# OIL EXPLORATION AND PRODUCTION BUSINESS



President, Representative Director. Chief Executive Officer Cosmo Energy Exploration & Production Co., Ltd. Katsushi Nishi

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.



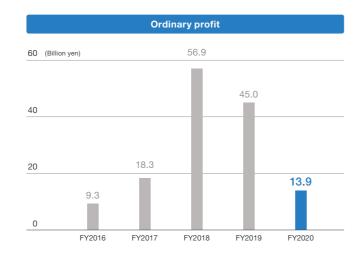
The oil exploration and production business is a revenue driver within the Group business portfolio, and based on the core area of the Middle East, centered on Abu Dhabi, United Arab Emirates (UAE) and Qatar, with which we have established long trustworthy relationships, we are promoting safe and stable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

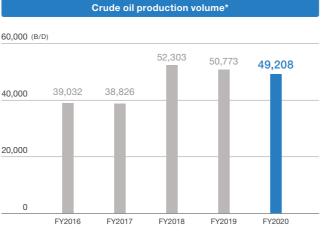
#### FY2020 Results and FY2021 Forecasts

In FY2020, ordinary profit declined ¥31.1 billion year on year, to ¥13.9 billion, reflecting the impact of a decline in crude oil prices attributed to the COVID-19 pandemic (Dubai crude oil price in Jan. to Dec. 2020: US\$42/barrel, down US\$22/barrel year on year). In FY2021, we expect ordinary profit to increase ¥19.1 year on year to ¥33.0 billion, with the continuation of safe, stable operations and the positive impact of improved crude oil prices (assumed Dubai crude oil price in Jan. to Dec. 2021: US\$60/ barrel, up US\$18/barrel year on year).

#### **Ordinary profit**

FY2020 results	¥13.9 billion	(Down ¥31.1 billion from the previous year)
FY2021 forecast	¥33.0 billion	(Up ¥19.1 billion from the previous fiscal year)





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



#### **Identified risks**

- Risk of stranded assets associated with energy transition
- Risks related to crude oil prices and production
- Risks related to exploration and development
- Risk of accidents in oil fields and at production facilities



#### **Opportunities**

- Realization of stable energy supply in the period of the transition
- Expansion of business opportunities as oil-producing countries
- Expectations for the development of CCS and CCUS technologies and business environment



#### **Strengths**

- Acquisition of new Offshore Block 4
- Trust-based relationships with oil producing countries for
- Possession of highly competitive oil fields
- Technologies cultivated through the operation of existing oil fields and the development of the Hail Oil Field



#### **COVID-19** impact and response

- The necessity of infection control measures at operation sites and oil mining plants
- Decrease in revenue associated with a decline in crude oil prices

- **Response** Developing and implementing a work-from-home program
  - Reviewing costs to secure profits even with low prices

#### **Business strategy**

In the Oil E&P Business, we have identified the following risks: 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; possibility that a commercially viable amount of resources will not be found in a newly awarded exploration block; risk of the 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.

However, as opportunities in the business environment, we expect a need for a stable energy supply in the period of the transition to decarbonization, the continued economic development of oil producing companies, progress in the development of CCS, CCUS, and other decarbonization technologies and the establishment of a related business environment, as they are all aimed at the creation of a

sustainable society.

One of the strengths of the Group is our close and trustworthy relationship with the Emirate of Abu Dhabi for more than 50 years since before the UAE was founded. In addition, at the Cosmo Energy Group, we are engaged in the self-operation (operatorship) of fields in the Emirate of Abu Dhabi and other oil producing countries and are achieving stable offshore oil field production using the technological abilities we have cultivated over many years. In 2021, we acquired the new Offshore Block 4. The new block is adjacent to an oil field possessed by Abu Dhabi Oil Co., Ltd., a Group company. We therefore expect synergy, including increased energy supply efficiency, to be created by the joint utilization of production, storage, and shipping facilities. Furthermore, our oil fields including the new block are located in shallow offshore areas, which makes it possible to reduce costs and thereby provides a competitive advantage.

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#### Competitive advantages

### Acquisition of Offshore Block 4, a new exploration block

Cosmo Energy Exploration & Production Co., Ltd., a Group company, participated in a round of block bidding organized by Abu Dhabi National Oil Company (ADNOC) in the United Arab Emirates (UAE) Emirate of Abu Dhabi, and was awarded Offshore Block 4, an offshore exploration block. Upon acquiring the block, the Cosmo Energy Group established Cosmo E&P Albahriya Limited, a project company, and signed the exploration concession agreement with ADNOC and the Supreme Council for Financial and Economic Affairs (SCFEA).

In the Oil E&P Business segment, we have been considering business strategy from a long-term perspective by seeking "added-value projects utilizing the Company's strengths" under the Sixth Consolidated Medium-Term Management Plan. We won the bid for the new block based on our long-term business strategy. We believe that the bid was successful due to the high evaluation of the solid, trust-based relationships we have built in the Emirate of Abu Dhabi, our many years of operating oil fields, and other reasons.

