"The developments and planning in Cyprus EEZ in relation to the exploration and exploitation of hydrocarbons reserves"

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## LEGAL FRAMEWORK



## Legislation

- The Hydrocarbons (Prospection, Exploration and Exploitation) Laws of 2007 to 2015 (L.4(I)/2007, L.126(I)/2013,
   L.29(I)/2014 και L.186(I)/2015)
- The Hydrocarbons (Prospection, Exploration and Exploitation) Regulations of 2007 to 2019 (P.I. 51/2007, P.I. 113/2009, P.I. 576/2014 και P.I. 248/2019)
- The activities pertaining to hydrocarbons prospection, exploration and exploitation are also subject to the general national legislation on taxation, environmental protection, health and safety.

## Model Agreement

• The Exploration and Production Sharing Contracts (EPSCs) govern the exploration and exploitation activities.

## Hydrocarbon Exploration License

- Granted initially for 3 years; possibility for 2 renewals of up to 2 years each
- On each renewal, 25% of the initial area is relinquished

## Hydrocarbon Exploitation License

• Granted for an initial period of up to 25 years; ability for one renewal of 10 years



## DELIMITATION OF CYPRUS EXCLUSIVE ECONOMIC ZONE (EEZ)



## ► Arab Republic of Egypt

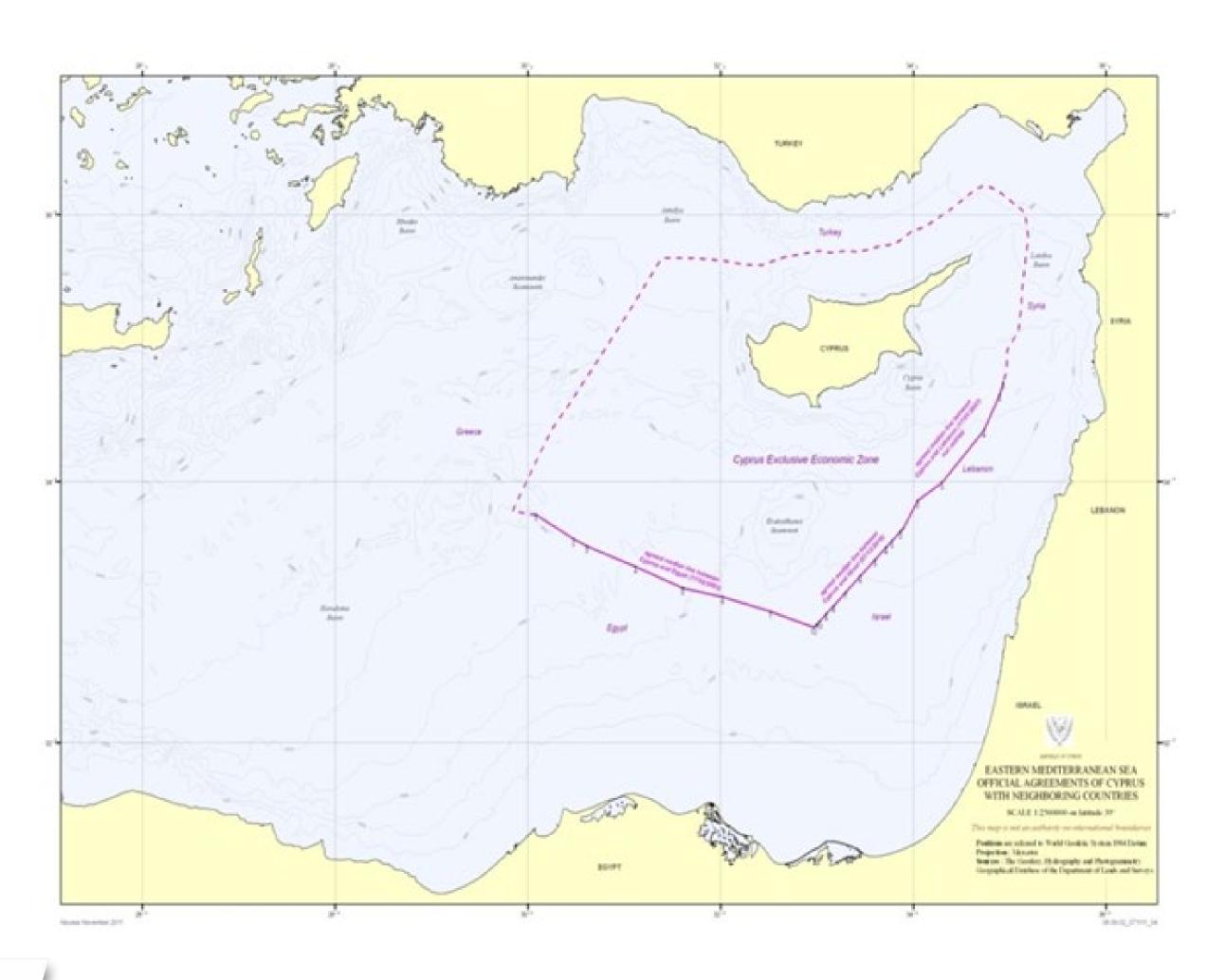
- Delimitation of the EEZ 2003 (ratified)
- Framework Agreement concerning the development of cross-median line hydrocarbon resources signed 12/12/2013
- Intergovernmental Agreement on a cross-border gas pipeline (signed in 2018)

