




**Greek and Cypriot
natural gas resources
for stability, peace and prosperity of
the countries in Europe and SE Med**

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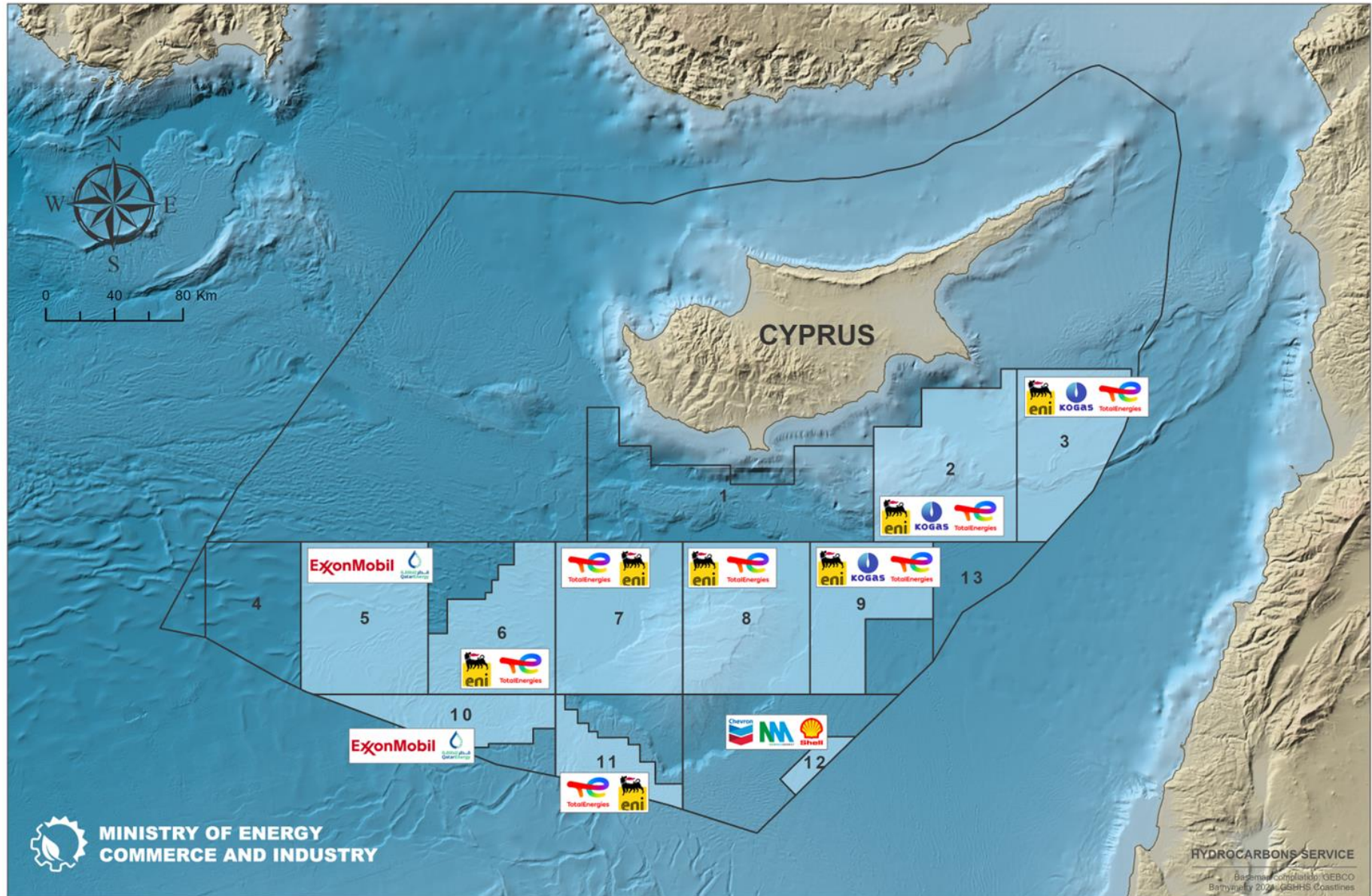
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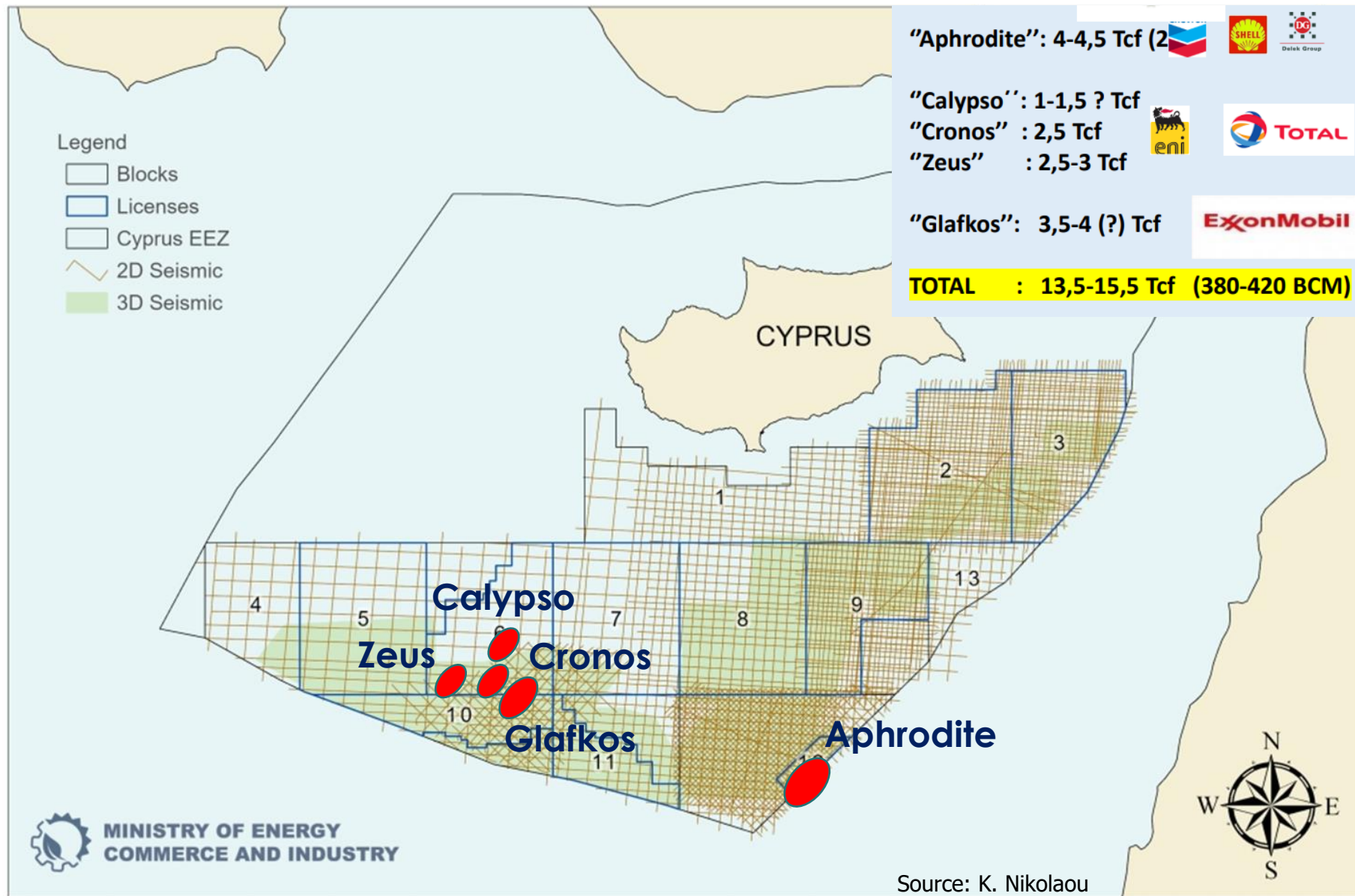
The author would like to express his appreciation to Hellenic Petroleum for employing him 1982 2020 and offered to him the opportunity to serve the Greek upstream sector. The author would like express his deep gratitude to his colleagues, who throughout all these years, taught him and joined him working intensively to explore our country to discover oil and gas.

