



OIL EXPLORATION AND PRODUCTION BUSINESS

In addition to our achievements in oil development spanning half a century, we will strive to expand business based on our trustworthy relationships with Middle Eastern oil-producing countries.

Business Overview

The oil exploration and production business is a revenue driver within the Group business portfolio, and based on the core area of the Middle East, centered on Emirate of Abu Dhabi in the United Arab Emirates (UAE) and Qatar, with which we have established long trustworthy relationships, we are promoting safe and stable operation in existing fields.

FY2019 Results and FY2020 Forecasts

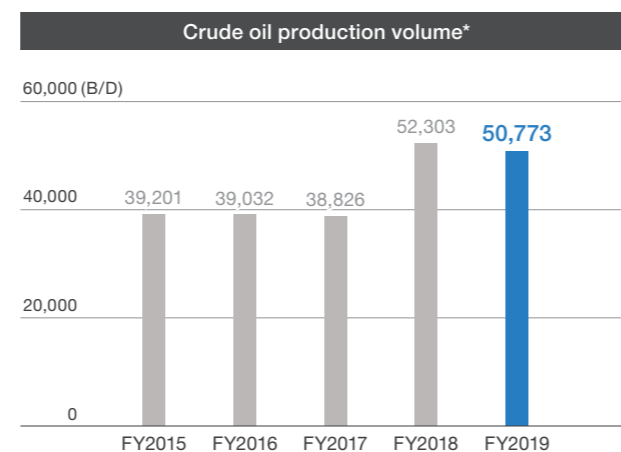
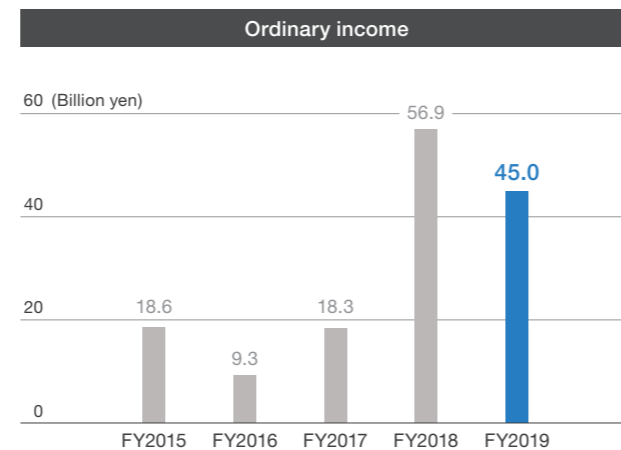
Production volumes in three oil fields (Mubarraz Field, Umm Al Anbar Field and Neewat Al Ghalan Field) recovered from the previous year in FY2019, but as we implemented production adjustments in response to a drop in the reservoir pressure at Hail Oil Field, production volume* decreased by 3% from the previous year to 50,773 barrels per day. In addition, crude oil prices fell US\$5 per barrel from the previous year to US\$64 per barrel, and ordinary income declined by ¥11.9 billion year on year to ¥45.0 billion.

In FY2020, even though we continue to operate safely and stably, we expect ordinary income to decrease by ¥49 billion year on year to ordinary loss of ¥4 billion due to the impact of the oil price decline caused by the COVID-19 pandemic. At Hail Oil Field, we are currently considering secondary oil recovery method to maximize the recovery of crude oil in the future.

*Production volume is the combined production of Abu Dhabi Oil Co., Ltd., Qatar Petroleum Development Co., Ltd., and Bunduq Co., Ltd.(subsidiary of United Petroleum Development Co., Ltd.), which are the major oil operating companies in the Group.

Ordinary income

FY2019 results	¥45.0billion (-¥11.9 billion year on year)
FY2020 forecast	-¥4.0billion (-¥49 billion year on year)



Business strengths and strategies

Risks	Opportunities	Strengths
<ul style="list-style-type: none"> Risk of crude oil price fluctuations Risk of stranded assets associated with energy transition Risk of operational and equipment accidents at oil fields 	<ul style="list-style-type: none"> Global oil demand will increase until 2040 Expansion of business opportunities as oil-producing countries develop 	<ul style="list-style-type: none"> Strong 50-year trustworthy relationship with Emirate of Abu Dhabi, the UAE Offshore oil field production as an operator Operating at highly competitive oil fields

Main Group companies

Cosmo Energy Exploration & Production Co., Ltd.,
Abu Dhabi Oil Co., Ltd.,
Qatar Petroleum Development Co.,Ltd.,
United Petroleum Development Co.,Ltd. (equity-method affiliate),
etc.

Major assets (as of March 31, 2020)

<p>Crude oil reserves (proved and probable) 160.6million barrels Equivalent to supply of approx. 17 years (As of December 31, 2019)</p>	<p>Crude Oil Production (Group Total) Approx. 51,000 barrels per day Approx. 13% of refining capacity (January to December 2019 result)</p>	<p>Partnerships Strong and trustworthy relationships with oil producing countries for 50 years</p>
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Business strategies

In the Oil Exploration and Production Business, we recognize the following risks in the business environment: Fluctuation in crude oil prices due to global trends in oil supply and demand as well as political instability in oil producing countries and surrounding countries; asset stranding of oil fields (asset holdings) caused by the energy transition as a long-term trend; and accidents at oil fields and production facilities associated with operations.

On the other hand, as opportunities in the business environment, we expect global demand for petroleum products to grow steadily in the long term until 2040, and we are assuming that business opportunities will expand as oil producing countries develop.