#### ▶ Republic of Lebanon

- Delimitation of the EEZ 2007
- Agreement concerning the joint development and exploitation of cross-median line hydrocarbon resources – under negotiation

#### > State of Israel

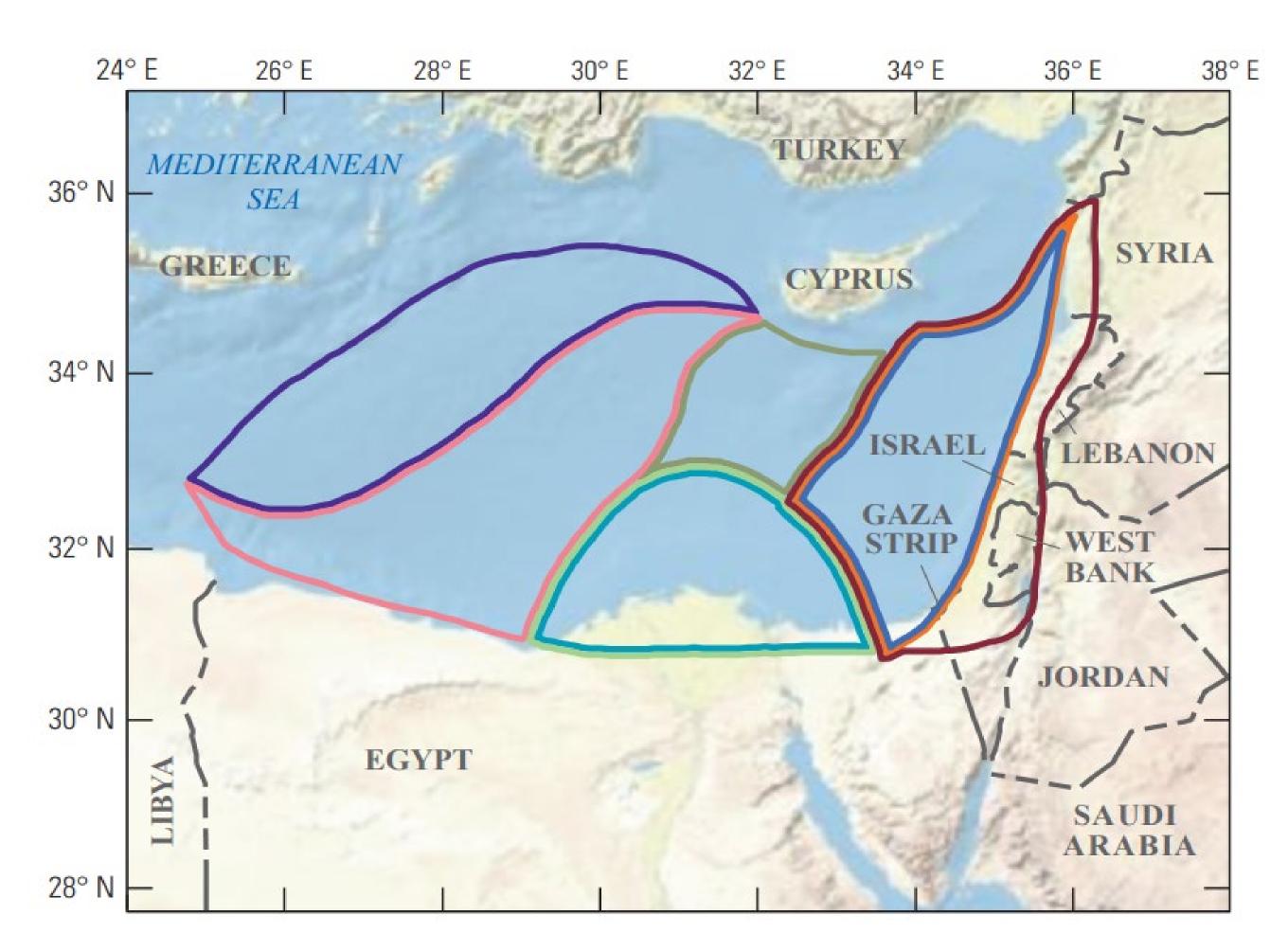
- Delimitation of the EEZ 2010 (ratified)
- Agreement concerning the joint development and exploitation of cross-median line hydrocarbon resources under negotiation





## EASTERN MEDITERRANEAN HYDROCARBONS POTENTIAL





According to a study by the U.S. Geological Survey (Fact Sheet 2021-3032), the estimated undiscovered, technically recoverable mean resources in the Eastern Mediterranean area are:

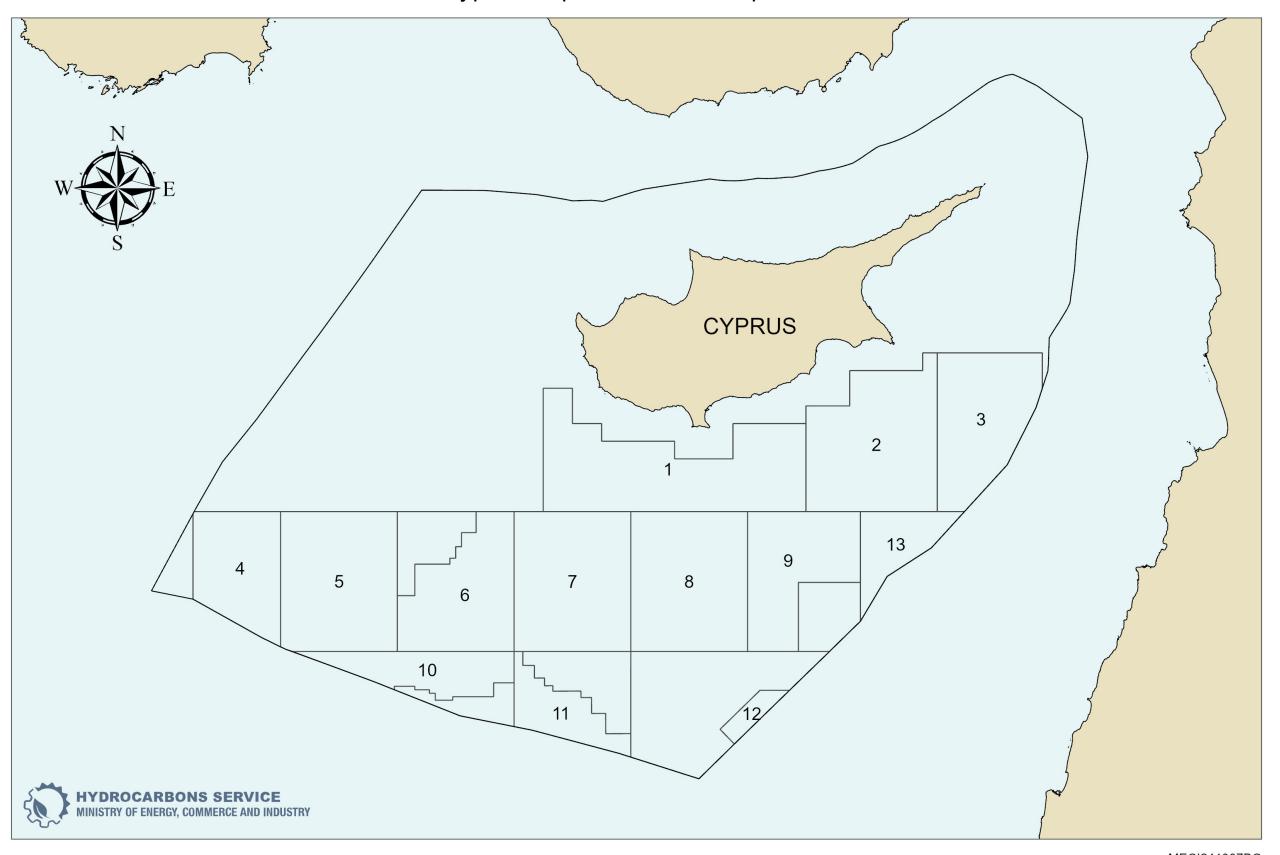
- >880 million barrels of conventional oil
- > 286 trillion cubic feet of conventional gas



# **EXPLORATION BLOCKS**



#### Offshore Cyprus Exploration and Exploitation Blocks



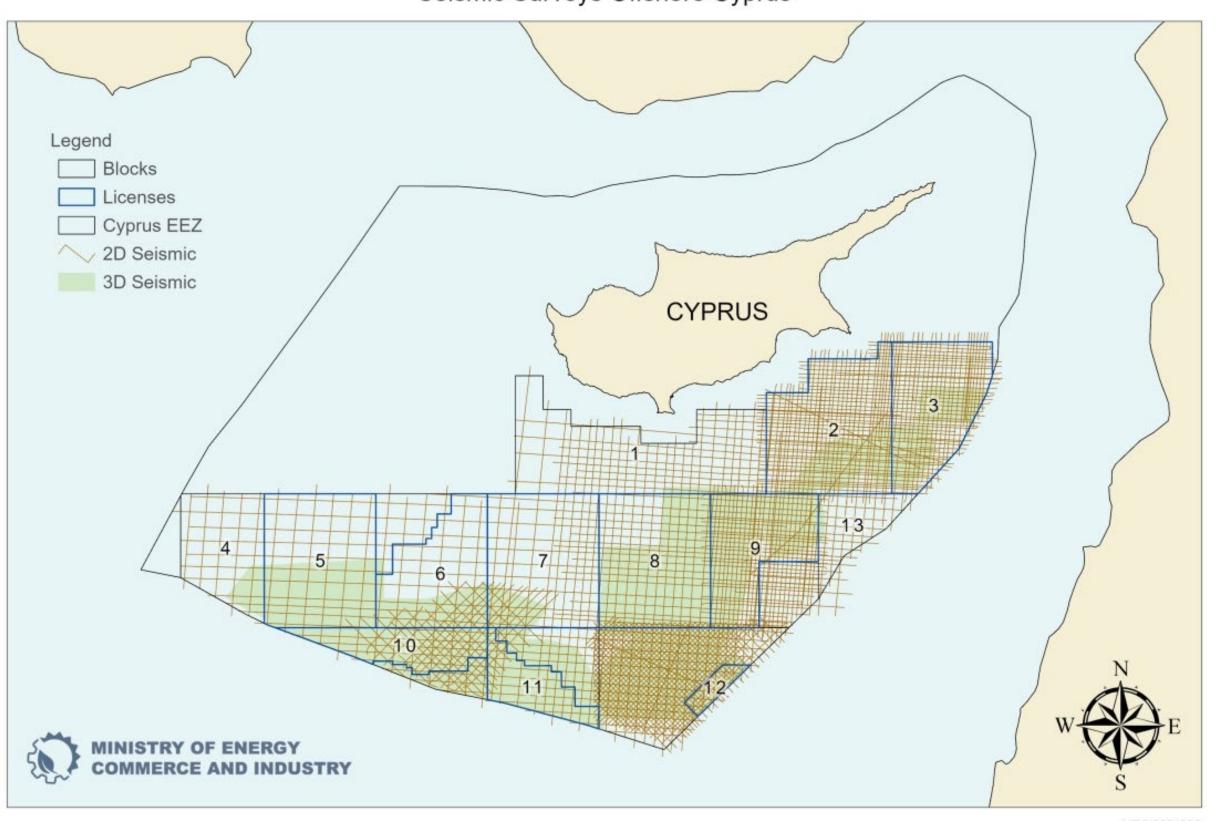
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## **AVAILABLE DATA**