Offshore Block 4 lies adjacent to an oil field owned by Abu Dhabi

Oil, a Group company. Therefore, we expect that, if we reach the phase of development and production, the shared use of production, storage, and shipping facilities will minimize production and development costs and maximize the synergy of the overall Oil E&P Business segment.

With the acceleration of decarbonization and the shift to carbon neutrality by society as a whole, it is anticipated that the demand for oil will decline in the long term. However, the Oil E&P Business will remain important for us at the Cosmo Energy Group from the perspective of our mission to maintain stable supply to meet oil demand, which will remain at a certain level for some time, and from the viewpoint of energy security. Through our business in Offshore Block 4, which is highly competitive, we will efficiently supply oil energy and maintain and increase our competitiveness as we remain committed to producing revenue for the Group. At the same time, we will also consider the development and application of technologies which will be demanded by a decarbonized society, such as CCS and CCUS, toward the realization of a sustainable society in the future.

#### Features of Offshore Block 4

Basic information

- This block is located in the northern part of the Emirate of Abu Dhabi. Its area is 4.865 square kilometers.
- It is located in the shallow waters of the Arabian Gulf, which contains an ample amount of oil and natural gas resources and where development and production costs are said to be lower than other areas.

 The block is adjacent to the Mubarraz Oil Field possessed by Abu Dhabi Oil Co., Ltd. (ADOC), a subsidiary of Cosmo Energy Exploration & Production. Therefore, we expect that, if a commercially viable amount of crude oil or gas is discovered in this block, allowing us to move to the development and production phase, we will be able to utilize the production, storage, and shipping facilities of ADOC, which will enable Cosmo E&P Albahriya Limited to significantly reduce development and production costs and improve the operating efficiency of ADOC.

#### Flow of the Oil E&P Business and position of exploration activities

Flow of the Oil E&P Business is largely divided into four steps.

Offshore Block4

#### **Existing blocks of the Cosmo Energy Group**

Blocks of ADOC, United Petroleum Development Co., Ltd., and Qatar Petroleum Development Co., Ltd.

> Production and shipping

#### **Acquisition of concession**

- Bidding for concession, etc.
- Signing concession agreement

Taking bids or contract negotiations with an oil producing or gas producing country to acquire the concession for the promising area (block), and the signing of a



#### **Exploration**

- Geological survey
- Drilling test well

Conducting a geological survey and drilling a test well to discover a commercially viable reserve of oil



 Drilling production well Construction of production and

Development

shipping facilities

Constructing a production well and production facilities to start nercial production



### Crude oil production

- Processing of crude oil and
- shipment in crude oil tankers

Producing crude oil via the production well and processing it to remove impurities and for other purposes, before shipping



# Competitive 2

## Strong relationship of trust with the Emirate of Abu Dhabi

The relationship between Abu Dhabi Oil Co., Ltd. in the Cosmo Energy Group and the Emirate of Abu Dhabi, the UAE, started in 1967, before the UAE was founded. The strong relationship of trust has been maintained for more than 50 years.

The Cosmo Energy Group, has continued safe, stable crude oil development in collaboration with the Abu Dhabi National Oil Company (ADNOC) in the Emirate of Abu Dhabi for more than 50 years. In addition to this operational track record, we have built a multi-layer relationship that is not limited to crude oil development but also involves environmental measures and initiatives for contributing to local communities. This has led us to be highly evaluated as a reliable partner by the Emirate of Abu Dhabi and ADNOC. We believe that this strong relationship of trust with the Emirate of Abu Dhabi is the reason we were selected as the winner of the concession for the new Offshore Block 4. We will continue to strive to remain a friendly, trusted partner of the Emirate of Abu Dhabi.



#### Competitive advantages

## Self-operation in highly competitive oil fields

The area where the Group is engaged in oil development and production contains traditional oil fields located in shallow seas. They have lower development and production costs and are more competitive than non-traditional oil fields, which are typically deep water oil fields and shale oil fields. As a result, the Group's Oil E&P Business segment secured profitability on an ordinary profit basis, even in FY2016, when the Dubai crude oil price fell sharply to the US\$30 per barrel level.

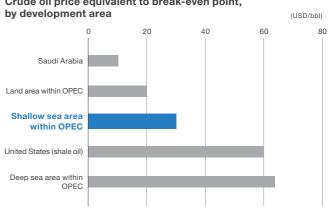
In addition, as an operator (a company that is responsible for performing operations), the Group develops and produces oil in oil producing countries, and has accumulated technology, know-how and experience related to oil field operations. In the case of crude oil production, only about 20% of the crude oil in the oil reservoir can be recovered by means of production based on a flowing well. In order to maximize the oil recovery rate, it is necessary to introduce methods to recover crude oil that suit the features of the oil field. According to the properties of the oil field, the Group uses recovery methods, such as gas injection and waterflooding into the formation to maintain reservoir pressure and maximize oil recovery rates and production.

The Group is also actively engaged in overall HSE activities.\* Abu

Dhabi Oil Co., Ltd. addresses risks related to occupational safety and health and environmental problems through a wide range of activities, such as formulating HSE education and training plans based on employees' careers and conducting emergency drills.

\* 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

# Crude oil price equivalent to break-even point.



\* Created based on data from an external research organization. Production cost differs among oil fields