



# Site description and planned environmental monitoring of the Prinos CCS site within the COREU project

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## The Project

- EC Horizon Europe
- 43 partners from industry and research
- Total budget – 35 M€
- 4 years – 2024 to 2027

Innovation

## Focus on:

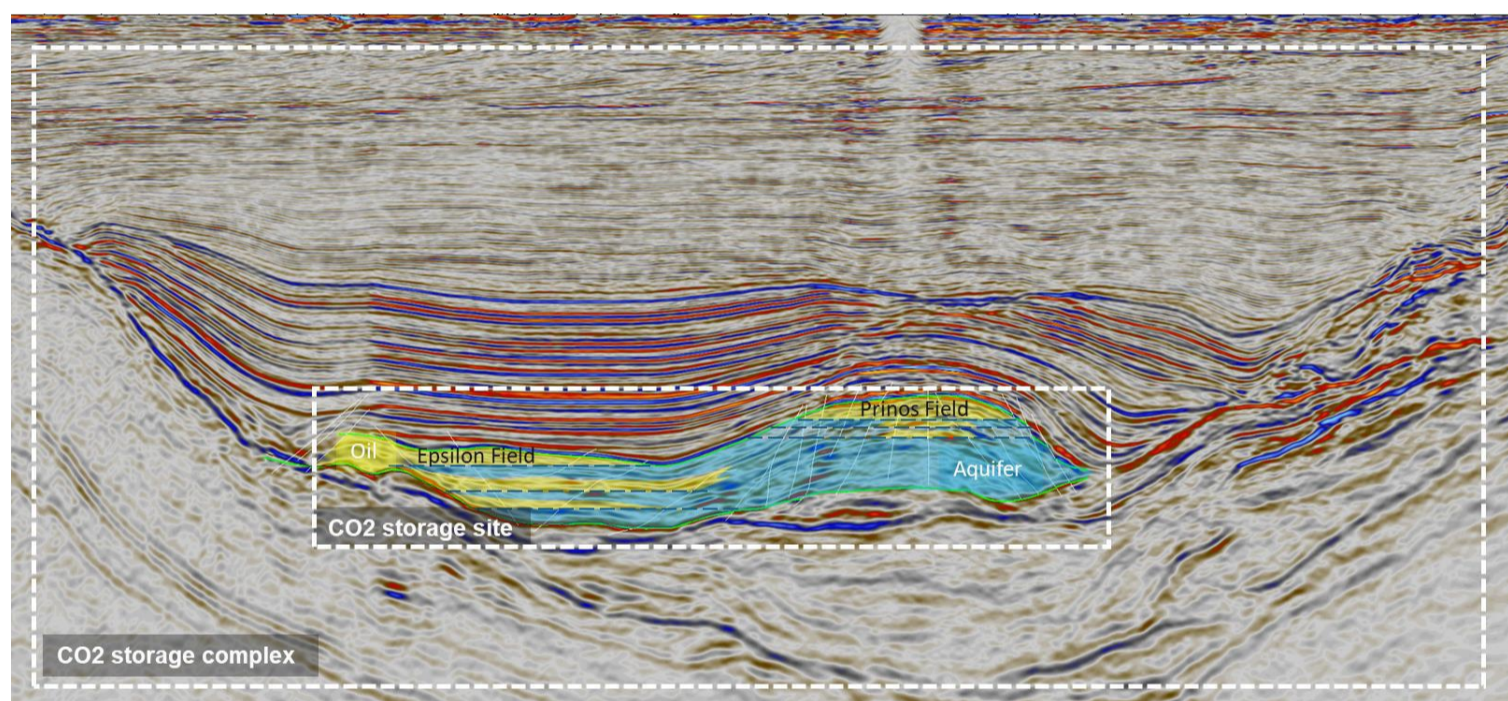
- E and SE Europe – Greece, Poland, Czech, Ukraine
- Cross-border integration
- Hubs, reduced costs, technology transfer