One of the strengths of the Group is our strong and trustworthy relationship with Emirate of Abu Dhabi for more than 50 years since before the UAE was founded. In addition, the Cosmo Energy Group is engaged in operations in oil producing countries and is achieving stable offshore oil field production using the technological capabilities it has cultivated over many years. Furthermore, our oil fields are located in shallow offshore areas, which

makes it possible to reduce drilling and production costs, thereby providing a competitive advantage.

In response to oil demand, which is expected to grow steadily in the future, the Group will continue to promote stable production at competitive oil fields.



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Competitive advantages

1 Strong 50-year trustworthy relationship with Emirate of Abu Dhabi

The relationship between Abu Dhabi Oil Co., Ltd. in the Cosmo Energy Group and Emirate of Abu Dhabi, the UAE started in 1967, before the UAE was founded. Back then, Emirate of Abu Dhabi had only given oil concessions to the United States and European companies but opened international bidding to Japan. Maruzen Oil Co., Ltd., Daikyo Oil Co., Ltd.(both companies are currently Cosmo Energy Holdings Co., Ltd.), as well as Nippon Mining Co.,(currently

ENEOS Holdings, Inc.) jointly bid and the oil concessions were awarded to them. Subsequently, a concession agreement on the exploration and development of the offshore oil fields in Abu Dhabi was signed on December 6, 1967. Abu Dhabi Oil Co., Ltd. has been engaged in safe and stable operation for many years through a close relationship with Abu Dhabi National Oil Company (ADNOC) and has been highly evaluated since its foundation. In 2018, Abu Dhabi

Oil Co., Ltd. celebrated its 50th anniversary. Our Group will strive to be a friendly, trusted partner of Emirate of Abu Dhabi for many years to come.



2 Offshore oil field production as an operator

As an operator (a company that is responsible for performing operations), the Group develops and produces oil, and has accumulated technology, know-how and experience related to oil field operations. In the case of crude oil production, only about 20% of the crude oil in the oil reservoir can be recovered by flowing well. In order to maximize the oil recovery rate, it is necessary to introduce methods to recover crude oil that adjust the features of the oil field. According to the properties of the oil field, the Group use oil recovery methods such as installing electric submersible pumps in wells, gas injection and

waterflooding into the formation for maintaining reservoir pressure in order to maximize oil recovery rates and maximize production. The Group are also actively engaged in overall HSE¹ activities. Abu Dhabi Co., Ltd. is engaged in operations that prioritize environmental protection while striving to improve occupational health and safety. It is conducting a wide range of activities that include developing and implementing HSE education and training plans corresponding to employees' careers, HSE patrols to improve the management of HSE on site and emergency response training. We will continue to implement safe operations and stable production at

each oil field and thereby contribute to a stable supply for Japan.

¹ HSE (Health, Safety & Environment): This term indicates labor safety and environmental problems associated with business activities. HSE activities are initiatives to deal systematically and efficiently with these problems, reduce risks as much as possible, and enhance corporate value.



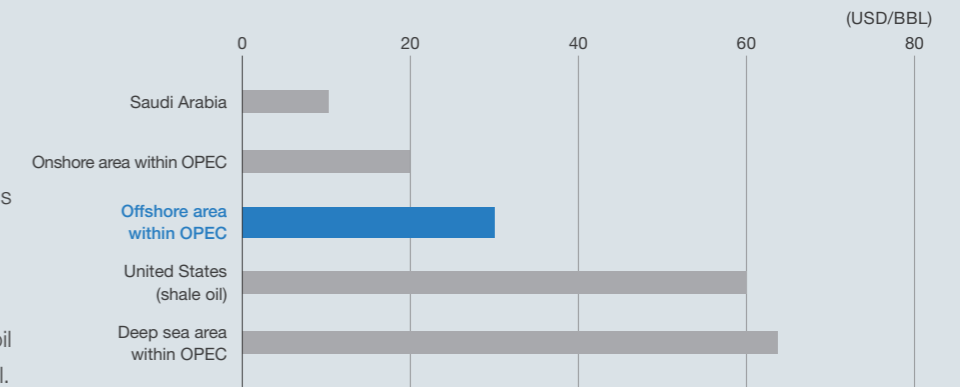
3 Possession of highly competitive oil fields

The Group's operating companies comprise Abu Dhabi Oil Co., Ltd. in Abu Dhabi, Qatar Oil Development Co., Ltd. in Qatar, and Bunduq Co., Ltd. on the border between Abu Dhabi and Qatar, and they are engaged in oil development and production. The area where the Group is engaged in oil development and production contains conventional oil fields located in shallow seas. They have lower development and production costs and are more competitive than non-conventional oil fields, which are typically deep water oil fields and shale oil fields. As a result, the Group's oil development division achieved profitability on an ordinary income basis, even in the tough FY2016 environment, when the Dubai crude oil price fell to the US\$30 per barrel level. Abu Dhabi Oil Co., Ltd. in the Group

acquired additional concession in Hail Oil Field, which was an undeveloped discovered structure, in December 2012. Because Hail Oil Field is located near existing oil fields, the development process was able to take advantage of existing ground production facilities, thereby

limiting new capital investment. In addition, per-barrel operating costs have been reduced as production volume increases. Hail Oil Field was commenced production in November 2017, and as production increased, the Group's profitability rose significantly.

Crude oil price equivalent to break-even point, by development area



* Prepared based on materials provided by an external research organization. Production costs vary at each oil field.

