



# ADDRESSING ZOHR FIELD RESOURCES IN A NEW PROSPECTIVE

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## ZOHR AT A GLANCE

### FIELD LOCATION & AREA

Basin	Mediterranean Sea
Concession	Shorouk
Location	190 km north of the city of Port Said
Area	100 km <sup>2</sup>

### CONCESSION AGREEMENT

2012 Bid Round	EGAS Concessionaire	Jan 2014 Agreement Date
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### ABOUT THE DISCOVERY

Discovery Date Aug 2015	Field Type Natural Gas Offshore	Production Start Dec 2017
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### THE 1<sup>ST</sup> DISCOVERY WELL

Zohr 1X NFW	Name
Underwater Depth 4,757 feet (1,450 metres)	
13,553 feet (4,131 metres)	Drilling Depth
Reservoir Characteristics Miocene age A deeper Cretaceous upside	

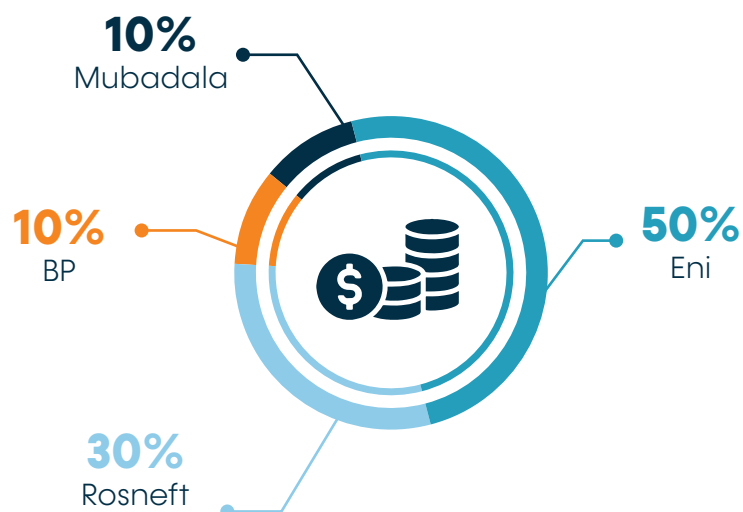


## 1. OPERATING COMPANIES

### COMPANIES JOINED THE GIANT FIELD OPERATIONS

Date	Company	Share Value (\$ billion)
Feb 2017	BP	0.375
Oct 2017	Rosneft	1.125
Jun 2018	Mubadala	0.934

### CURRENT STAKEHOLDERS



### ZOHR FIELD PRODUCTION SHARING

	Pre-Cost Recovery (%)	Post-Cost Recovery (%)
Egypt	39	60
Eni & Partners	21	40
Cost Recovery	40	-

## 2. ZOHR MAIN INDICATORS

### A. FIELD'S RESERVES

Recoverable Reserves at Zohr

**25%** of natural gas discoveries in the Levant basin & the East Mediterranean region

#### NATURAL GAS RESERVES IN THE LEVANT BASIN

Egypt	Lebanon
Palestine	Israel
Divided Island of Cyprus	



**122 tcf**

#### NATURAL GAS RESERVES IN THE EAST MEDITERRANEAN



#### ZOHR IS THE LARGEST AMONG NATURAL GAS FIELDS IN THE EAST MEDITERRANEAN

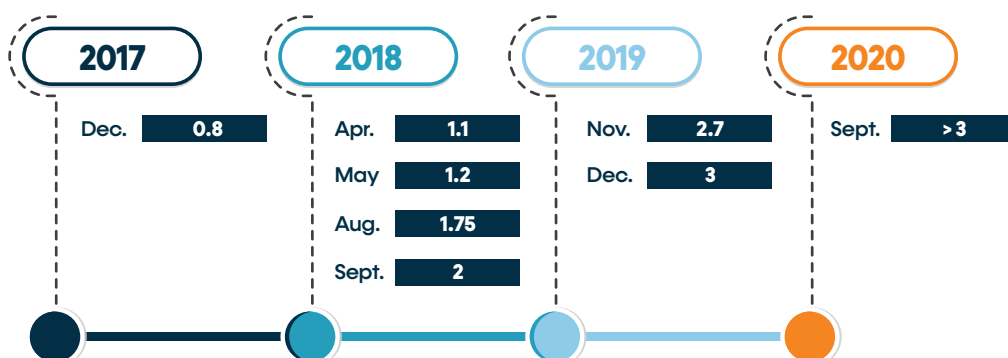
Field	Location	Year of Discovery	Estimated Reserves (tcf)
Zohr	Egypt	2015	30
Leviathan	Israel	2010	22
Tamar		2009	10
Calypso		2018	6-8
Glafoos	Cyprus	2019	5-8
Aphrodite		2011	5
Gaza Marine	Palestine	1999	1.06

