OIL EXPLORATION AND PRODUCTION BUSINESS

**Strengths**

- Trustworthy relationship based on the stable operation in Abu Dhabi off-shore fields over 50 years
- Renewed concession agreement for three existing oil fields of Abu Dhabi Oil Co., Ltd. for 30 years and newly acquired Hail Oil Field. Operating Hail Oil field at full capacity
- Alliance with CEPSA\(^1\), a wholly-owned company of our largest shareholder MIC\(^2\) (formerly IPIC)

\(^1\) Compañía Española de Petróleos, S.A.U. (CEPSA) is a major Spain-based oil company.

\(^2\) Mubadala Investment Company (MIC), a holding company was established by an integration of International Petroleum Investment Company (IPIC), an energy investment company that is fully owned by the Abu Dhabi government and Mubadala Development Company (MDC).

Abu Dhabi Oil Co., Ltd. in the Cosmo Energy Group owns concessions in four oil fields (Mubarraz, Umm Al Anbar, Neewat Al Ghalan, and Hail) based on over 50-years trustworthy relationship with Abu Dhabi, UAE. We have also maintained stable operation for many years at three oil fields (Al Karkara, A-Structure North and A-Structure South) in Qatar by Qatar Petroleum Development Co., Ltd. and at El-Bunduq Oil Field in the border zone of Abu Dhabi and Qatar by United Petroleum Development Co., Ltd. We are also engaged in oil development and production as an operator. As we have accumulated technologies and know-how about our oil fields, we have been able to operate and product the crude oil at low-cost. Our strong competitiveness enable us to earn profit even in FY2016, when the Dubai oil price dropped to around US$30 per barrel.

**Ordinary income**

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<tr>
<td>18.6</td>
<td>18.3</td>
<td>9.3</td>
<td>18.3</td>
<td>69</td>
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**Dubai crude oil price (Jan.-Dec. Average, RH)**

<table>
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<tr>
<th>FY2014</th>
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<tr>
<td>97</td>
<td>51</td>
<td>41</td>
<td>53</td>
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* Operating companies (Abu Dhabi Oil Co., Ltd., Qatar Petroleum Development Co., Ltd., and United Petroleum Development Co., Ltd.) end their FY on December 31.
FY2018 Results
Our gross production rate increased by 35% year-on-year to 52,303 B/D thanks to continuous full production capacity of Hail Oil Field from January 2018. Higher crude oil prices also contributed positively to generating ordinary income of ¥56.9 billion in FY2018, up ¥38.6 billion from the previous year.

FY2019 Forecasts
In order to maximize recovery of crude oil from Hail Oil Field, we curtail its production and proceed to consider secondary oil recovery* in FY2019. As a result, ordinary income is expected to be ¥40.0 billion, down ¥16.9 billion year on year.

Enhanced profitability due to production at Hail Oil Field
Abu Dhabi Oil Co., Ltd. in the Cosmo Energy Group acquired a concession of the Hail Oil Field in December 2012 and commenced production in November 2017. Along with an increase in production rate at Abu Dhabi Oil Co., Ltd., the Cosmo Energy Group’s profitability improved substantially. Being located near existing oil fields, Hail Oil Field has suppressed new capital investment by sharing the existing facilities and has also reduced per-barrel operating costs while boosting production volume.

After the commencement of production, the rate of decline in the reservoir pressure at Hail Oil Field was higher than initially expected. We are therefore considering secondary oil recovery methods such as the waterflooding method in 2019. After the method for secondary oil recovery is implemented, production rate is expected to recover to the originally expected level. We will maintain stable production in each oil field, thereby contributing to the stable crude oil supply for Japan.

*The purpose of secondary recovery is to maintain reservoir pressure and to displace oils toward the wellbore by using an external fluid such as water or gas injected into the reservoir through injection wells.