Ocean Development

A number of offshore oil development projects are planned around the world, so we will aggressively expand activities to take on orders through flexibility with our resources and strengthening collaboration throughout the Group.

MODEC, Inc.
Representative Director, President
Yuji Kozai

[Environment Recognition and Challenges]

In order to respond with flexibility to the recent burgeoning demand for FPSOs and strengthen our competitive edge over new players in the market, we recognize there is a need to increase the number of units we can build simultaneously. We must also optimize our business portfolio in preparation for the decrease in demand for crude oil in the future.

[Opportunities and Our Strengths]

Our strengths are our technological and smooth project management capabilities backed by achievements cultivated as a leading company in the FPSO industry, expertise and data accumulated well over 220 cumulative years of O&M experience with nearly 30 floating production units, collective Group capabilities throughout the whole lifecycle, as well as advanced financial structures and partnerships with leading Japanese companies. The shift from onshore to offshore oil and gas development as well as the rising global demand for natural gas are opportunities for our Company.

Business Environment and Performance

With regards to crude oil prices, amid concerns about supply and demand tightness from a drop in supply due in part to US sanctions against Iran, West Texas Intermediate (WTI) rose to the US$70/barrel level, however, as the supply-demand outlook eased somewhat, prices settled down and traded at around US$50 at the end of December 2018. After which prices rose to around US$60 by the end of March 2019 against the backdrop of another underlying upward trend.

Under these circumstances, and based on the policy to "Maximize Mitsui E&S Group strengths collectively to improve profitability and stabilize earnings" as set out in the MBP17, we are strengthening collaborations in terms of EPC (Engineering, Procurement and Construction) and flexibility in resources throughout the whole Group so as to expand the FPSO business. As a result, in addition to the construction and chartering of an FPSO for the development of the Area 1 offshore field in Mexico, we received orders for Front-End Engineering and Design (FEED) contracts for an FPSO for Senegal's first offshore oil field project and for an FPSO for the Barossa offshore project in Australia. However, due to the backlash of several large-scale projects received in the previous fiscal year, overall orders received dropped ¥446.7 billion (down 63.7%) to ¥254.2 billion.

Net sales increased ¥31.2 billion (up 16.4%) to ¥222.5 billion due to progress in FPSO construction, etc., and operating income increased ¥3.5 billion (up 31.6%) to ¥14.9 billion. In Brazil, one of our most important markets, we started charter services (lease, operations and maintenance) for an FPSO for the Tartaruga Verde and Tartaruga Mestiça fields, which were ordered from the state-run oil company, Petrobras.

* Results for this segment include figures for MODEC, Inc. and affiliated companies engaged in the business.

Business Outlook

MODEC, Inc. (MODEC) is the only company based in Japan that supports the whole life cycle of floating offshore oil and gas production facilities such as FPSO, covering everything from EPCI (Engineering, Procurement, Construction and Installation) to leasing and O&M (Operations and Maintenance) services, making it widely known in the industry as the leading company in this field. In addition to its technological and advanced project management capabilities backed by numerous achievements in EPCI of FPSOs etc., it is further strengthening its international competitiveness through its expertise accumulated from providing O&M services and its advanced use of big data.

In terms of business opportunities, global energy demand is expected to continue to increase over the long term against the background of population and economic growth in emerging countries. Demand for crude oil will remain firm and the clean energy source of natural gas is expected to grow significantly. At the same time, oil and natural gas production is shifting from onshore to deep water, and demand for FPSOs is expected to remain stable. MODEC is especially skillful at large-scale and complex FPSOs for deep-water. In recent years, new large-scale oil fields that require such large-scale FPSOs are continually being found, especially offshore in Brazil and West Africa, making for a continued favorable business environment for MODEC.

Under these circumstances, MODEC is currently underway with a total of 4 EPCI projects (as of the end of August 2019) including ones for Brazil where the Company has an outstanding track record. In addition, FEED work is underway for an FPSO for Senegal's first offshore oil field development project. As soon as the final investment decision for the oil field development project has been made by the client, MODEC will be responsible for the supply, charter and operations of this FPSO.

Along with responding with flexibility to the recent burgeoning demand for FPSOs, MODEC is continuing its efforts to build a firm position in the FPSO industry. In response to the increasing size and complexity of FPSOs and prolonging their operational lives, MODEC has developed a next generation new built hull design for FPSOs in collaboration with Mitsui E&S Shipbuilding. Furthermore, in order to further strengthen the financing composition that is one of the sources of MODEC's competitiveness, a project bond was issued for one FPSO charter project this year, building a system that can flexibly raise funds necessary for future growth.

MODEC is also aiming for full-scale entry into the natural gas market. As well as already having experience in multiple FEED projects for FLNGs, SOFEC, Inc., a US subsidiary of MODEC, has been working on multiple mooring systems for FLNGs. In addition to the regasification of LNG (Liquefied Natural Gas), MODEC has independently developed FSRWP®, which makes power generation from gas, and seawater desalination, possible. MODEC is therefore actively promoting sales of this new product.

MODEC is also working on research and development of new technologies for the future. MODEC is currently developing methods to repair FPSOs' hulls which can be implemented offshore while the vessels continue to operate using carbon fiber and other composite materials without the use of fire. In the field of renewable energy, MODEC is utilizing its EPCI experience in TLPs to promote the development of floating structures and their mooring systems on which offshore wind turbines are mounted. In the future, MODEC plans to carry out tests with real units. MODEC is also continuing to develop technologies in close cooperation with public institutions in the field of developing seabed mineral resources, such as rare-earth minerals found in deep-sea mud, with the aim of contributing to resource development in Japan.

With many offshore oil and gas development projects being planned all over the world, MODEC aims to be a company that can continue to grow sustainably, steadily generating profits by demonstrating the combined capabilities of the Mitsui E&S Group's ship, machinery and engineering segments.

FSRWP®

*FPSO (Floating Production, Storage and Offloading system)
*TLP (Tension Leg Platform)
*FSRWP® (Floating Storage, Regasification, Water-Desalination & Power-Generation)
*FLNG (Floating LNG Production Unit)

MODEC's TOPICS

2018	Feb	Extended charter contract of an FPSO for Petrobras' development of Marlim Leste field offshore Brazil
	June	Order received from ConocoPhillips Australia for FEED of an FPSO for the development of Barossa field offshore Australia
		Started charter service by an FPSO for Petrobras for the development of Tartaruga Verde and Tartaruga Mestiça fields offshore Brazil
	Aug	Selected as one of the companies to composite the JPX-Nikkei Index 400
	Dec	Order received from Eni Mexico for supply, charter and operations of an FPSO for the development of Area 1 offshore field in Mexico
		50th anniversary