**CO<sub>2</sub> routes across Europe**

<https://coreu.eu/>

<https://www.energean.com/operations/greece/prinos-co2/>



<https://www.iene.eu/articlefiles/inline/sardi%20-%2014th%20seed.pdf>

## The Prinos site

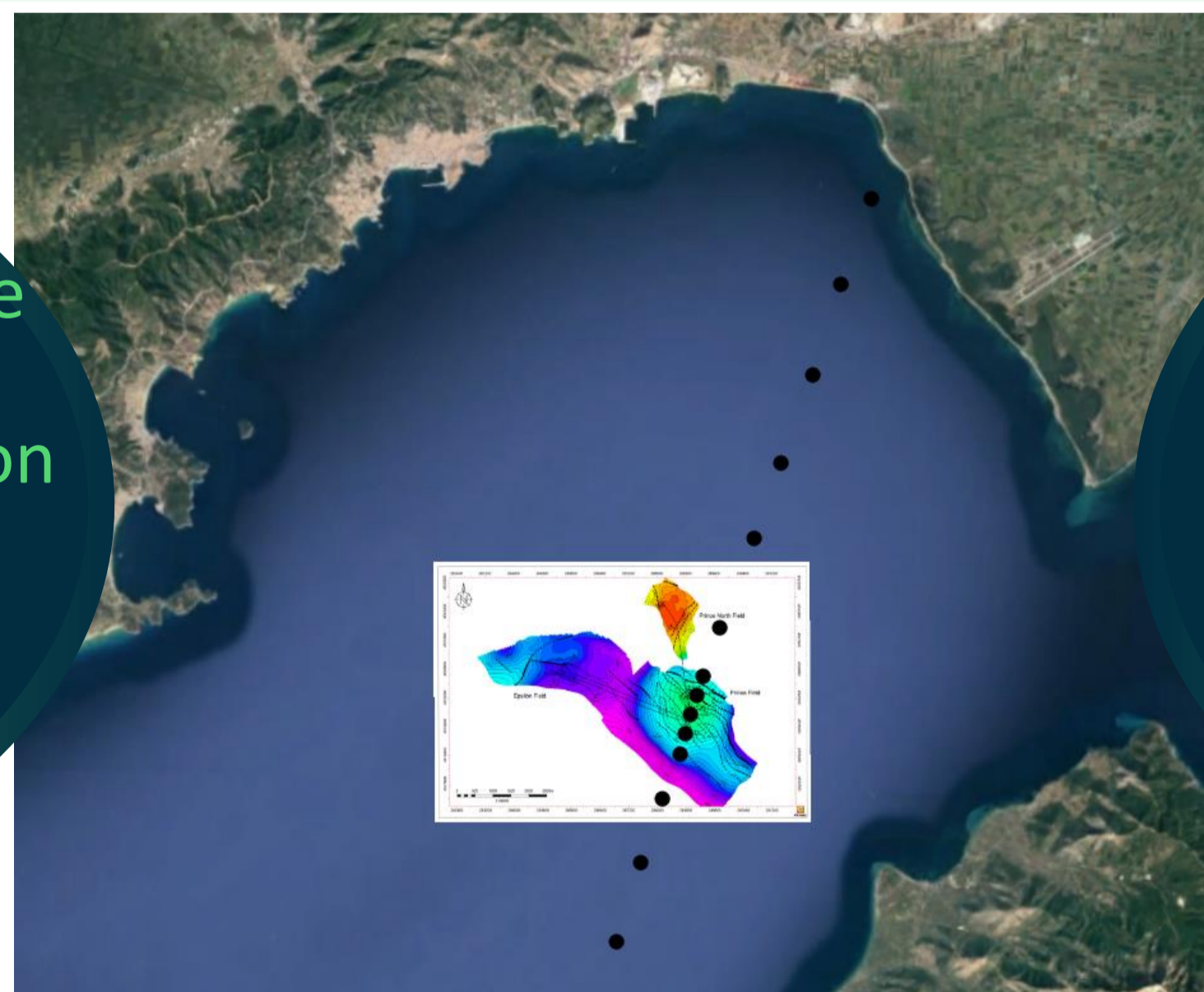
- Offshore NE Greece
- 4 O&G reservoirs
- Anticlines with turbidic sands
- Caprock overpressurized clay plus 7 cycles of evaporites
  - 2500-2700 m

## CCS

- Full chain demo
- CO<sub>2</sub> injection below reservoir (ie, no EOR)
- Phase 1 – Q4 2025  
1Mt CO<sub>2</sub> / yr
- Phase 2 – Q4 2027  
2.5 Mt CO<sub>2</sub> / yr

## Gulf of Kavala

- 20 – 50 m deep, 18km offshore
- Weak currents; winds from N, NE, and S; summer stratification
- Environment impacted by existing industry
- Commercial fishing, Natura 2000 parks, tourism



## Baseline surveys

- 4 seasonal campaigns x 3 days
- 15 point profile across storage complex and along pipeline
- Denser near platform and above faulted interval
- Sediments + water column

## Biology

- Environmental DNA to define impact index
- Focus on foraminifera because sensitive to pH
- Focus on sediments because greater leak impact

## Geochemistry

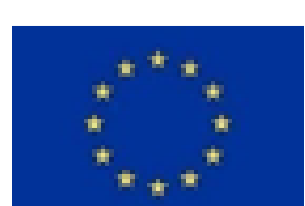
- Dissolved CO<sub>2</sub> conc. and  $\delta^{13}\text{C}$  isotopes in sediments and water
- Nutrients, alkalinity
- Continuous monitoring of CO<sub>2</sub> and T in water
- Mineralogy

## Atmospheric chemistry

- High precision, high frequency atmospheric CO<sub>2</sub> monitoring

## Current monitoring

- ADCP measurements



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