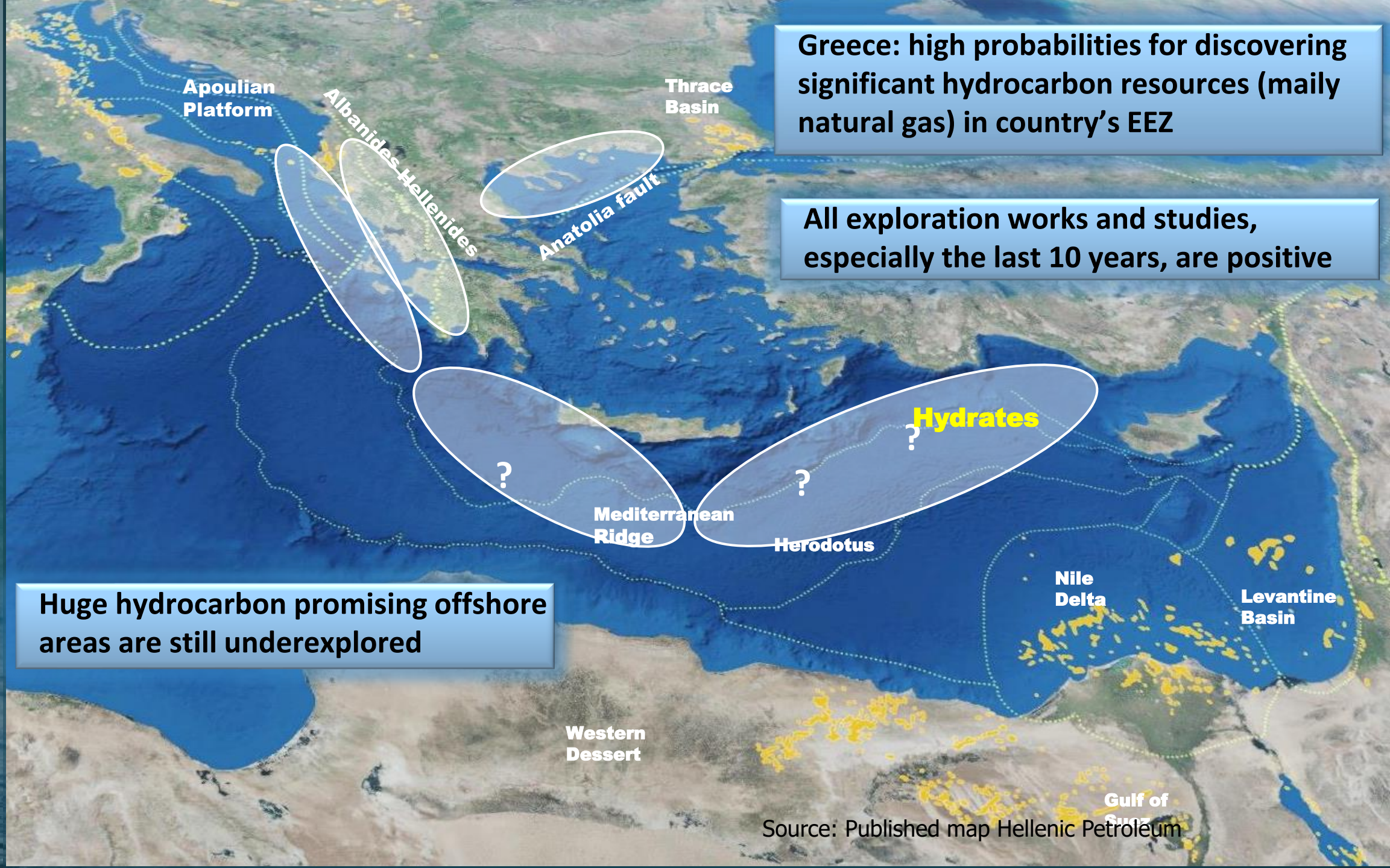
REPUBLIC OF CYPRUS

Offshore Exploration and Exploitation Licenses



Natural gas discoveries in Cyprus: c. 400 BCM





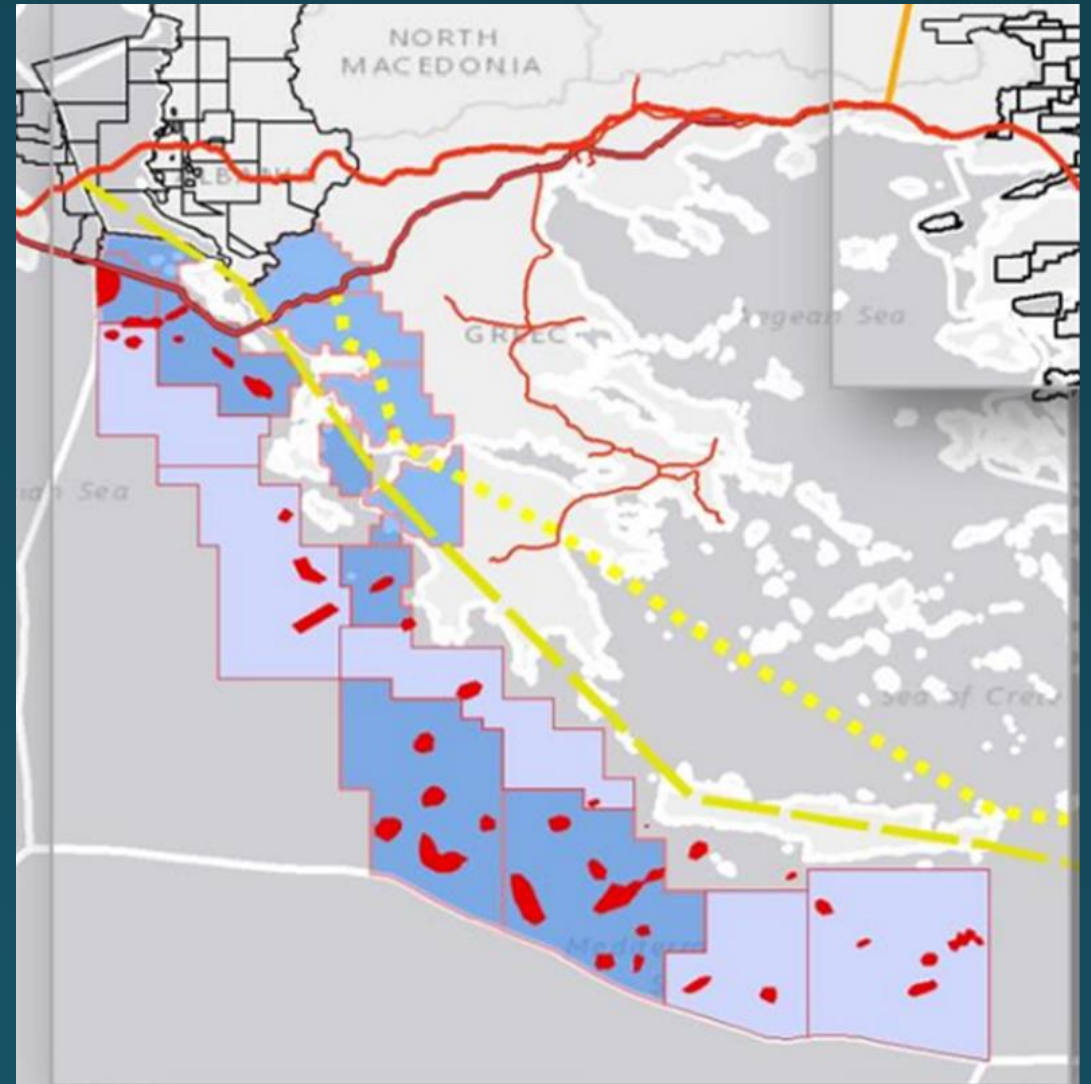
Greece: high probabilities for discovering significant hydrocarbon resources (maily natural gas) in country's EEZ

All exploration works and studies, especially the last 10 years, are positive

Huge hydrocarbon promising offshore areas are still underexplored

Significant natural gas resources in Greek Exclusive Economic Zone

- Based on the interpretation of the existing legacy 2D seismic data, the 2D multi client seismic survey (PGS 2012) HEREMA mapped more than **40 geological plays and prospects**
- The integration of legacy exploration data estimate country's **potential natural gas resources to be up to 2000 – 2500 BCM (70 – 90 TCF)**
