

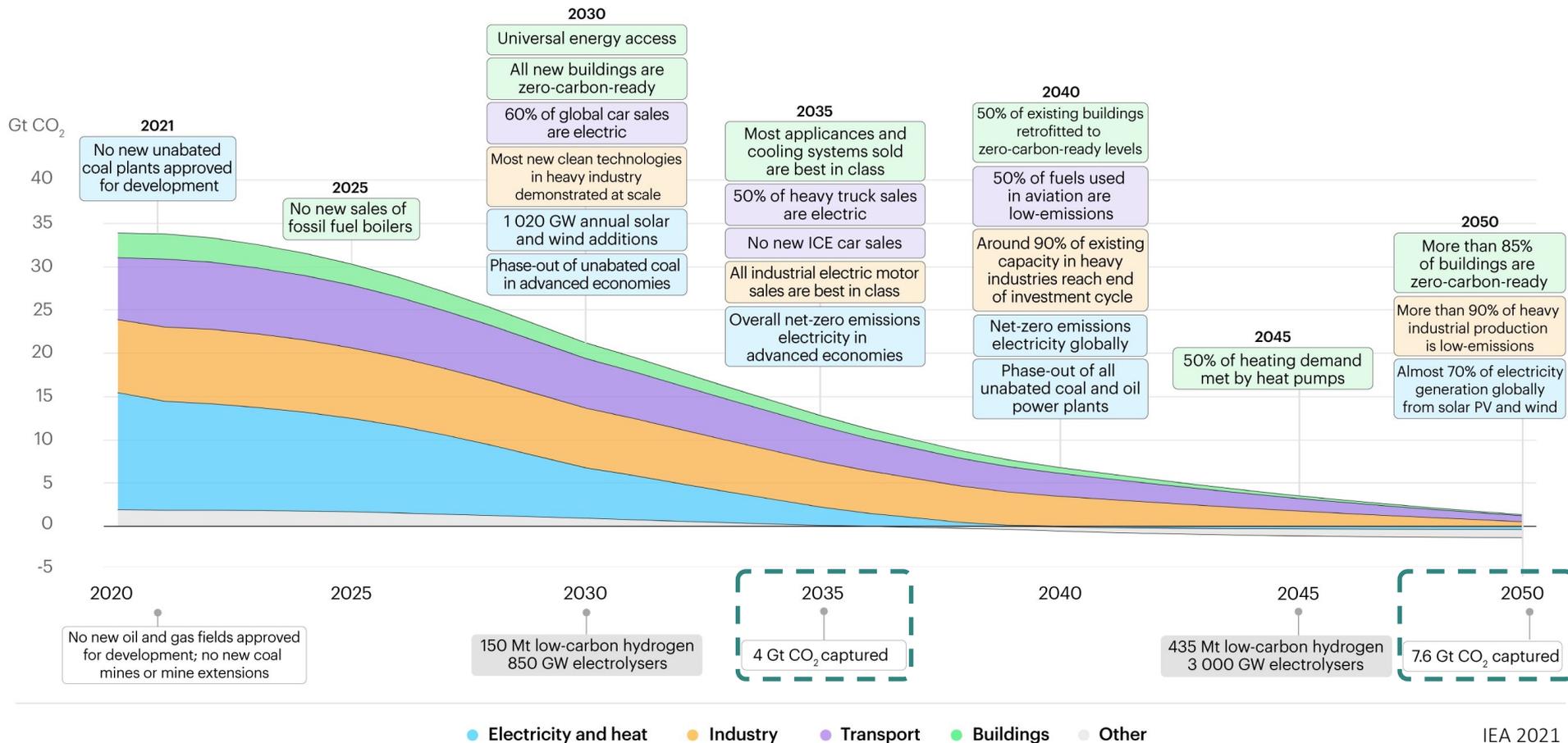
Aprovechando el subsuelo para un futuro sostenible:

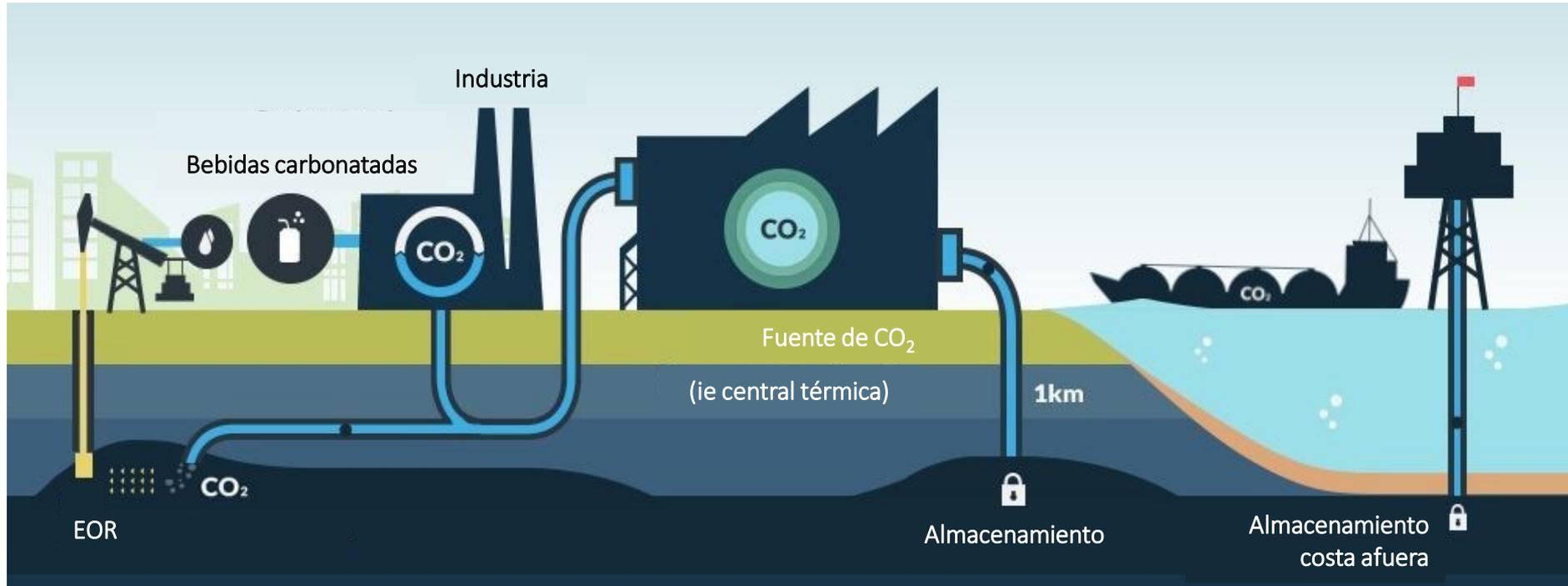
Introducción al CCUS

**Teresa M. Pique**

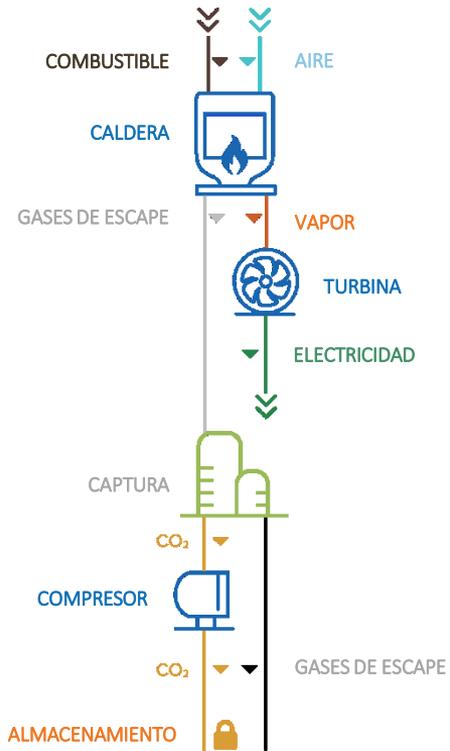
6 de septiembre del 2024

# → El camino hacia la neutralidad en carbono

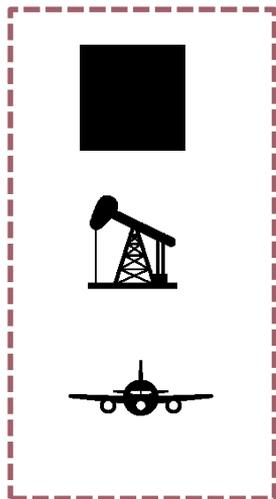




