

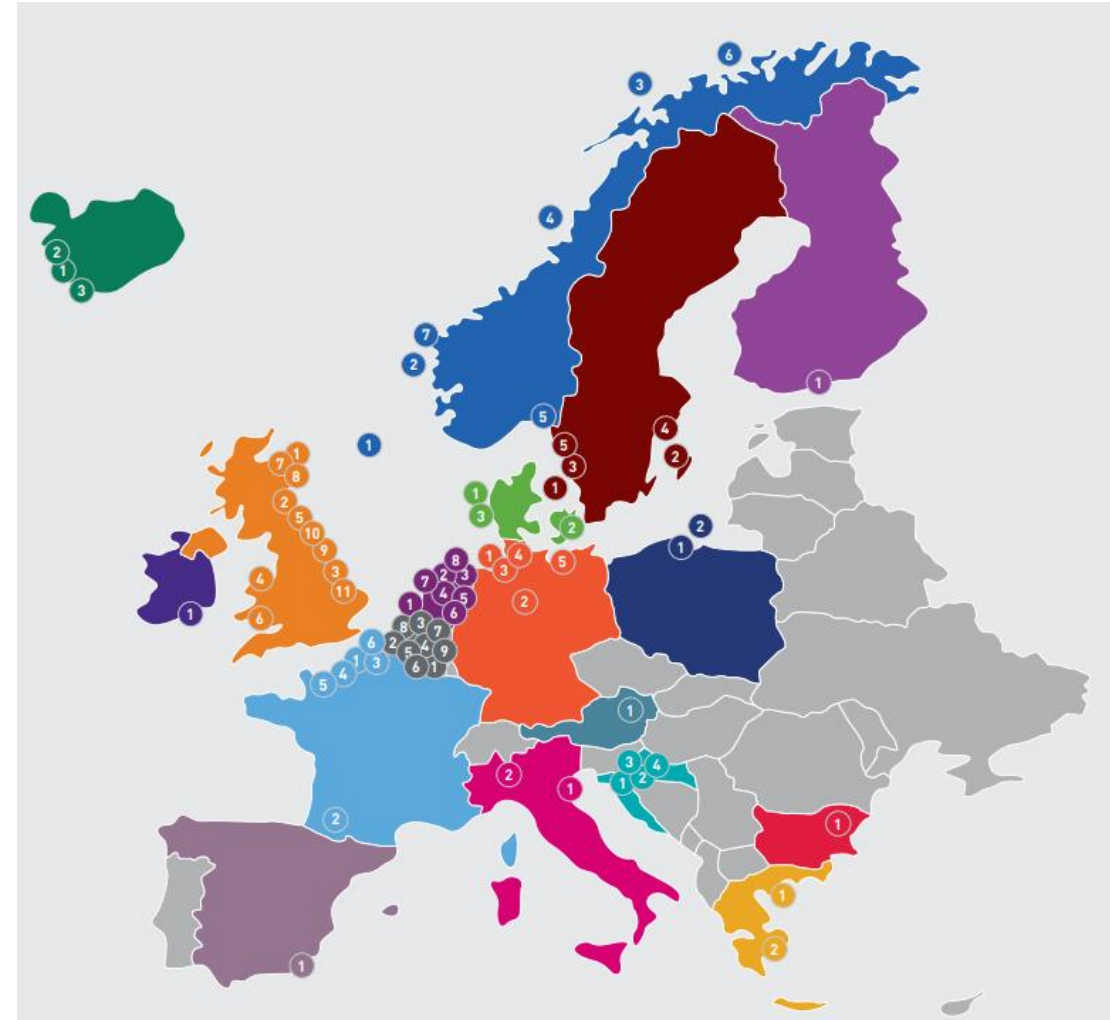
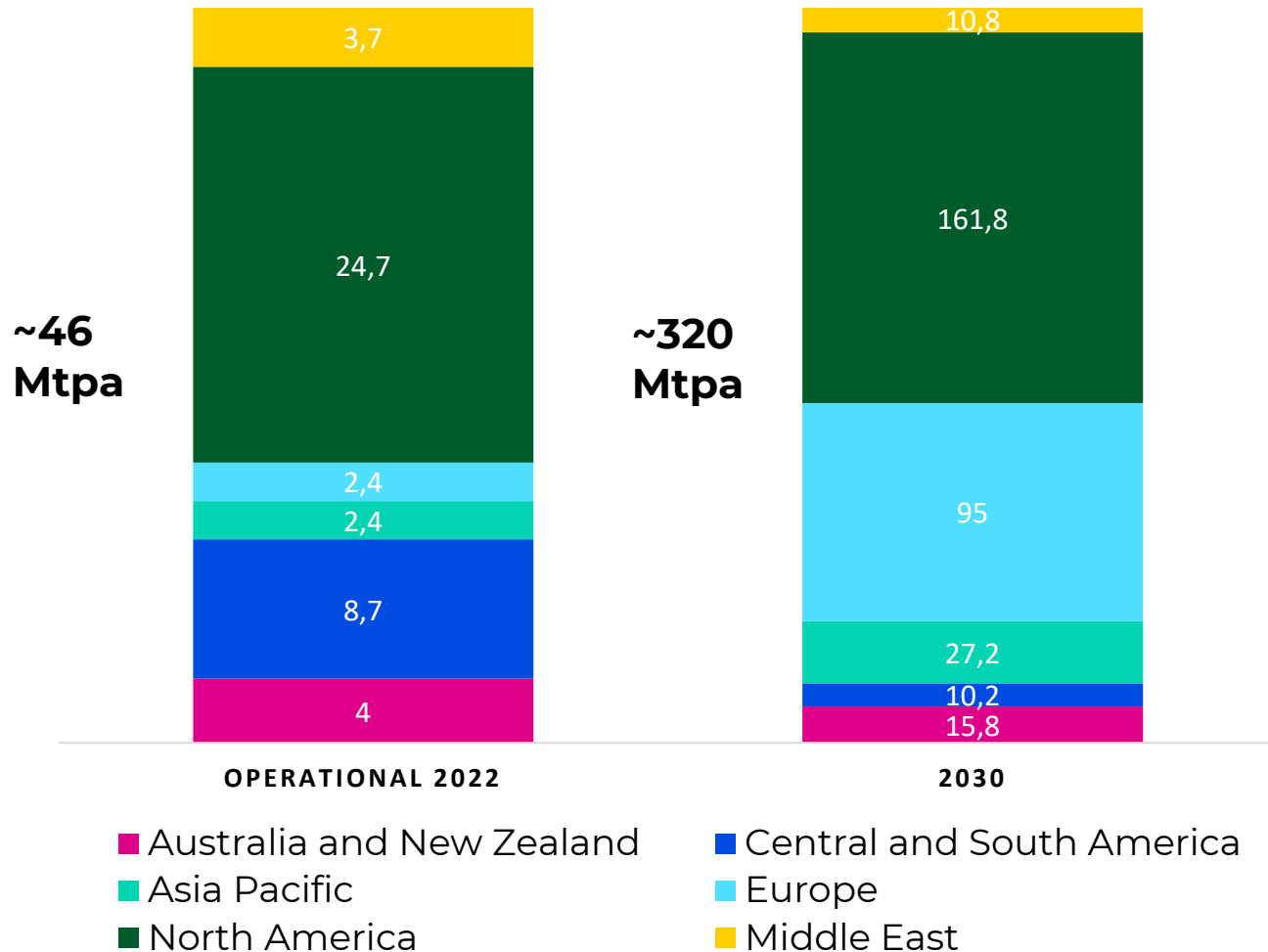