#### Seismic Surveys Offshore Cyprus



#### **Multi-client Geophysical Data**

- 2006 2D seismic survey (MC2D-CYP 2006), 6,770 line-km
- 2007 3D seismic survey (MC3D-CYP2007), 659 sq. km
- 2008 2D seismic survey (MC2D-CYP2008), 12,266 line-km
- 2013 3D seismic survey (MC3D-CYP2013), 2,280 sq. km
- 2016 3D seismic survey (MC3D-CYP2016), 5,201 sq. km
- 2017 3D seismic survey (MC3D-CYP2017), 4,780 sq. km
- 2023 Cyprus Vision 3D reprocessing project, 19,126 sq. km

#### Licensees

- 2D seismic surveys, 12.500 line-km
- 3D seismic surveys, 11.500 sq. km





# HYDROCARBONS EXPLORATION LICENCES



#### 1st Licensing Round (2008)

➤ Block 12: Noble Energy –
now Chevron (35%),
Delek now NewMed
Energy (30%) and
BG now Shell (35%)

#### 2nd Licensing Round (2013)

- ➤ Blocks 2, and 9: Eni (60%), TotalEnergies (20%) and Kogas (20%)
- ➤ Block 3: Eni (50%), TotalEnergies (30%) and Kogas (20%)
- ➤ Block 11: TotalEnergies (50%) and Eni (50%)

### 3rd Licensing Round (2017)

- ➤ Block 6: Eni (50%) and TotalEnergies (50%)
- ➤ Block 8: Eni (60%) and TotalEnergies (40%)
- ➤ Block 10: ExxonMobil (60%) and Qatar Energy (40%)

# Licensing Process for Block 7 (2019)

➤ Block 7: TotalEnergies (50%) and Eni (50%)