- These geological plays and prospects require further drilling and development operations before come into production (**estimated annual production at the levels of 80 – 120 BCM**) replacing Russian gas imports and covering half of Europe annual consumption



Source: HEREMA study, study IENE, published reports and studies



**On top of the obvious geopolitical strength
significant economic benefits from the potential production
of 1 TCF natural gas offshore field (*)**

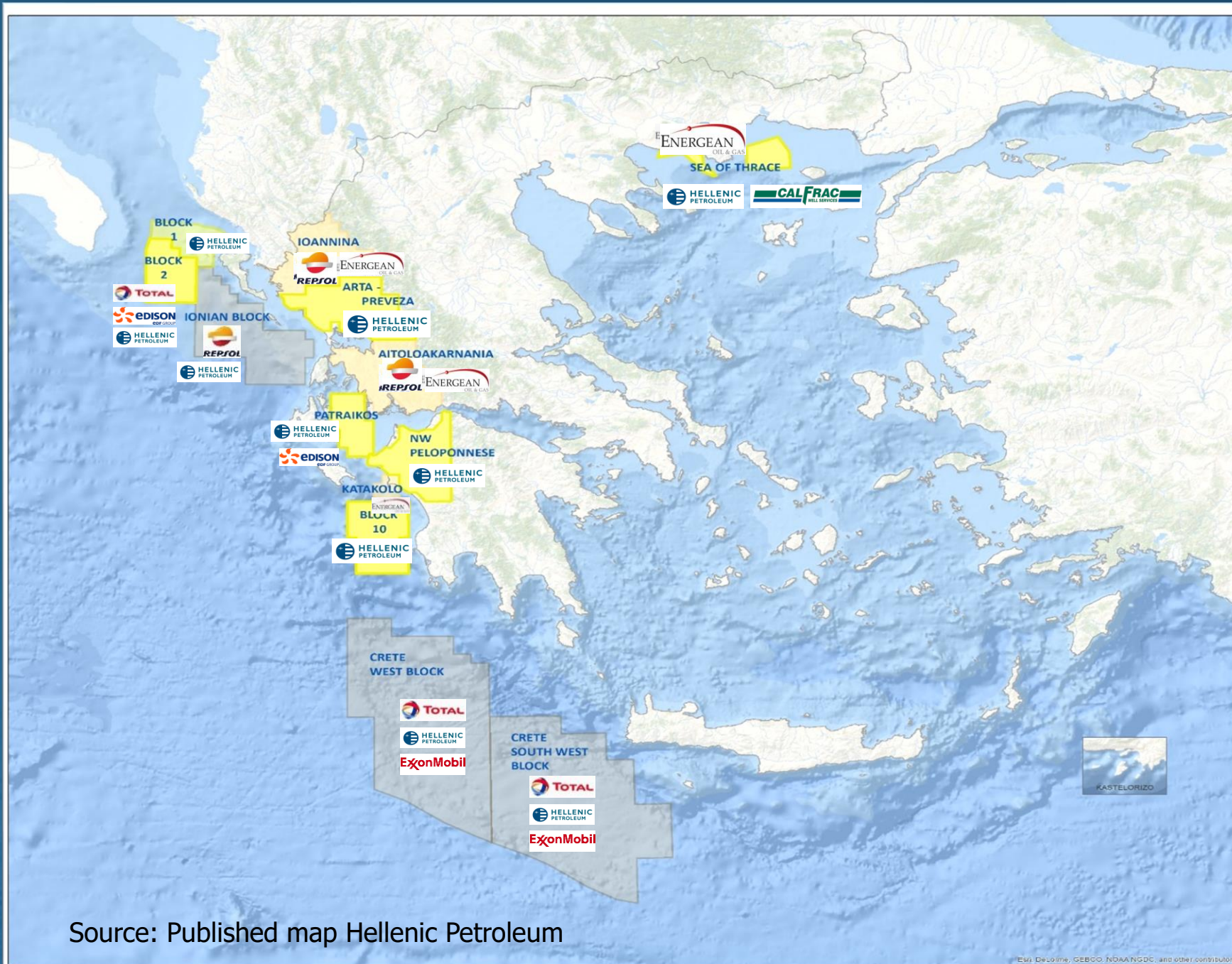
- **Value** c. **\$ 10 billions**
- **Capital Expenditure** c. **\$ 1,8 billions**
- **Operating expenses** c. **\$ 2 billions**
- **State income** c. **\$ 3 billions**
- **Local authorities income** c. **\$ 300 millions**
- **New working positions** c. **2000** (500 direct)

