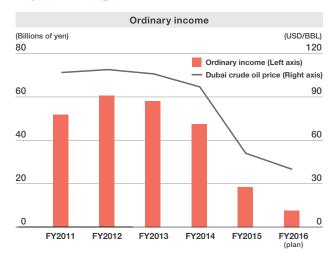
## Oil Exploration and Production

### **Business Summary**

The Cosmo Energy Group is participating in interests in the Middle East region as an operator that is in control of the development process, based on strong relationships of trust with Abu Dhabi in the United Arab Emirates (UAE), where it has established partnerships of trust over many years, and State of Qatar. The Group is engaged in oil exploration and production mainly through three companies—Abu Dhabi Oil Co., Ltd. (ADOC), Qatar Petroleum Development Co., Ltd. (QPD), and United Petroleum Development Co., Ltd. (UPD). Among these, the ADOC project, in particular, has been continuing to produce oil steadily for nearly 50 years, and now the Group

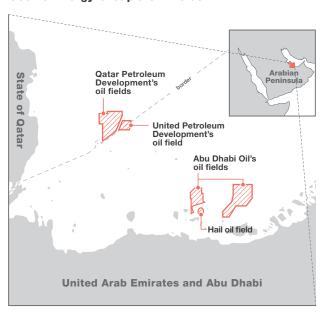
is promoting the development of the Hail Oil Field, which is projected to generate production volume equivalent to that of the three oil fields already engaged in production. Moreover, in 2014, Cosmo Energy Group signed a memorandum of understanding regarding the establishment of a strategic comprehensive alliance with International Petroleum Investment Company's (IPIC's\*) wholly-owned subsidiary Compañía Española de Petróleos, S.A.U. (CEPSA), a major Spain-based oil company, and in November of the same year, this alliance was strengthened further by accepting a 20% investment by CEPSA in Cosmo Abu Dhabi Energy Exploration & Production.

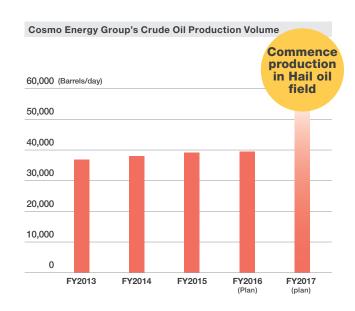
### **Operating Performance**



In FY2015, total oil production by the three companies led by Cosmo Energy Exploration & Production—ADOC, QPD, and UPD—amounted to 39,201 barrels/day, up 3.1% compared with the previous fiscal year. However, owing to the strong impact of a decline in crude oil prices, ordinary income in the Oil Exploration and Production Business segment was ¥18.6 billion, a ¥28.9 billion yearon-year decrease. In FY2016, as we assume an average crude oil price of US\$40/barrel (versus an actual \$50.9/ barrel in January-December 2015) and an exchange rate of ¥110 per U.S. dollar (versus an actual ¥121.1 per U.S. dollar in January-December 2015), we project segment ordinary income of ¥7.5 billion, down ¥11.1 billion.

### Cosmo Energy Group's Oil Fields





<sup>\*</sup> An investment company in the energy and related sectors that is fully owned by the Abu

# Business

### **Strengths**

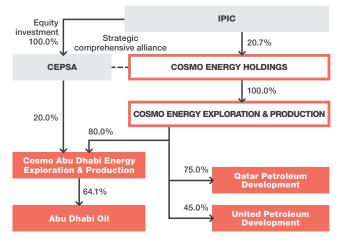
- Alliance with CEPSA, our largest shareholder IPIC's wholly owned company
- Track record of stable off-shore oil fields development in the Middle East extending for approximately 50 years
- Extension of interests in three existing oil fields of ADOC for 30 years and acquisition of Hail oil field

Evaluation of Crude Oil Reserves (The Company's interests)\*1

Proved reserves*2	80.2 million BBL
Probable reserves*3	81.2 million BBL
Total of proved and probable reserves	161.4 million BBL
Proved and probable reserves/ production ratio	Approx. 24 years

As of December 31, 2015

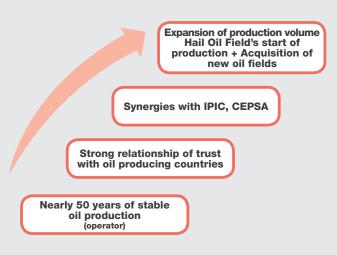
The reserves include those of a new concession area, Hail Oil Field. The average crude oil production based on working interest reached 19,000 barrels/day in FY2015 (Jan-Dec).



- \*1 The assessment of ADOC reserves which deemed to have significant impact on Cosmo's future profitability was carried out in an independent assessment by Gaffney, Cline & Associate (hereinafter, "GCA"), a leading global independent reserve auditor. The assessment of QPD and UPD reserves were carried out in these companies respectively. These assessments of the reserves do not guarantee the reserves and production from them
- \*2 Proved Reserves are those quantities of petroleum, which by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under defined economic conditions, operating methods, and government regulations. When probabilistic methods are used, there should be at least a 90% probability that the actual quantities recovered will equal or or the 1P estimate. (Definition of SPF PRMS 2007 March)
- \*3 Probable Reserves are those additional Reserves which analysis of geoscience and engineering data indicate are less likely to be recovered than Proved Reserves but more certain to be recovered than Possible Reserves. When probabilistic methods are used, there should be at least a 50% probability that the actual quantities recovered will equal or exceed the 2P estimate. (Definition of SPE PRMS 2007 March)

### Initiatives to create long-term corporate value

ADOC at the same as extending interests for 30 years from 2012, based on its strong relationship of trust with oil producing countries, acquired new concession area, the Hail oil field which is expected to generate production volume on par with that of the three existing oil fields (Mubarraz Oil Field, Umm Al-Anbar Oil Field, and Neewat Al-Ghalan Oil Field), and is promoting development aimed at the start of production in the first half of 2017. The Hail Oil Field is a highly competitive, large-scale project that can share facilities such as for shipment with the nearby existing oil fields, and is expected to contribute at an early stage to the Cosmo Energy Group's Oil Exploration and Production business. In addition, workshop meetings involving Abu Dhabi National Oil Company (ADNOC), CEPSA, and Cosmo Energy Group are held periodically in a combined effort to acquire new concession areas and seek possibilities for further business expansion.



### Hail Oil Field's Progress and Development Schedule

- Start of production in the First Half of 2017 (Excavation started in FY2016)
- Production volume is projected to be equivalent to that of the three existing oil fields of ADOC
- Expect a decline in operational cost per unit, due to use of existing facilities