CAPTURA



USO



 **Combustibles**

- Metano
- Etanol
- Aviación

 **Químicos**

- Metanol/  
Etanol
- Polímeros

 **Materiales de Construcción**

- Agregados
- Cemento

← conversión



→ uso directo

 **Rendimiento**

- Algas
- Urea/  
fertilizantes

 **Solventes**

- EOR
- Descafeinización

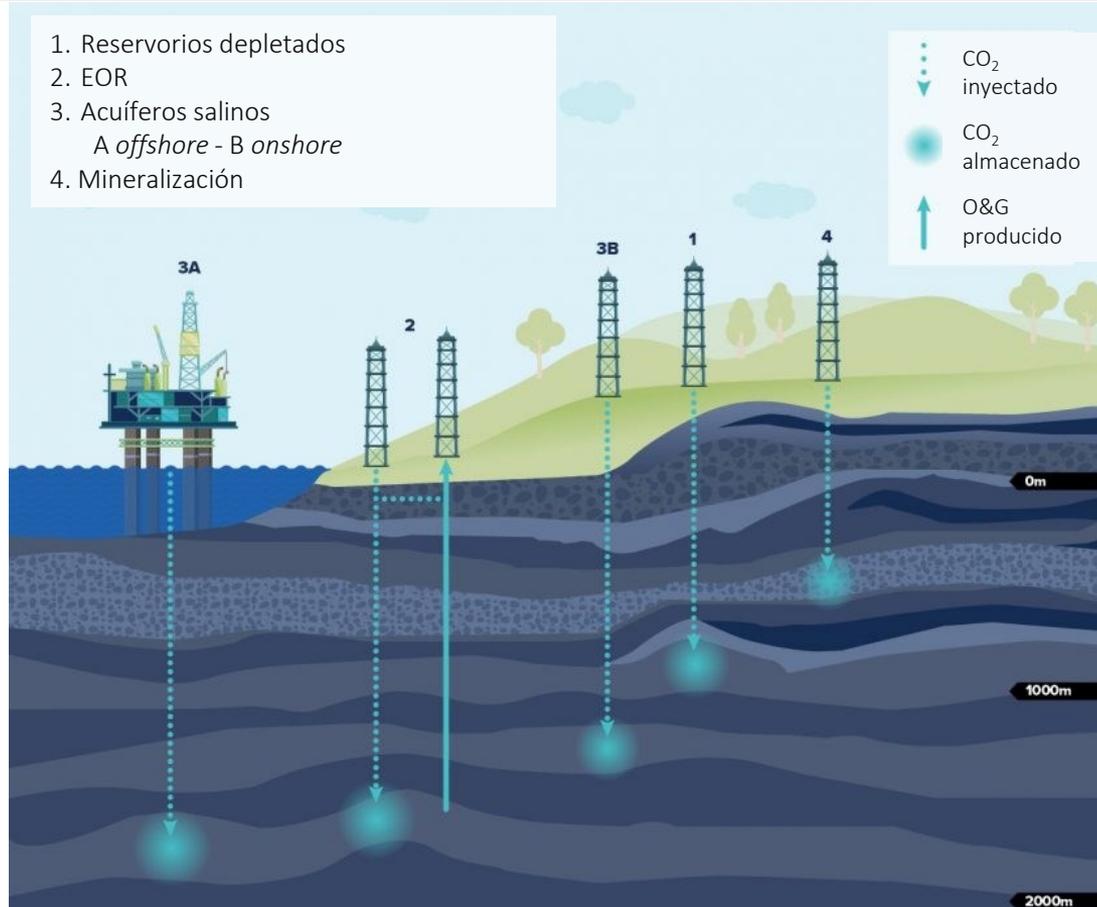
 **Flujo térmico**

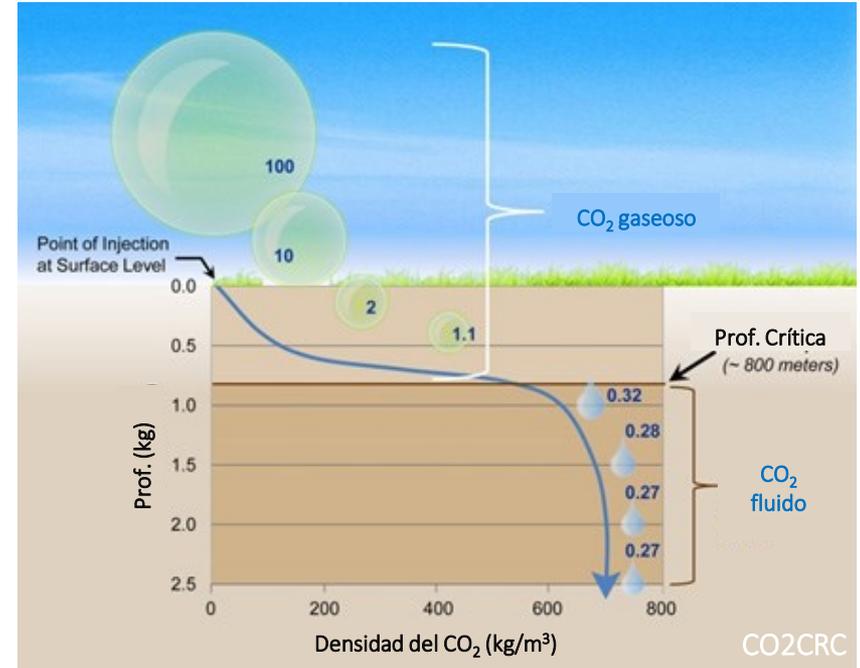
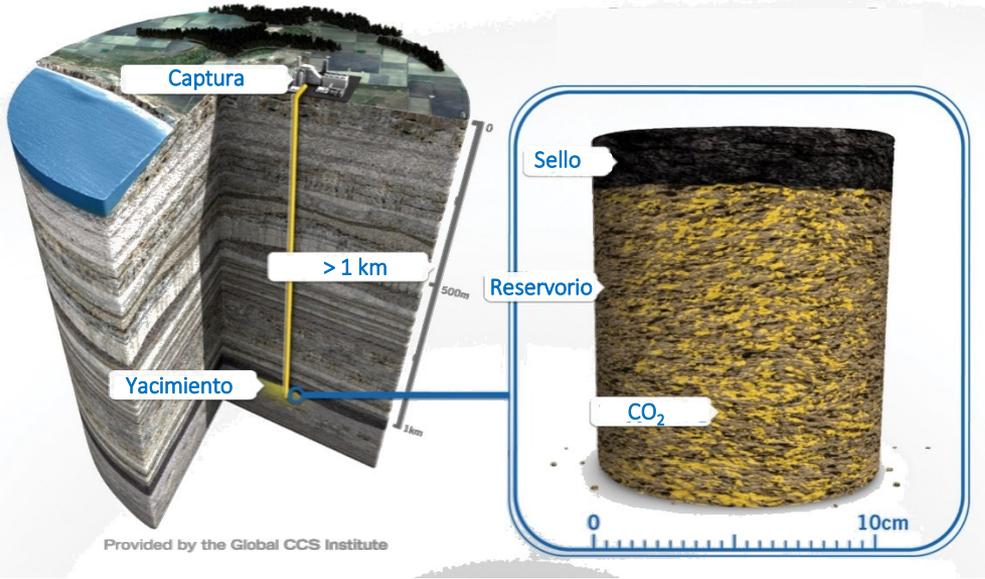
- Refrigeración
- Potencia  
supercrítica