(*) c. 1 TCF natural gas corresponds to c. 170 MBoe.

Source: HELPE published data – calculations based on market data and the existing Lease Agreements for exploration, development and production of a hypothetical offshore field 170 Mboe in W. Greece

2012 -2019

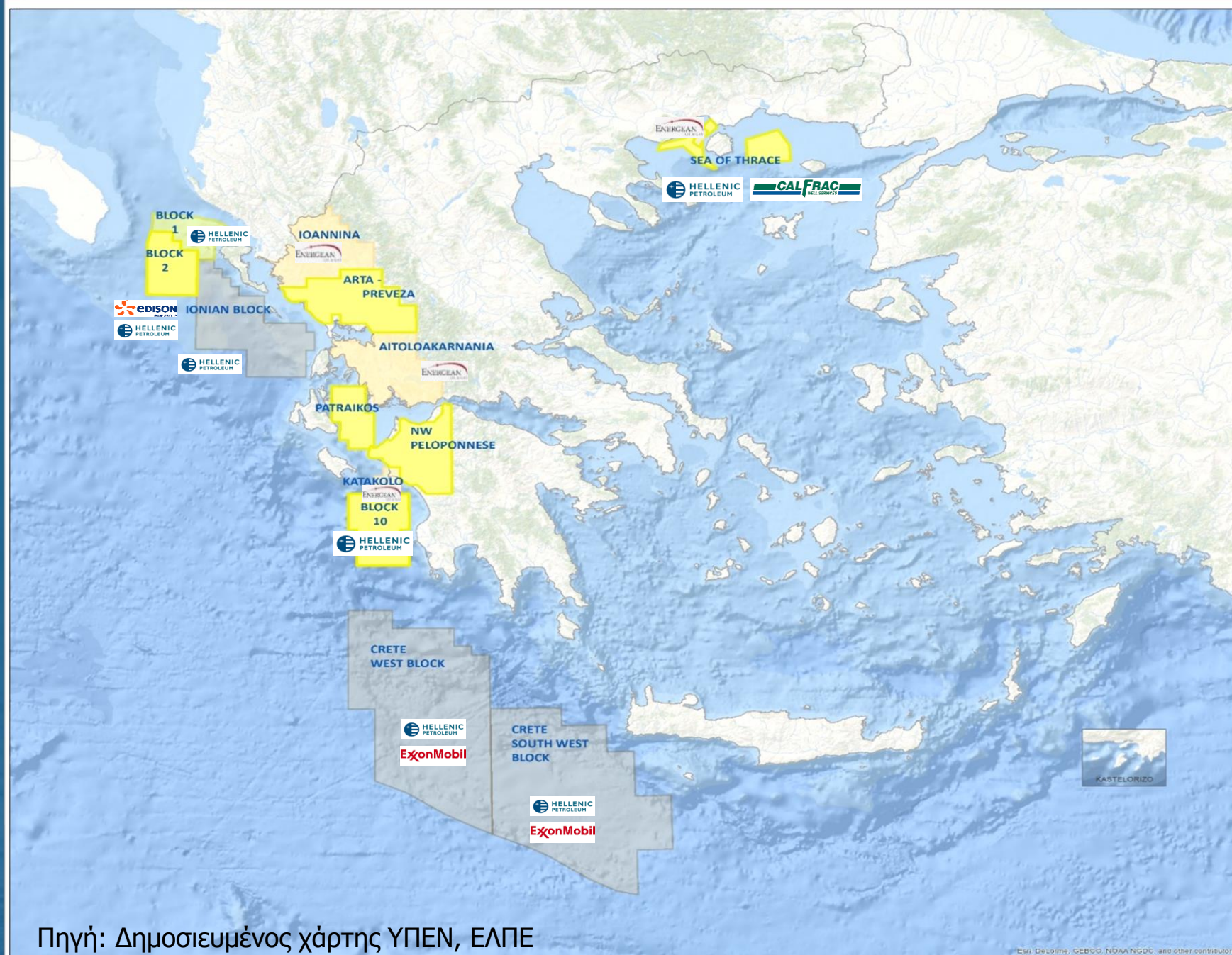
- Following four international rounds **13 blocks** awarded to **HELLENiQ ENERGY**
Energean / Edison
Total
ExxonMobil
Repsol
- **HELLENiQ ENERGY** (ex Hellenic Petroleum) was the leading company, having competitive advantage exploring Greece since 1975 and supported by a strong team