# ***MORE THAN A MITIGATION***

**A CCS ROADMAP FOR GREECE**



# CCUS: Today and Tomorrow



## 2011 – Establishment of HHRM

With the Greek State as its sole shareholder, HHRM manages the national interests related to the exploration and production of hydrocarbons, with a particular focus on natural gas

## 2011 – Transposition of CCS EU Directive

Greece transposed the CCS Directive into National Law through Common Ministerial Decision (CMD Government Gazette B 2516\_2011)

## 2020 – Conceptualization of HHRM Transformation Strategy

HHRM initiates its transformation by strengthening ESG standards & exploring synergies among various energy sectors

## 2022 – HEREMA CCS National Competent Authority

HHRM is rebranded to Hellenic Hydrocarbons and Energy Resources Management (HEREMA) and expands its mandate to include permitting of underground gas storage (including CO<sub>2</sub>, natural gas, and hydrogen) and Offshore Wind Farms (art. 228 Law 4920/2022)

## 2022 – Legislative provision for CO<sub>2</sub> storage to E&P license holders

Entities that hold a right or a license to explore and exploit hydrocarbons in a certain area have the right to apply for CO<sub>2</sub> storage license in that same area, if proven suitable.

## 2022 – First exploration permit for CO<sub>2</sub> storage

HEREMA awards the first exploration license to Energean for the Prinos field (Government Gazette B 5247\_2022)

## 2023 – HEREMA Implementation Agent for RRF (carbon storage)

Designated as the implementation agent of Sub-project 2 of Axis 3-1.3 "Transition to a green and sustainable transport system - Support green manufacturing and transport - development of capture technology and de- carbon dioxide storage"