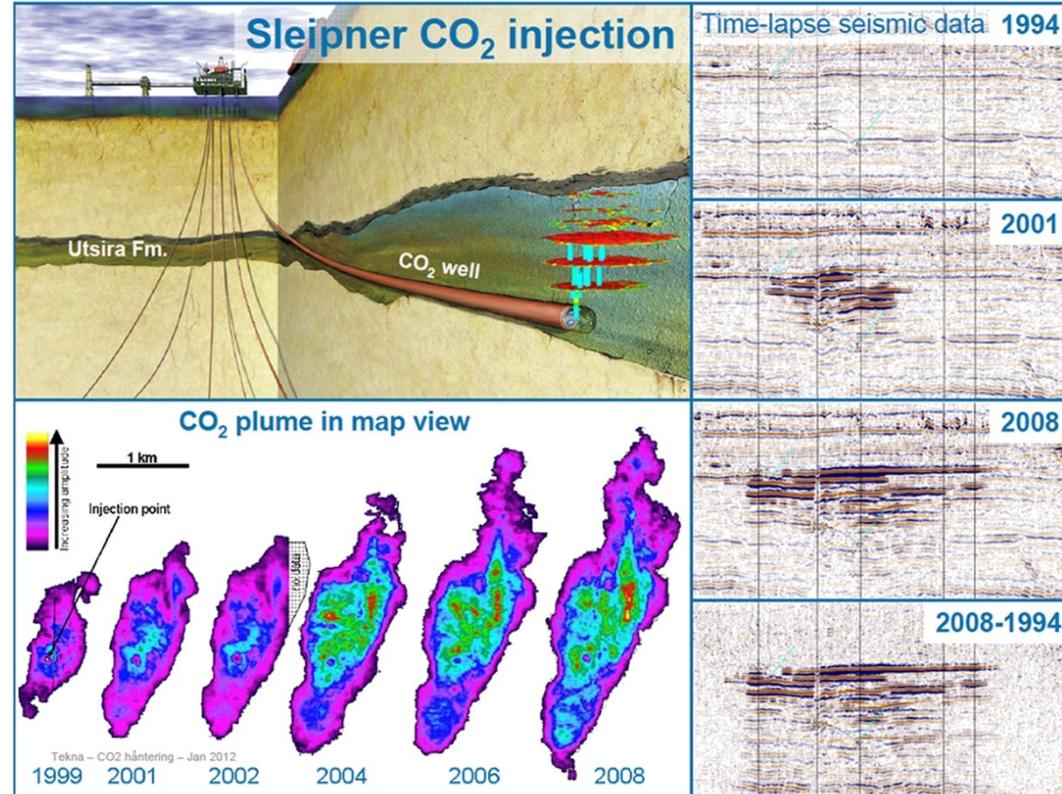
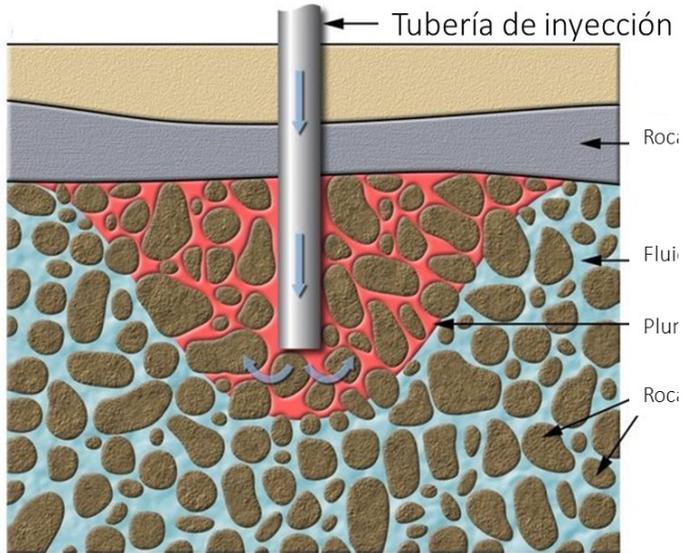