Source: Published map Hellenic Petroleum

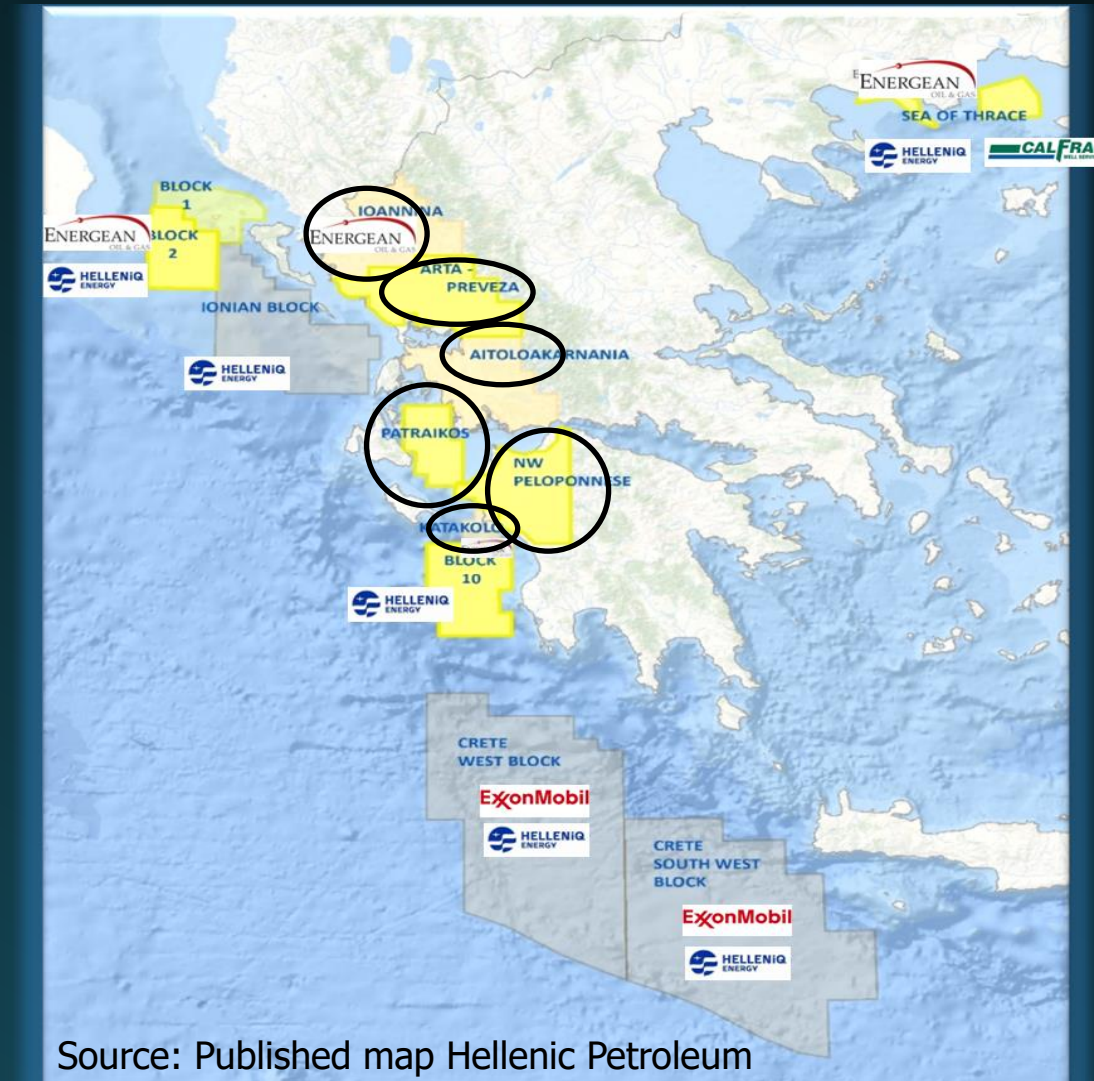
2019 - 2024

- Exploration works with positive results
- Total and Repsol left the country
- 2D and 3D seismic works done in 5 offshore blocks with outstanding technical results
- Offshore Patraikos and other 3 onshore blocks relinquished without concluding contractual commitments
- Delays permitting for **Katakolon**



2021 - 2022: delays in exploration and withdrawals for “unknown reasons”

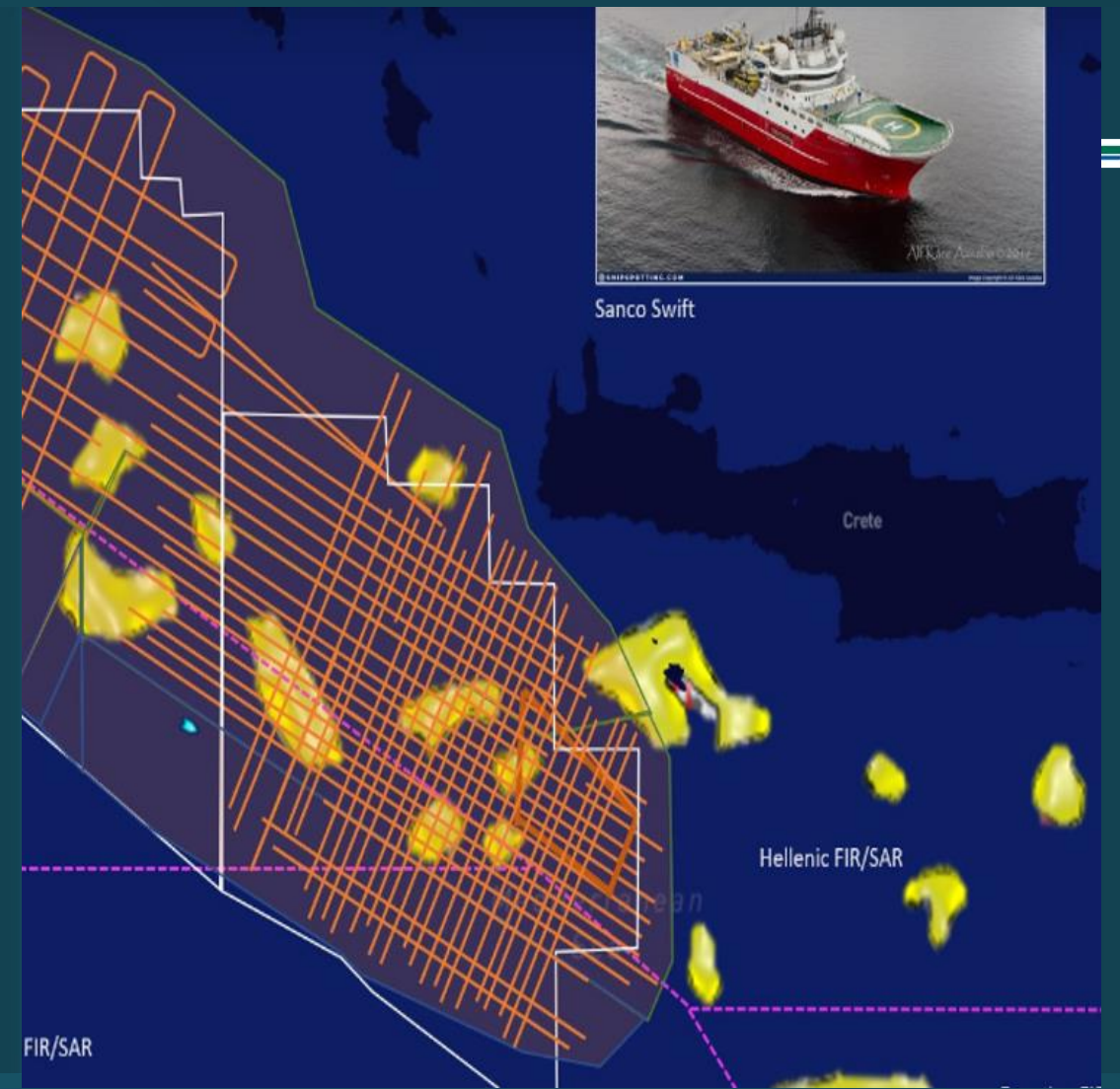
- **Patraikos offshore block:** relinquished a ready to be drilled prospect c. 140 Mboe based 3D seismic data – Concessionaires and Greek state are in courts concerning **port infrastructure to support drilling**
- **NW Peloponnisos block.** Geochemical, geological studies and MT studies are positive. Block relinquished **without shooting** committed seismic works, while a **biogenic gas field could be developed**
- **Katakolon field:** Considerable **delays for permitting the** development of Katakolon field
- **Ioannina block:** based on 2D seismic a well is planned. **Activists are against** the approval of environmental studies for drilling **causing delays**
- **Arta Preveza block:** Geochemical, geological studies and MT studies are positive. Block relinquished **without shooting** committed seismic works
- **Aitoloakarnania block:** Block relinquished **without shooting** committed seismic works