# The CCS Roadmap in Greece





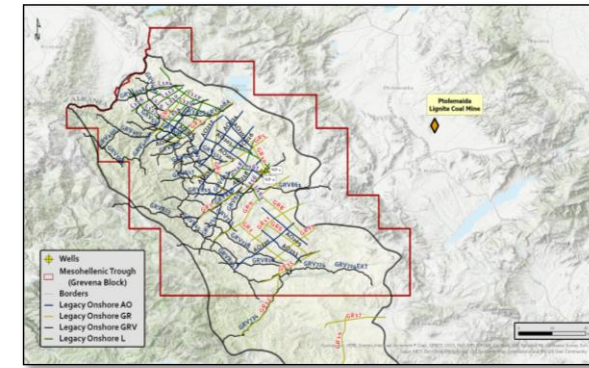
# CCS in GREECE

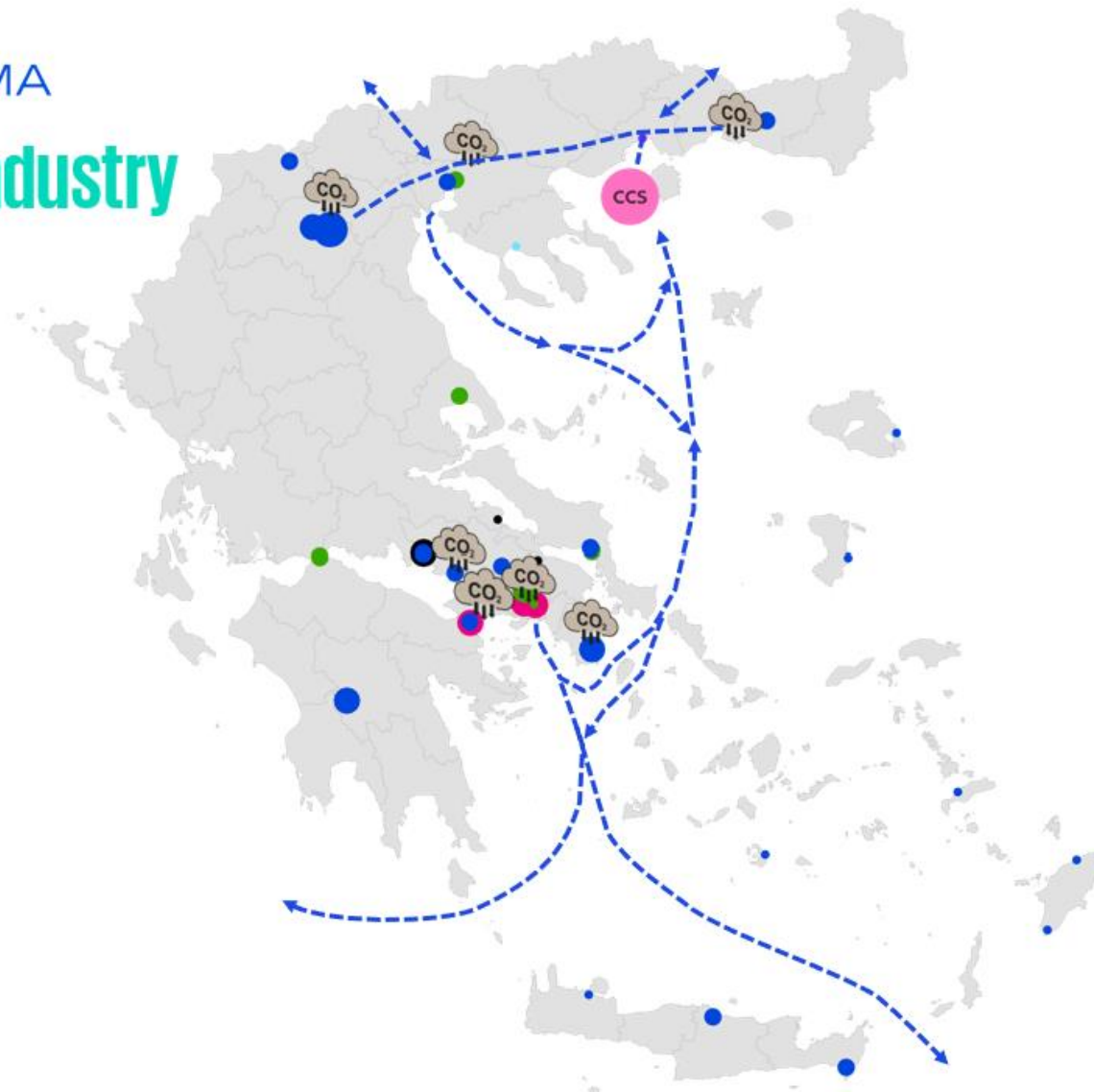
- ✓ **1st Exploration license** granted to Energean Oil & Gas S.A. for CO<sub>2</sub> storage in Greece for Prinos & Epsilon fields.
- ✓ **Evaluation of other formations** (Mesohellenic Trough, Axios/Thermaikos basin, western Greece, basalts, etc.) for CO<sub>2</sub> storage will be undertaken.
- ✓ Participation in the **PilotStrategy Horizon** project with the reprocessing of vintage seismic data in the Messohellenic Trough.
- ✓ Cooperation project with the Norwegian institute SINTEF ongoing regarding the knowledge transfer for CCS and the transformation of the O&G industry, under the **EEA Grants** 2014-2021 financial mechanism, funded by Iceland, Liechtenstein and Norway.
- ✓ **White Paper** on the challenges and the outlook for CCS development in Greece published in cooperation with KPMG.
- ✓ Participation in IENE's study regarding **CCS technology and its application** in Greece.



