

Ship & Ocean Project Headquarters

We are enhancing our existing businesses and proceeding with creation of new business models, such as the ocean business and gas engineering.

Director and Managing Executive Officer
General Manager of Ship & Ocean Project Headquarters

Tetsuro Koga



Business environment and performance

The shipping market has worsened from the cooling state that has continued since last year and entered a recession phase. The state of excess capacity attributed to the completion of numerous new shipbuilding construction projects over the last several years has been aggravated by the slowdown in the Chinese economy. In particular, charter freight has remained at historically low levels in the dry bulk division, which has left the market in a rigid state. On the other hand, while the charter market of crude oil tankers and LPG carriers has remained reasonable level, competition has been growing fiercer in the shipbuilding market, exposing us to fierce price competition for all types of ships.

The future remains uncertain in the ocean development field. This uncertainty stems partly from the drop in the price of crude oil, which has led to the slowdown or discontinuation of new oil well and gas development projects.

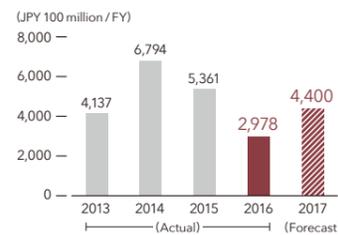
In the midst of these conditions, MES

has developed and released a steady stream of new bulk carriers that incorporate energy-saving and environment-friendly technologies. Since we handed over the first energy-saving ship in November 2013, we have steadily received new orders for and have constructed various types of energy-saving bulk carriers, ranging from 56,000-ton bulk carriers to 66,000-ton vessels.

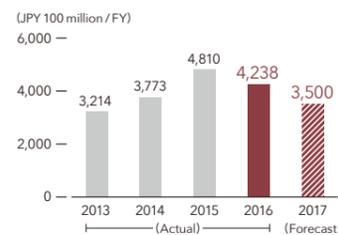
During the fiscal year under review, we received additional orders for multiple newly-designed large tankers (VLCC). This has raised the total number of new orders received for energy-saving ships to 69 vessels, resulting in an order backlog for approximately two years. The environment for receiving new orders has been tough, but we will continue to apply our competitive advantages as the pioneer shipyard for energy-saving ships. We will also strive to be selective in accepting new orders, while at the same time trying to improve profitability.

Financial highlights

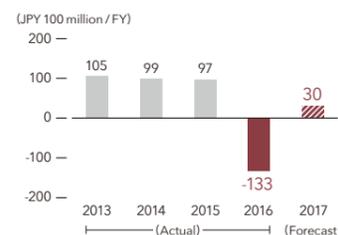
New orders



Net Sales



Operating income



Fiscal 2016 earnings

We received orders to construct Floating Storage and Offloading system (FSO) vessels for marine oil and gas, operation services for floating production storage and offloading system (FPSO) vessels for marine oil and gas. However, due in part to a decline in orders for the construction of FPSO and bulk carriers, orders received decreased by 238.252 billion yen (-44.4%) compared to the previous fiscal year to 297.818 billion

yen. Net sales decreased by 57.234 billion yen (-11.9%) compared to the previous fiscal year to 423.786 billion yen, partly reflecting a decline in the construction of FPSO vessels. While operating income was 9.657 billion yen in the previous fiscal year, we posted an operating loss of 13.305 billion yen due mainly to a decline in the profitability of ocean support vessels.

Our Action

Initiatives for innovation based on the Mid-Term Business Plan

Topics Progress in the establishment of a system for ocean projects

Working within a business environment that remains tough, we are actively promoting a shift in our axis to ocean and engineering business in an effort to move away from the previous business model that focused solely on general commercial ships. As for ocean projects, we have been proceeding with the development of new process for manufacturing the vessel hulls for floating production storage and offloading system (FPSO) vessels for marine oil and gas production in anticipation of the increase of new oil well development projects. In

September 2015, we developed the Mitsui noah-FPSO Hull (noah: New Offshore Adapted Hull), a next generation offshore platform for FPSO that allows for flexible FPSO hull design adapted to the production facilities, rather than adjusting the oil/gas production facilities to fit the specifications of the hull. In regards to facilities, a 500-ton crane will be built at Dock No.3 of Chiba Shipyard in the latter half of 2016. Steady progress is being made in the establishment of a system for ocean projects.



FPSO whose vessel hull was constructed at Chiba Works

Topics Engagement in gas engineering business

In October 2015, MES acquired shares in TGE Marine AG (TGE), a gas career engineering company headquartered in Bonn, Germany, making TGE a subsidiary of MES. MES and TGE are highly compatible in terms of technologies and customer bases. In addition, MES will use TGE's network with ship owners to actively engage in the upstream process of gas carrier business, such as the

determination of ship specifications. The acquisition will enable MES to provide consistent services, from the upstream to downstream of manufacturing processes for the gas transportation business. We will establish a firm position in the global market of medium- and small-sized gas carriers for short-distance transportation, a type of vessel for which demand is expected to increase.



A gas carrier that TGE worked on

Topics Establishment of a Design Office in Fukuoka to strengthen design capabilities

To strengthen its design and engineering capabilities that support the business structure, MES has been increasing the internal manpower and enhancing resources of its domestic and overseas design companies. In October 2015, we established the Fukuoka Design Office of Ship Design Department, Ship & Ocean Project Headquarters, at Kamigofukumachi in Hakata Ward, Fukuoka City. We focused attention on the fact that Kyushu area possesses a large number of people with great sets of skills.

There are many educational institutions that support the ship and marine business, and many people with experience in ship design. These conditions led us to establish a design organization headed by people with experience in ship design at Fukuoka, a strategic location in Kyushu, as a measure for improving our design and engineering capabilities. We are working to improve our capabilities to handle ocean projects, and consolidate and improve the efficiency of detailed design function.



Fukuoka Design Office was established in October 2015