Source: Published map Hellenic Petroleum

2023 -24: positive seismic data indicate drilling the next couple of years

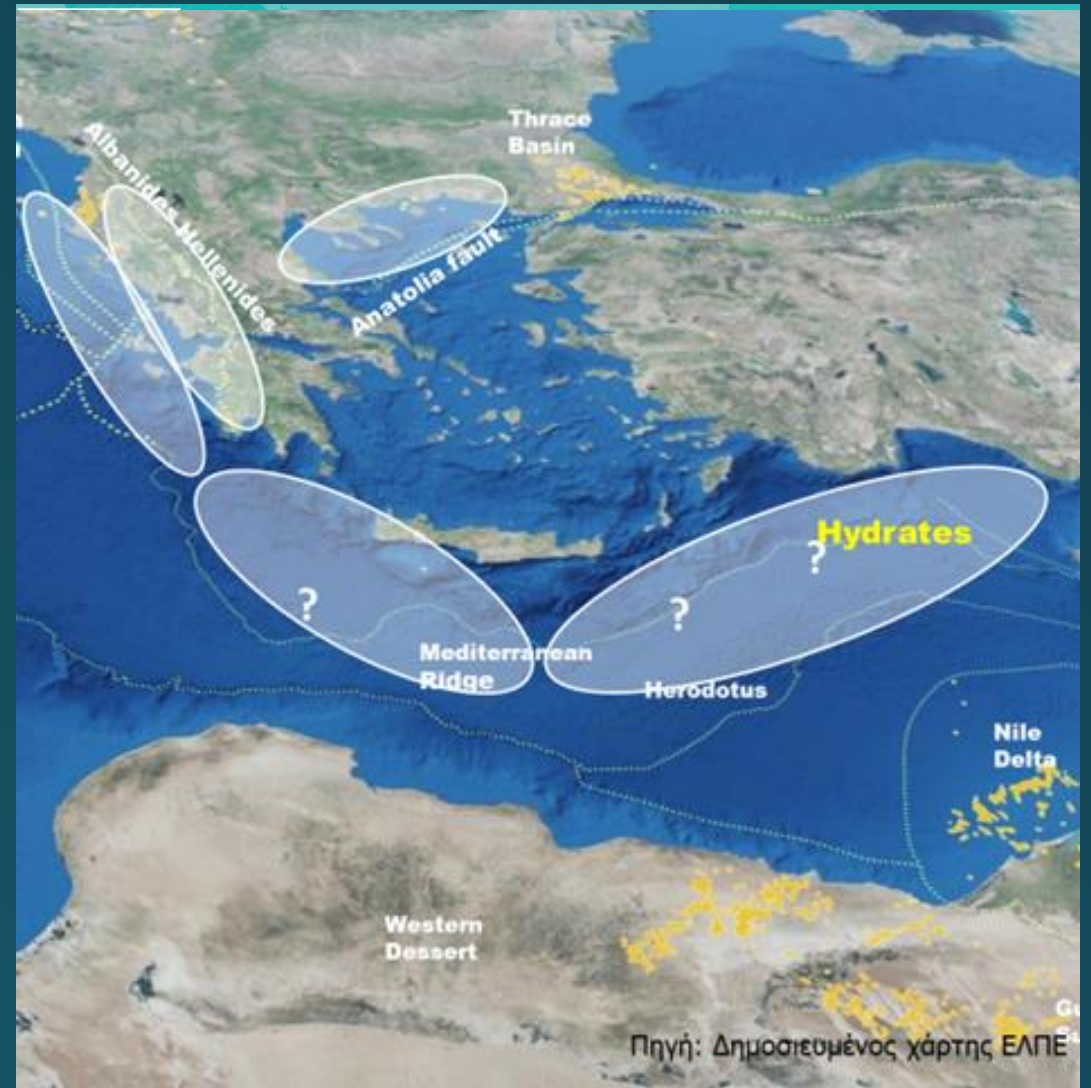
- In five offshore blocks (**W and NW Crete, block Ionio, blocks 2 and 10**) the oil companies shot **2D and 3D seismic** as per their contractual commitments.
- Based on the location maps of the seismic surveys and the available public information (official statements, media reports etc) in all blocks, the results from **the seismic data are absolutely positive and encouraging.**
- It is quite promising that in most of the cases (Crete, Ionian, block 10), the concluded **work programme is well ahead the Lease Agreement time schedule**
- **Next step, in all five offshore blocks, over the coming couple of years is drilling** the mapped geological prospects, provided that the competent authorities will **approve the environmental studies** .