**STRATEGY CCUS**  
A viable solution for a sustainable future

Iceland  
Liechtenstein  
Norway grants





## CCS in GREECE

**PRINOS storage site:**  
 > 60 Mt storage capacity in development (late 2025)  
 exp. Injectivity 1-3 Mtpa

### Industrial Clusters

- Central around Athens region collective emissions at 8.1 – 14.7 Mtpa (within radius of 30 to 100 kms)
- Northern cluster with collective emissions of ~5 Mtpa

# Primary Challenges CCUS industry faces



01

### Cost and Incentive Shortcomings

The worldwide progress of CCUS has been sluggish, primarily attributed to inadequate commercial incentives and lack of viable business model to stimulate investment across the value chain.



02

### Regulatory Framework for the Full Value Chain

The successful scale-up of CCS technologies necessitates an efficient legal and regulatory framework that ensures the effective management of CO2.

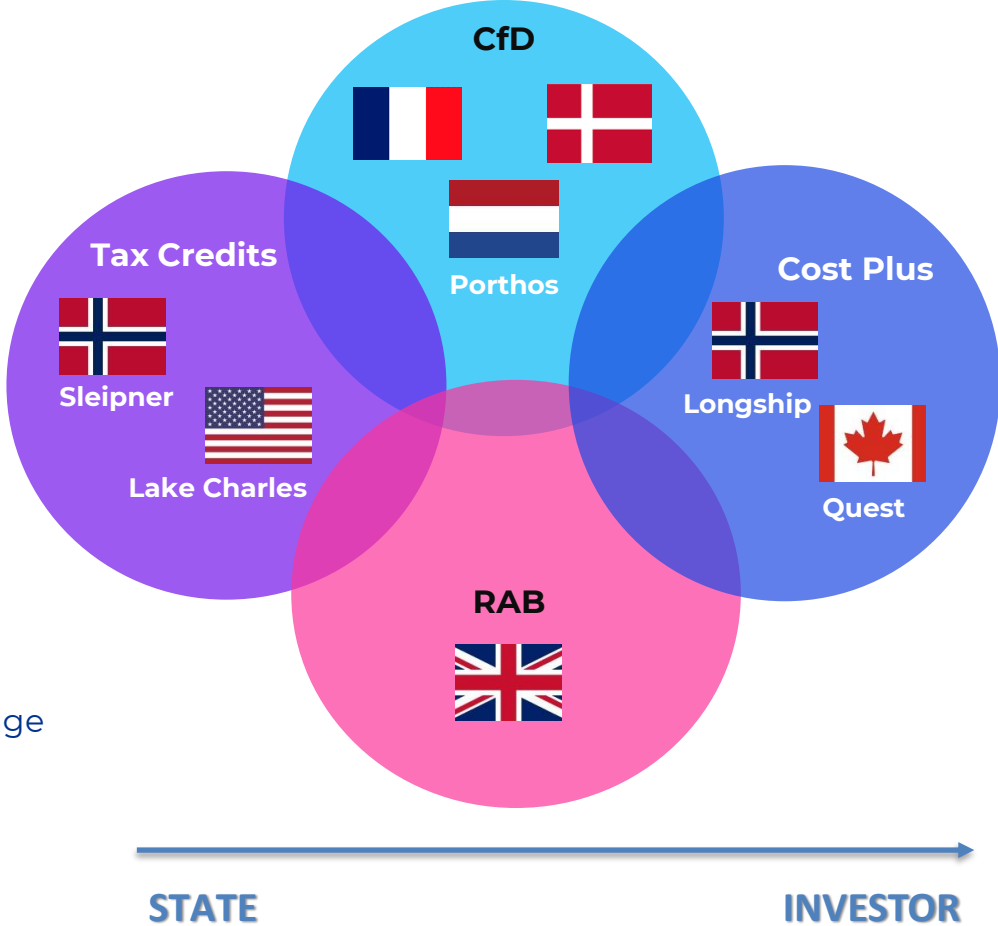


03

### Full Chain Readiness ("Chicken and Egg" Dilemma)

The CCUS industry faces a significant investment challenge regarding the readiness of the full chain.

## Revenue Models





THANK YOU



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Strictly Private & Confidential

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