# Licensing Process for Block 5 (2021)

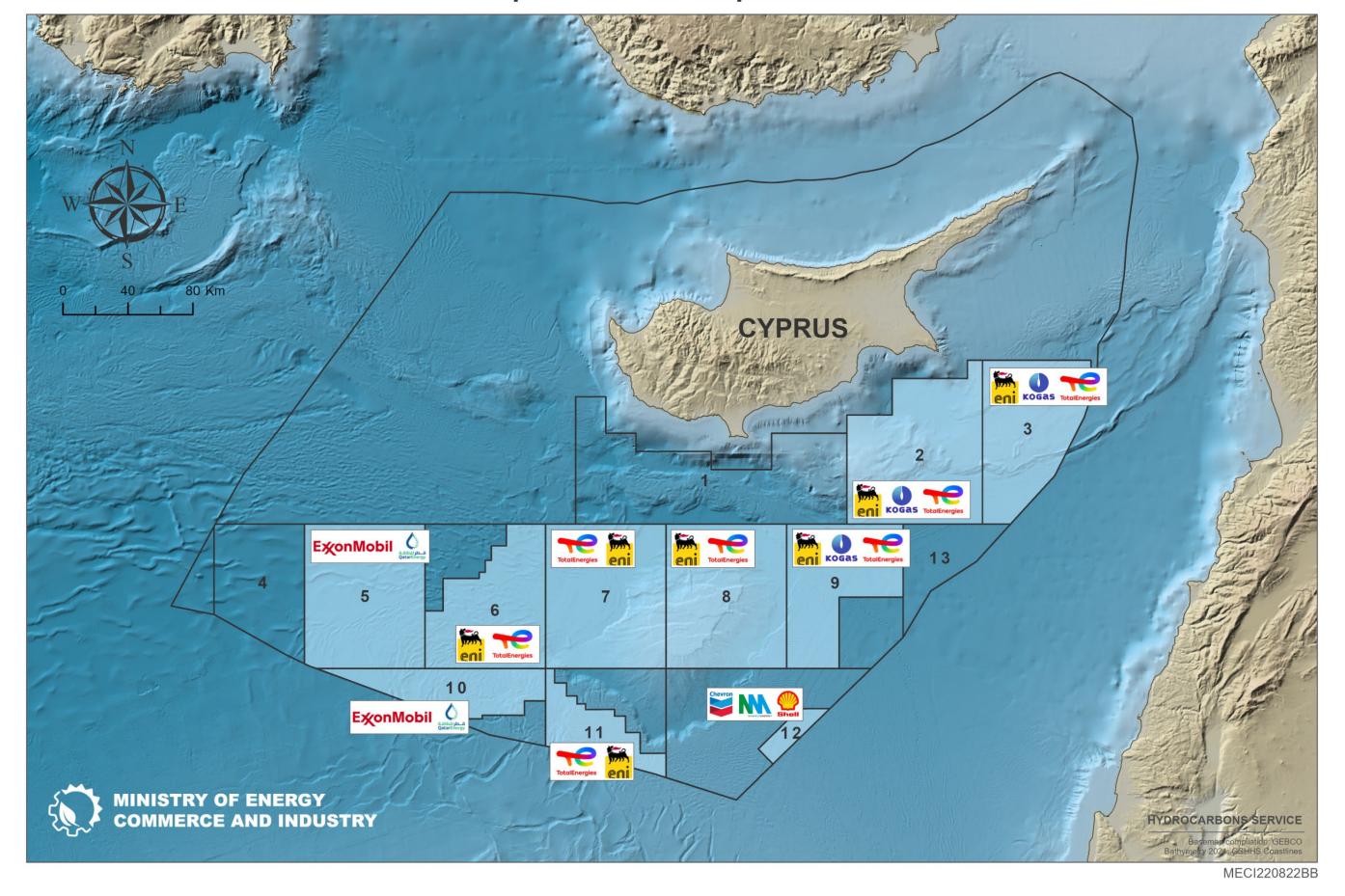
➤ Block 5: ExxonMobil (60%) and QatarEnergy (40%)



