

# Oil & Gas Developments in the Republic of Cyprus

### **Demetris C. Fessas** Act. Gen. Manager – Cyprus Hydrocarbons Company



## **Cyprus Hydrocarbons Company Ltd**

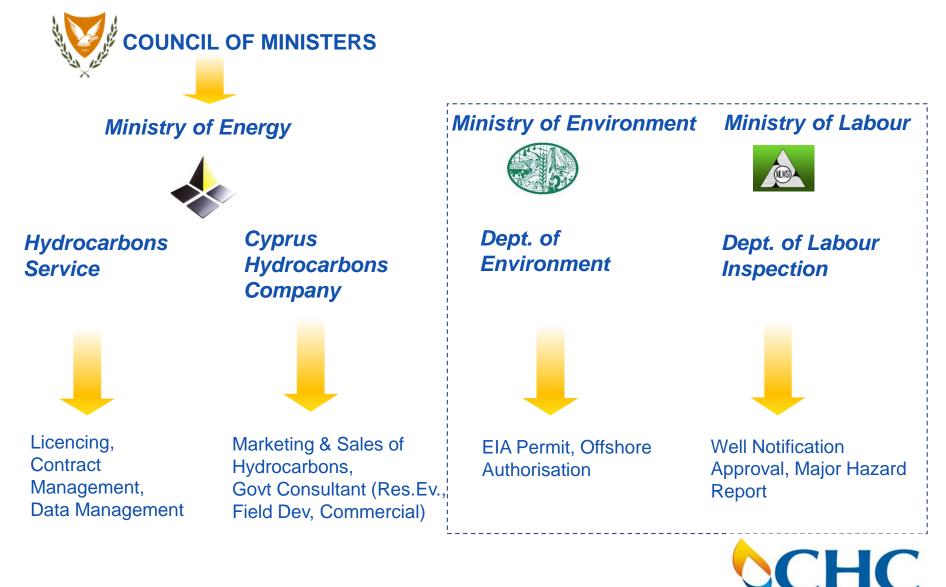
- The Cyprus Hydrocarbons Company (CHC) is the National Hydrocarbons Company of the Republic of Cyprus (RoC) and is responsible for the commercial management of the RoC's rights as included in the Production Sharing Contracts.
- Responsibilities include:
  - Advising on prospectivity of the Republic's EEZ
  - Advises on Licensing rounds
  - Advising on Commerciality of oil and gas discoveries
  - Advising on operators development and production plans
  - Marketing and sales of the Republic's share of any future hydrocarbons production
  - Will hold the government's share in large infrastructure projects.
- In its present form, established in March 2014
- Experienced team of Managers, Geoscientists, Engineers and Commercial professionals recruited from Major Operators and Service companies.
- Capabilities cover full spectrum of Upstream and Midstream activities, with cumulative experience of +100years

#### **Our Vision**

Optimum exploitation of hydrocarbons resources present in the Exclusive Economic Zone of the Republic of Cyprus in order to maximize the benefits for the Cypriot Society and for future generations.



### Administration of Hydrocarbons – Republic of Cyprus



01/11/2018

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### **Hydrocarbons Licencing and Contract Structure**

#### Hydrocarbons Law 2007 & Regulations:

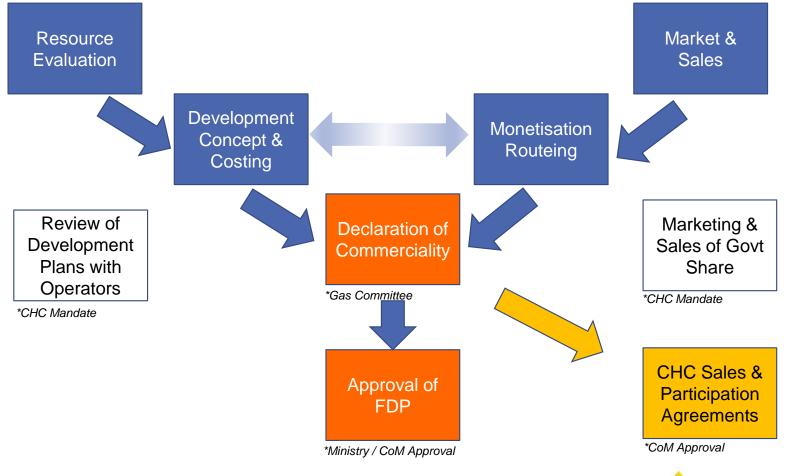
- Open tender process (with exceptions)
- Exploration period (3 +2 +2 years)
- > 25% area relinquishment on renewal
- Exploitation period (25 years)

#### **Production Sharing Contracts:**

- Model contract (finalised by negotiation)
- R-Factor (2/3<sup>rd</sup> round)
- Annual Cost recovery cap
- All taxes on revenues included in govt profit share
- No upstream direct participation by state entities

