacity of 220,000 barrels per day. One of the largest refineries in Japan, supplying all of eastern Japan including the Tokyo metropolitan area.

Business Alliances Secure International Competitiveness

Cosmo Oil and Kyokuto Petroleum Industries of the TonenGeneral Sekiyu Group established the joint venture Keiyo Seisei JV G.K. on January 7, 2015, seeking to integrate their refinery operations in Chiba. The joint venture will install pipelines linking the two refineries and then operate them centrally.

Cosmo Oil and Showa Yokkaichi Sekiyu of the Showa Shell Sekiyu Group have agreed on a business partnership between their refineries in Yokkaichi, starting in March 2017. Under the agreement, the refineries will pursue facility optimization to enhance competitiveness.

The Cosmo Oil Group will continue to leverage synergies obtained in business alliances to strengthen international competitiveness.

Diversifying Crude Oil Products

Japan's crude oil procurement is almost entirely reliant on imports, most of which are from the Middle East and other parts of Asia. Yet change is coming to the global supply structure of crude oil, driven by the shale oil boom in the United States and increasing demand for oil in developing nations.

The Cosmo Oil Group is responding not only by engaging in oil exploration and development in the Middle East to secure a stable supply of energy, but also by diversifying its crude oil procurement. This allows the Group to procure crude oil at lower prices amid volatile oil markets, greatly enhancing both refinery competitiveness and procurement stability.

Lately, the Group has expanded its procurement operations to include the United States, Russia, Mexico, Kazakhstan, and Western African nations.



In October 2014, Cosmo Oil became the first Japanese company to import condensate from U.S. shale wells to Japan, moving to further diversify its oil products. Condensate (shown at left) is a type of crude oil yielded from gas wells as a liquid, which foams because of its high gravity and low viscosity.