# HYDROCARBONS EXPLORATION LICENCEES



## REPUBLIC OF CYPRUS Offshore Exploration and Exploitation Licenses





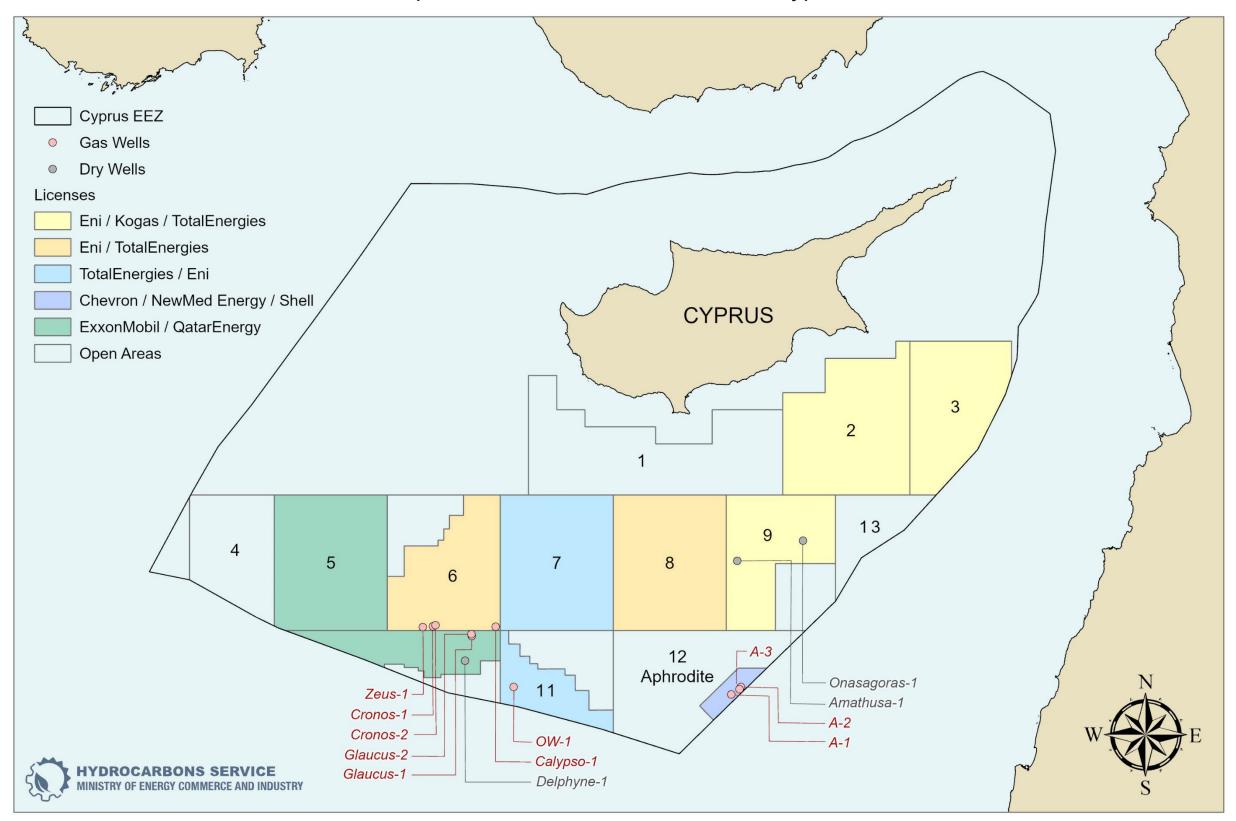
## EXPLORATION WELLS IN CYPRUS EEZ



## Nine exploration and four appraisal wells

- 1. Block 12: Aphrodite (2011) Discovery
- 2. Block 12: Aphrodite 2 (2013) Appraisal
- 3. Block 9: Onasagoras (2014) Dry
- 4. Block 9: Amathusa (2015) Dry
- 5. Block 11: Onesiphoros (2017) Technical Discovery
- 6. Block 6: Calypso (2018) Discovery
- 7. Block 10: Delphyne (2018) Dry
- 8. Block 10: Glaucus (2019) Discovery
- 9. Block 6: Cronos (2022) Discovery
- 10. Block 6: Zeus (2022) Discovery
- 11. Block 10: Glaucus 2 (2022) Appraisal
- 12. Block 12: Aphrodite 3 (2023) Appraisal
- 13. Block 6: Cronos 2 (2024) Appraisal

## **Exploration Wells Drilled Offshore Cyprus**





## CYPRUS OBJECTIVES FOR HYDROCARBONS DEVELOPMENT



- ☐ To ensure the optimum development of its natural gas resources,
- ☐ To ensure that revenues from any development are equitable and present fair value to the Republic,
- ☐ To ensure the timely development to production, and
- ☐ To ensure that the Cypriot domestic market is taken into account and benefits from the development of Cypriot gas resources.





## GAS MONETIZATION OPTIONS



#### Eastern Mediterranean area

- Considered as "frontier area"
- Highly prospective (USGS Fact Sheet 2021-3032), however geologically complex area
- Gas discoveries offer room for synergies between the neighbouring countries

## Current state of play in Cyprus

- Presence of "supermajors"
- Significant quantities of discovered gas
- Lack of gas import facilities and exploitation infrastructure
- Low gas demand in domestic market

# Pipeline to Egypt is an option for monetization of Cypriot gas

- Synergies with existing infrastructure
- Existing market need for gas
- Excellent relationship

## FLNG is another monetization option

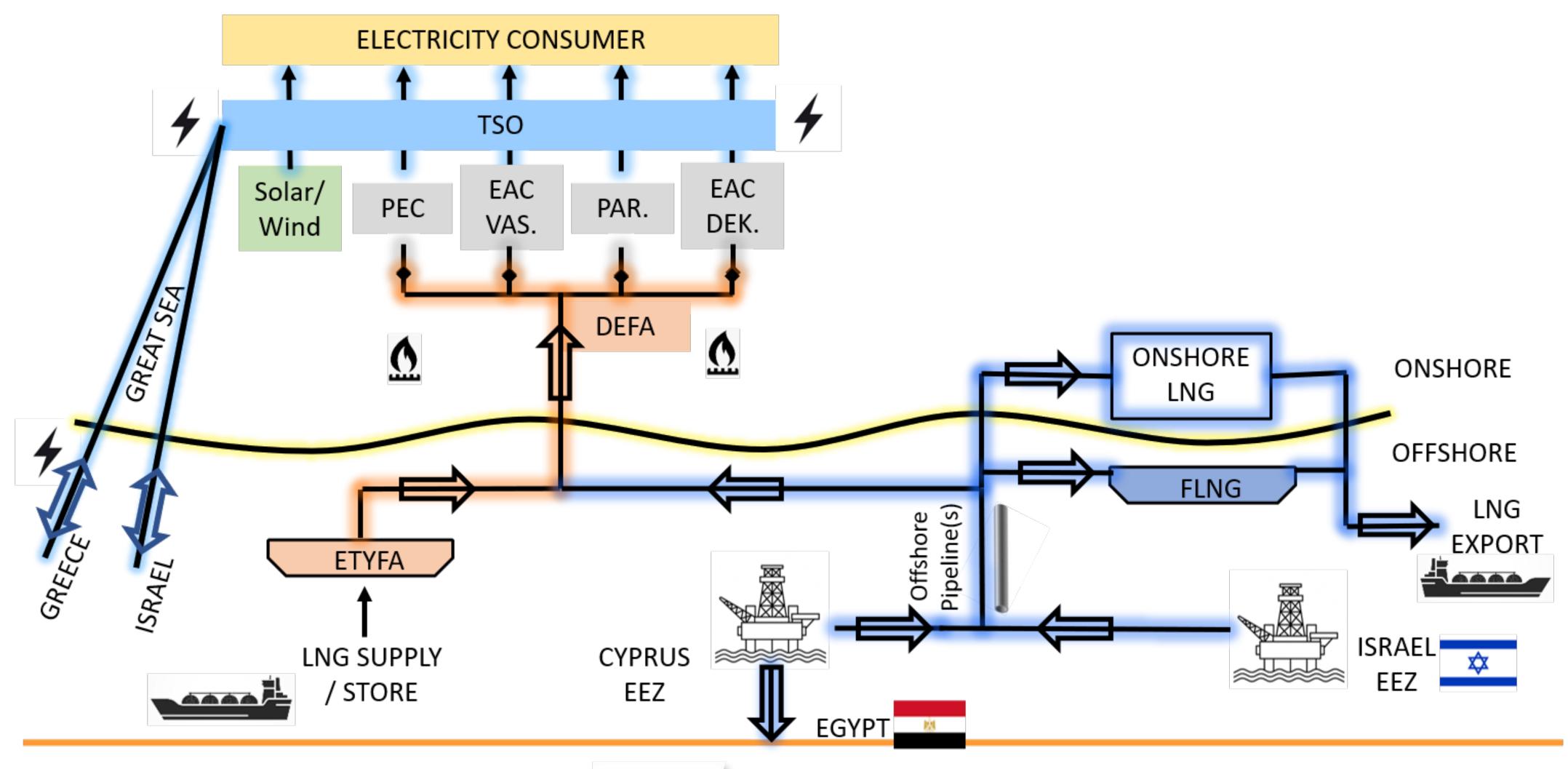
o Flexibility of destination, Independent infrastructure