### B. DEVELOPMENT OF FIELD'S PRODUCTION RATES



Zohr natural gas production represents **40%** of Egypt's total gas output

#### ZOHR PRODUCTION RATES (BOF/D)



### C. FIELD'S INVESTMENTS & DRILLED WELLS

#### PHASES OF ZOHR PROJECT

Development Dates	Total Wells	Added Investments (\$ billion)	Total Investments (\$ billion)
By June 2018	8	4	8
By June 2019	12	3	10.6
Late 2019	-	-	15.6
Late 2019	14	-	-
Late 2020	15 Southern: 5 Northern: 15	-	-

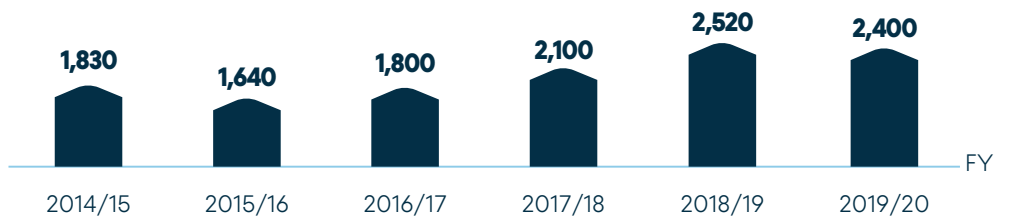


Investments are planned to reach **\$16 billion** throughout the project period

## 3. THE EFFECT OF THE DISCOVERY ON THE EGYPTIAN NATURAL GAS MARKET

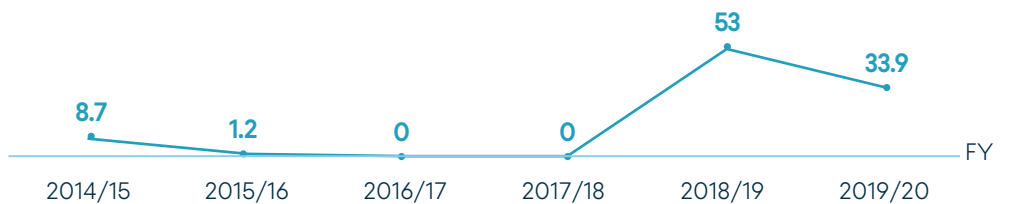
### A. CHANGE IN EGYPT'S TOTAL ANNUAL PRODUCTION RATES

#### ANNUAL NATURAL GAS PRODUCTION (BCF)

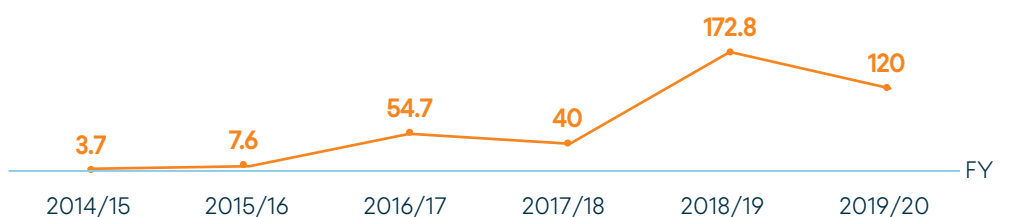


### B. EFFECT ON EGYPT'S NATURAL GAS BALANCE

#### EGYPT'S NATURAL GAS EXPORTS (BCF)



#### EGYPT'S LNG EXPORTS (BCF)



## EXPORTING MARKET STATUS IN EGYPT

FY		
2013/14	Transition from Exporter to Importer	
2014/15		
2015/16	Zohr Field Discovery	Net Importer
2016/17	Natural Gas Imbalance	Government pays a bill of \$ 2.2 billion
2017/18	Halt Imports	Start Exporting Trial Quantities to Jordan
2018/19	Began to Export	Idku facility came back to work
2019/20	Net Exporter	Damietta LNG plant returns to work