Source: HEREMA, Energean, media reports

Greek State sends contradicting messages to the market

- **PM** two years ago (April 2022) **encouraged oil companies to proceed exploration** works declaring that the relevant projects will be of “national interest”
- **Numerous oil companies** (supermajors and independent Europeans) **are interested to enter the country** looking for farm in existing blocks and/or new acreage opportunities
- **Contradicting statements from the government:** no oil production will be allowed – no more acreage will be explored – new offshore natural parks are on licensed areas (block 10)
- **Greek State did not proceed to release new acreage** as it was declared since 2019 (new rounds – open door procedure) either in N. Aegean or in W. Greece

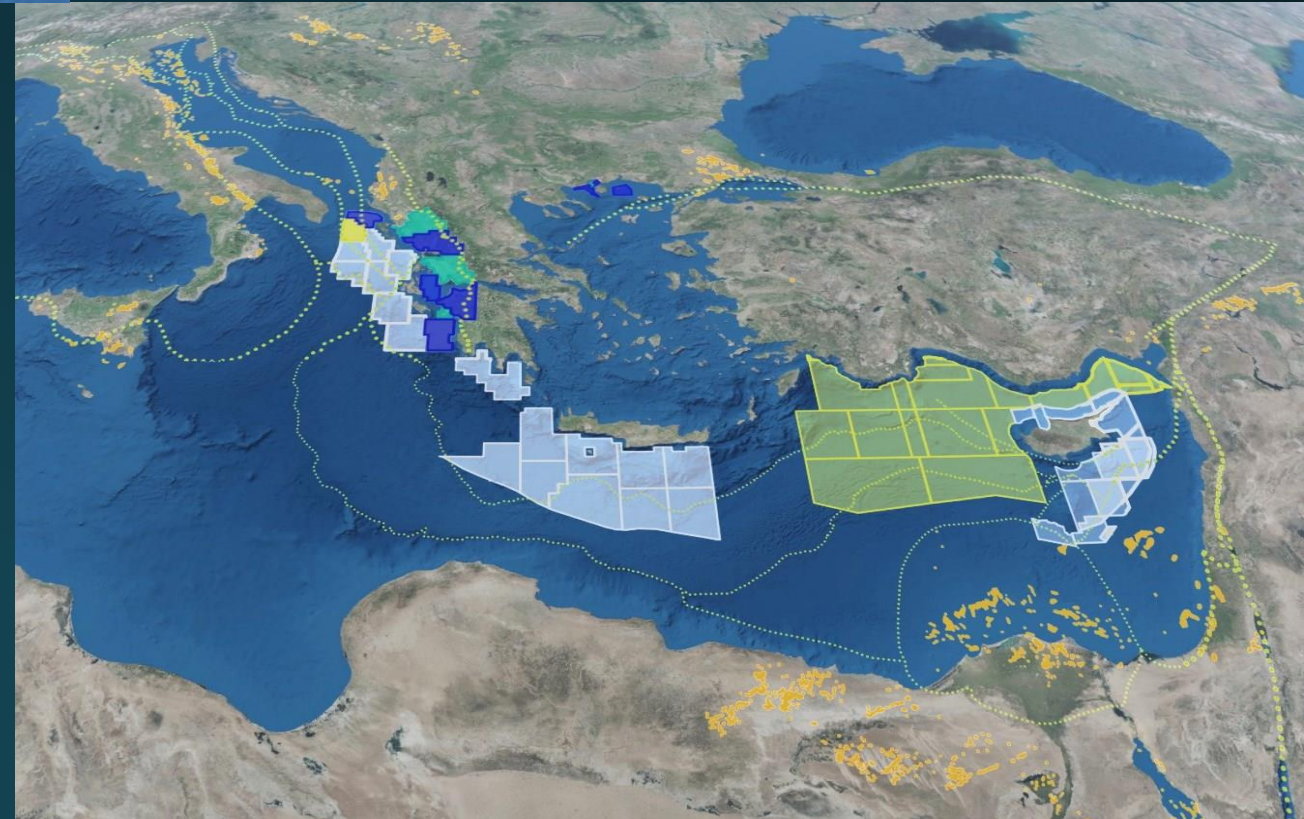




All licenced blocks in Greece and Cyprus are based on international laws

(white line indicates Greece's and Cyprus's EEZ according to International Law and are illustrated in the EU official "Sevilla map" – source T. Kariotis))

- **Turkey, since 2009, is granting illegally to TPAO offshore areas in SE Med (eastern to 28° meridian crossing Rhodes) trespassing Greece's and Cyprus' EEZ against the International Law.**
- TPAO in these blocks (in yellow) shot several seismic surveys and drilled wells (2017 -2020)