## **GAS TO POWER**

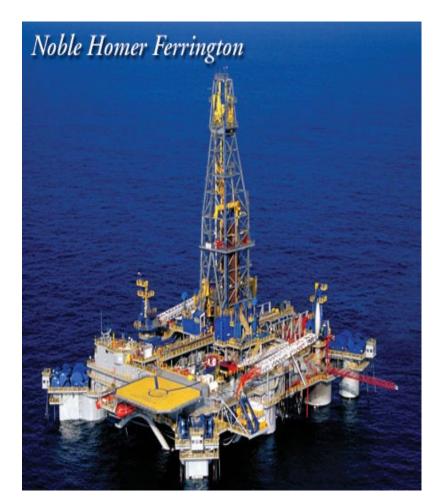






## APHRODITE EXPLOITATION LICENCE







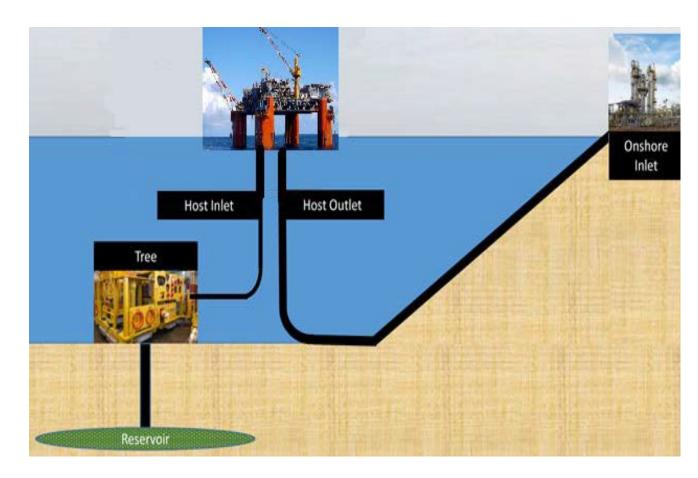
- □ December 2011: Aphrodite Field Discovery
- ☐ June 2013: 1<sup>st</sup> Appraisal Well
- ☐ June 2015: Declaration of Commerciality and Aphrodite Field Development and Production Plan (AFDPP) submission (Floating Production Unit to Egypt)
- □ April 2016: Submission of a revised AFDPP (FPU to Egypt)
- □ November 2019: Submission of a new revised AFDPP (FPU to Egypt) and approval from MECI
- □ 07 November 2019: Issuance of Aphrodite Field Exploitation Licence for a period of 25 years
- ☐ May 2023: Submission of a modified AFDPP (Tieback to Egypt)
- □ November 2023: Modified AFDPP rejected by the Republic of Cyprus (RoC)
- ☐ March 2024: Proposal for a new optimized AFDPP (FPU to Egypt)
- □ 30 April 2024: New optimized AFDPP proposal not accepted by the RoC
- □ 30 August 2024: Submission of a new draft modified AFDPP (FPU to Egypt)

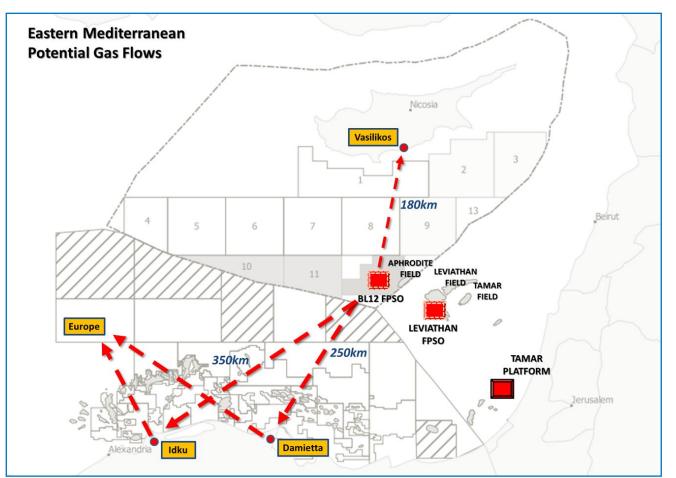


## **OVERVIEW OF THE APPROVED 2019 AFDPP**



- > Natural gas production via subsea infrastructure
- ➤ Gas treatment on a Floating Production Unit in Cyprus EEZ
- > Transfer to Egypt through a subsea pipeline
- > Sales to:
  - Egypt domestic market
  - Liquefaction and export to global markets