## 4. PRODUCTION AND TREATMENT FACILITIES (INFRASTRUCTURE)

### A. EARLY/PREMATURE FACILITIES

#### EARLY FACILITIES

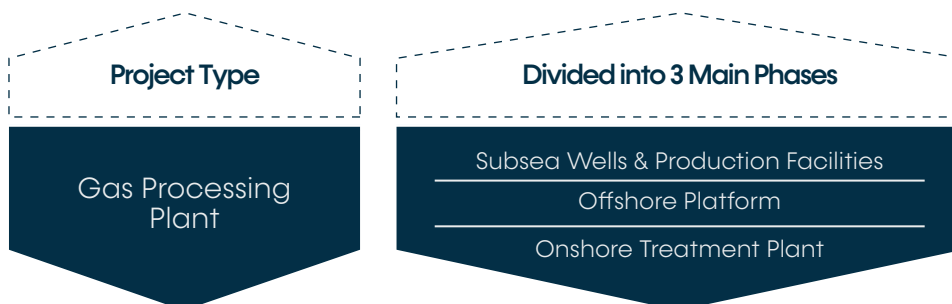
Consists of **4** Units



\*Sulfur Recovery Units

### B. ZOHR DEVELOPMENT PROJECT

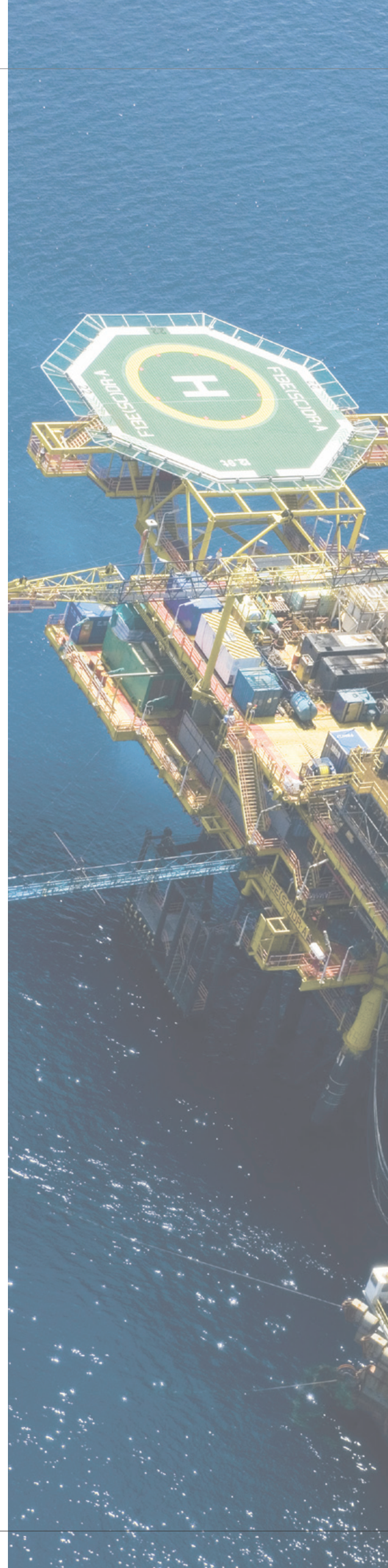
#### FIELD DEVELOPMENT PROJECT



### I. SUBSEA WELLS & PRODUCTION FACILITIES



\*Remote Operated Vehicles



## II. THE ONSHORE NATURAL GAS TREATMENT PLANT FACILITIES CONSTRUCTION



Area  
**2.5 million m<sup>2</sup>**



Operator  
**Petrojet**

### CONSTRUCTION PHASES

Phase	Phase's Details	Status
<b>1<sup>st</sup></b>	Includes Inlet Facilities, EPF, 4 Production Units, 2 SRUs*, Utilities & Flair	Implemented
<b>2<sup>nd</sup></b>	3 Production Units, 2 SRUs*, Utilities & Flair (Total Treatment Units: 8)	-

### ZOHR PLANNED & ONGOING MEGA PROJECTS IN 2021\*

Project	Status	Operator	Investments* (\$ million)
Field Development: Subsea Production Systems: Phase II	Under Construction	PetroShorouk	160
Field Development Project	Planned, & Unawarded - At Study Phase	Petrobel	7,547

\*Estimated

## III. THE FABRICATION OF THE OFFSHORE FACILITIES



Location

**200 km off the Onshore Plant in the Mediterranean Sea Operations, at Depth of 1,500 m**

### Fabrication Works

Fabrication of Control Platform & Deep-Water Structures

Coating **707** km Subsea Pipelines with Polyethylene & Concrete