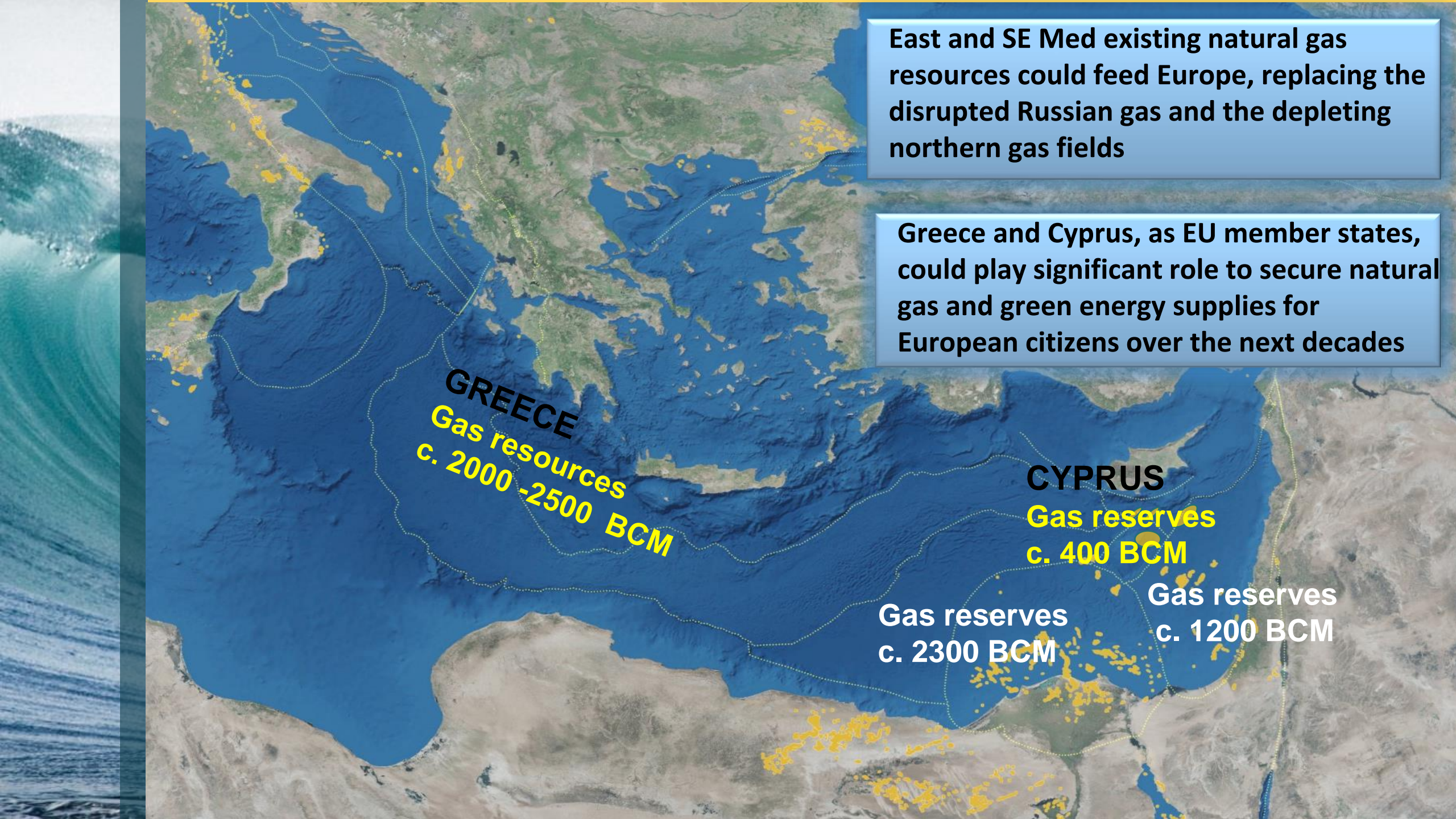


East and SE Med existing natural gas resources could feed Europe, replacing the disrupted Russian gas and the depleting northern gas fields

Greece and Cyprus, as EU member states, could play significant role to secure natural gas and green energy supplies for European citizens over the next decades

GREECE
Gas resources
c. 2000 -2500 BCM

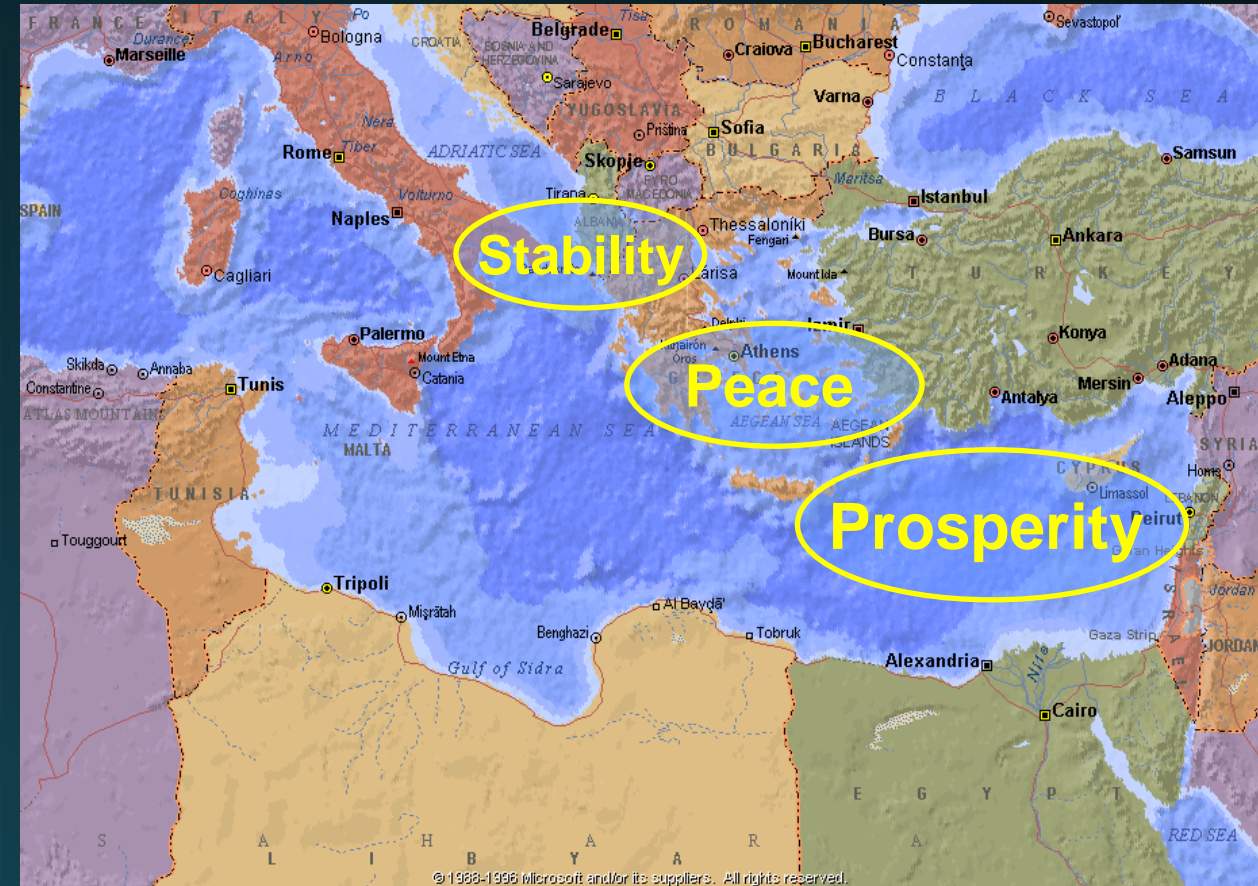
CYPRUS
Gas reserves
c. 400 BCM
Gas reserves
c. 2300 BCM
Gas reserves
c. 1200 BCM



Greek and Cypriot natural gas resources for stability, peace and prosperity of the countries in Europe and SE Med

➤ The only viable solution requires all neighboring and all involved countries in the area and the stakeholders, without terms and asterisks, to:

- Strictly comply and respect the International Laws and Treaties
- Recognise and accept the borders and EEZ of each country as per International Laws
- Honor the existing decisions of the United Nations





*Many thanks
for your kind
attendance*