## **OTHER DISCOVERIES**



## Glaucus (Block 10)

- Under appraisal
- Drilled Glaucus 2 in 2022
- ❖ Acquired 3D Seismic data in 2022 to better assess the discovery
- Evaluates a number of potential development options

#### Cronos (Block 6)

- Under appraisal
- Drilled Cronos 2 in 2024
- Prevailing development option is synergies with Zohr facilities

### Zeus, Calypso (Block 6)

Under appraisal







## MASTER PLAN OF THE VASSILIKOS AREA



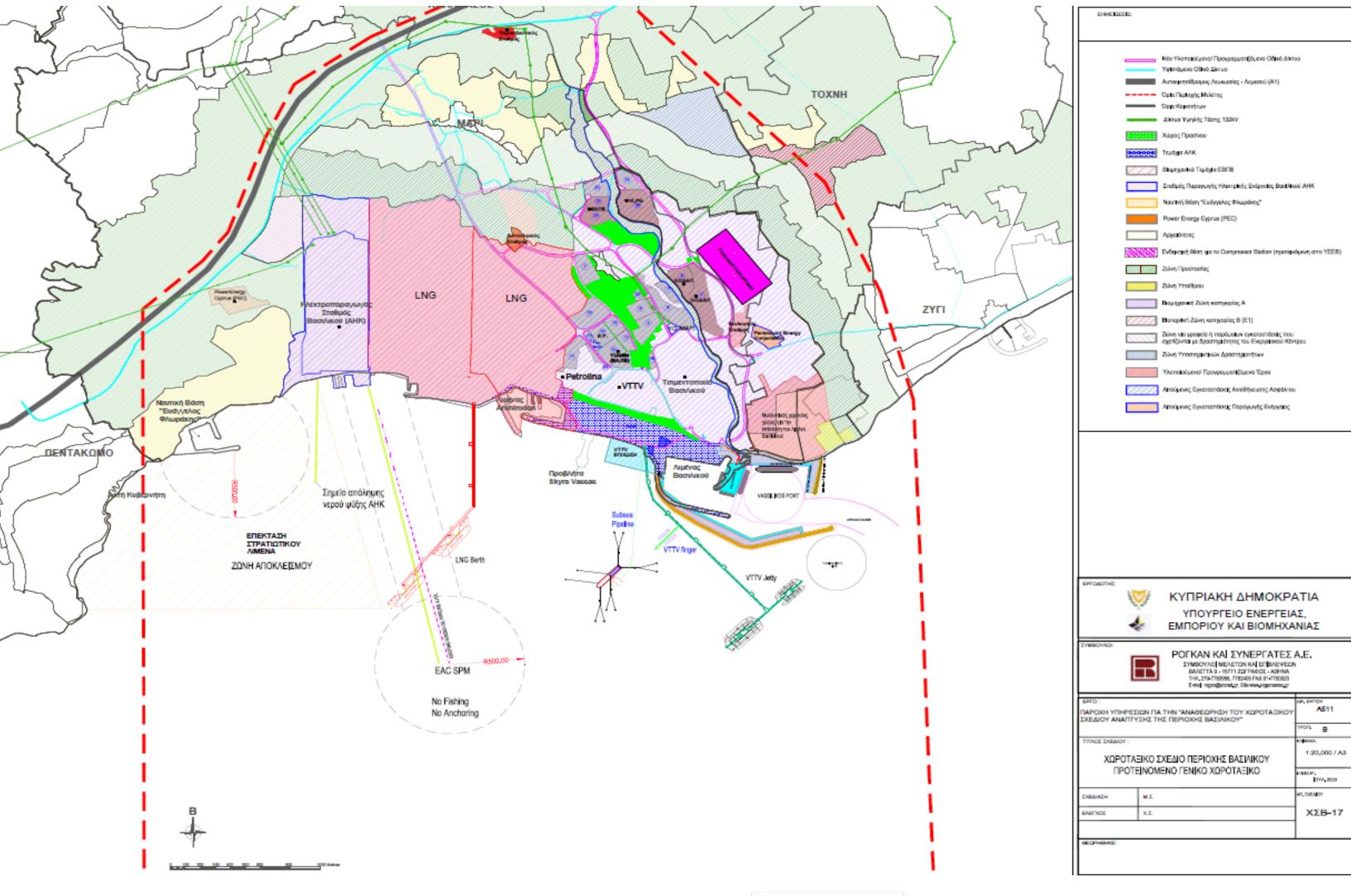
## **Objectives**

- Present a comprehensive picture of the area
- Development of the area emphasizing in social, environmental, security and health and safety issues
- Compatibility of existing and proposed facilities
- A tool for the optimal development of the Vassilikos area in the next 30 years





#### Vassilikos Master Plan



## LNG Plant







# Thank you for your attention