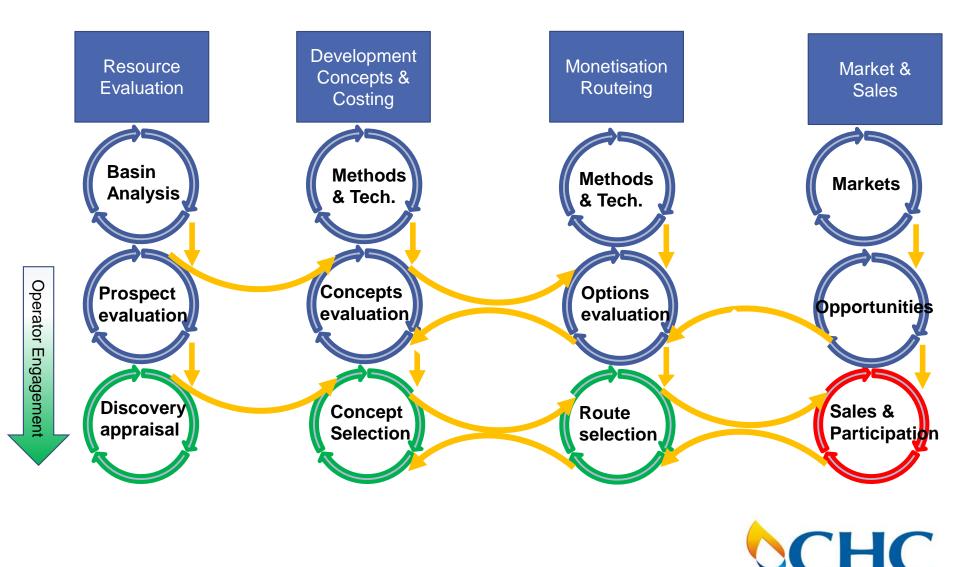


## CHC – Key Responsibilities Exploration / Appraisal





# **CHC – Implementation**



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### Some History...





## Some History...

#### Definition of the Republic of Cyprus Exclusive Economic Zone

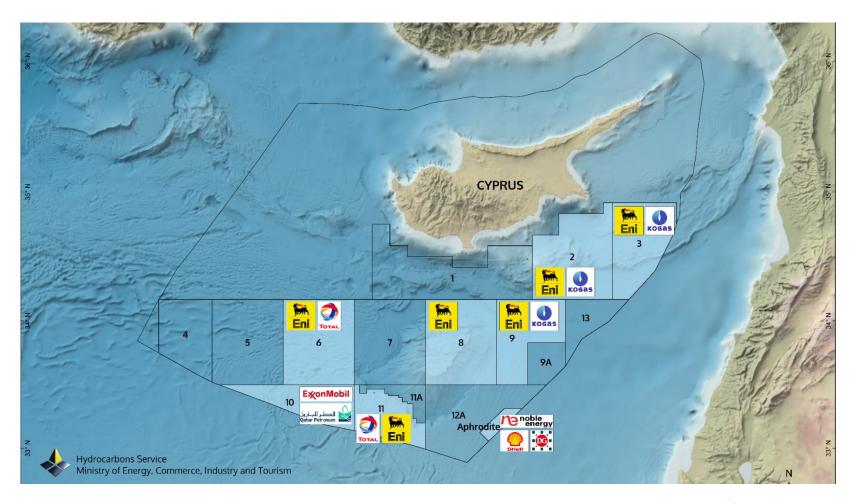
- •1988: Cyprus ratified the United Nations Convention on the Law of the Sea (UNCLOS)
- •2003: Delimitation Agreement of the EEZ with the Arab Republic of Egypt ratified in 2004
- •2007: Delimitation Agreement of the EEZ with the Republic of Lebanon
- •2010: Delimitation Agreement of the EEZ with the State of Israel ratified in 2011.
- •2013: Common utilization Agreement with the Arab Republic of Egypt.

#### **Oil and Gas Activities in the Cypriot EEZ**

- •2008: <u>1st Licencing Round</u>: Awarded Exploration License to Noble Energy for Block 12.
- •2011: Exploration well drill by Noble in Block 12 leads to the discovery of the Aphrodite field
- •2013: <u>2<sup>nd</sup> Licencing Round:</u> Awarded Exploration Licenses for Blocks 10 and 11 to Total, and 2, 3 & 9 to ENI /KOGAS
- •2013: Appraisal well in Aphrodite field confirms resources between 3.6 6 tcf
- •2015: Two Exploration wells in Block 9 by ENI No success
- •2016: BG Group (now part of Shell) joins the Block 12 Licence with a 35% shareholding
- •2017: <u>3<sup>rd</sup> Licencing Round:</u> Awarded Exploration Licenses for Block 6 to ENI/Total, Block 8 to ENI & Block 10 to Exxon/QP



### To Today...





### **Block 12 Aphrodite gas field – Development Status**

- Gas Sales Negotiations mature (CHC & Blk12 partners)
- > **Development & Production Plan** optimized and being discussed with government
- Production Sharing Contract to be renegotiated with government
- Pipeline IGA signed Cyprus /Egypt
- Base Case
  - Floating host with 800 mmcf/d
  - Export via pipeline to Egypt
  - FID targeted 2019
  - First gas targeted 2022

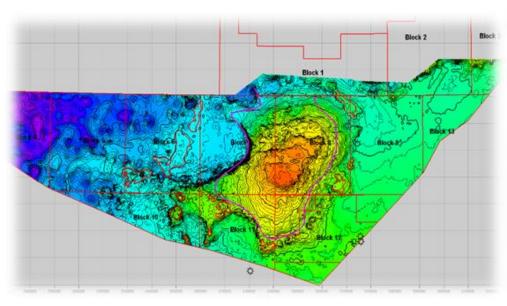






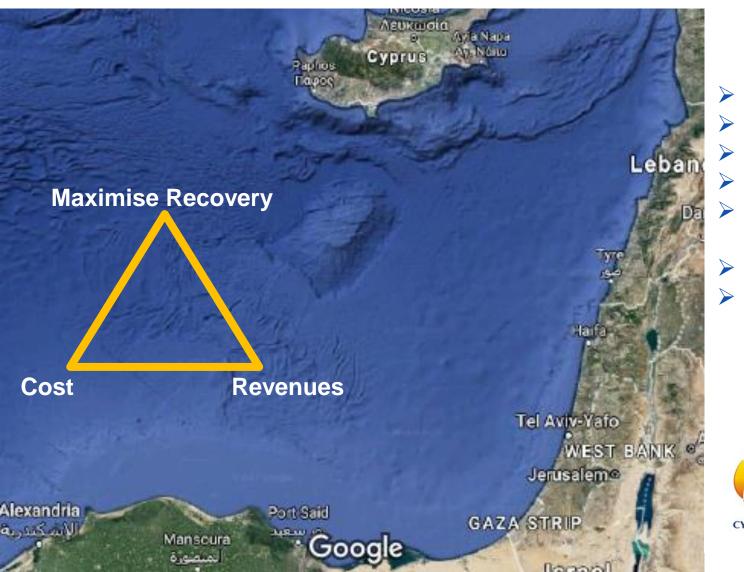
## **Exploration Activities**

- > Targeting of **Zohr** Analogues
- Further Multi Client Seismic Surveys completed
- Block 11 First exploration well confirms 'play' in Cyprus EEZ Sept 2017
- Block 6 Second exploration well drill in Block 6, significant gas discovery Feb 2018
- Block 10 Exploration drilling planned in 4Q 2018, 2 wells
- Block 7 Restricted tendering process commenced





### **Exploitation - Development Options**



- Resource volumes
- Resource location
- Distance to shore
- Gas composition
- 1500-2500m water depth
- Topography
- Metocean (wind, waves, temp)



### **Exploitation - Monetization Options**

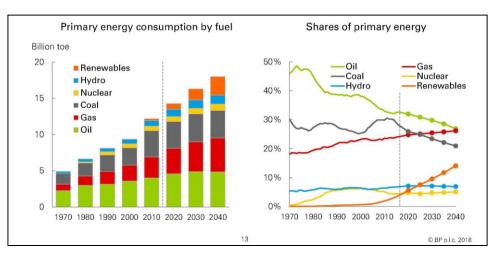
- Pipeline to Egypt (Egyptian facilities/market)
- Land based LNG Vasilikos (Global market)
- Floating LNG (Global market)
- East Med (European market)
- CNG Gasvessel (Regional market)

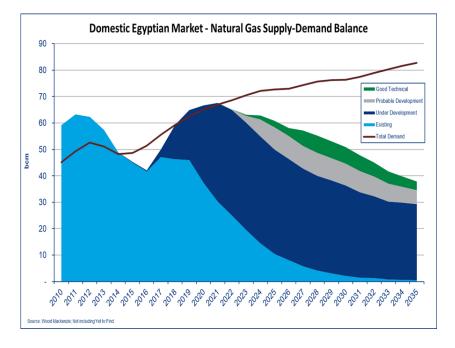


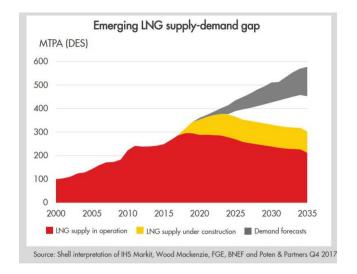




# **Regional and Global Markets**







- Global Energy needs increasing...
- Portion of Natural Gas % increasing
- LNG supply/demand gap
- Investments in LNG projects on the increase
- Egyptian long term supply/demand gap





# Thank you

### **Demetris C. Fessas**

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