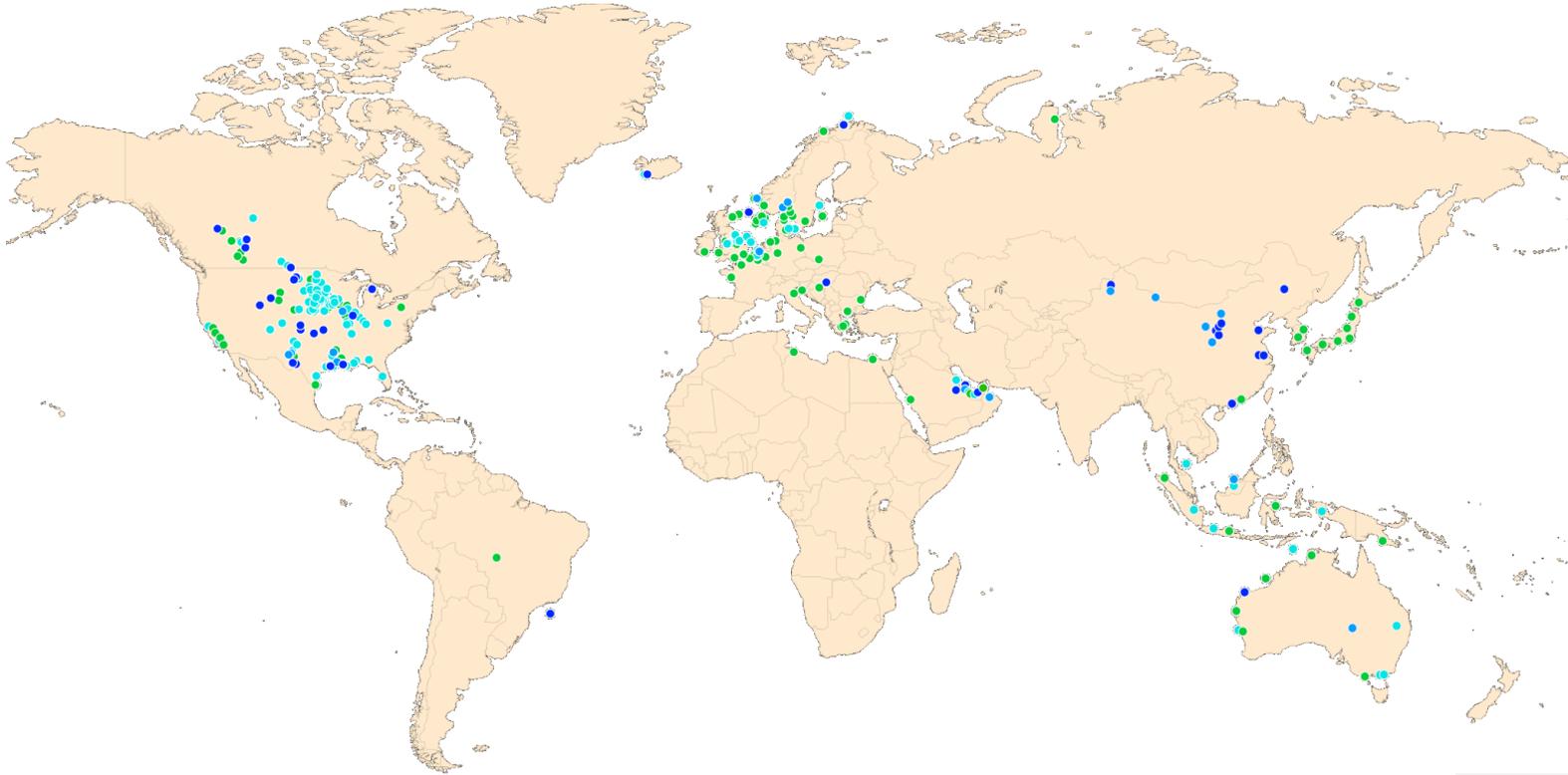
## ALMACENAMIENTO GEOLÓGICO DE CO<sub>2</sub>

1. Reservorios depletados
2. EOR
3. Acuíferos salinos  
*A offshore - B onshore*
4. Mineralización









**América y Europa:**  
tienen la mayoría de los  
proyectos a nivel mundial

**Latinoamérica:**  
México tiene proyectos  
de CCUS





## Cuencas Estudiadas

### Neuquina

- ✓ Acuíferos Salinos
- ✓ Reservorios Depletados O&G

### Golfo San Jorge

- ✓ Acuíferos Salinos
- ✓ Reservorios Depletados O&G

### Cuyana

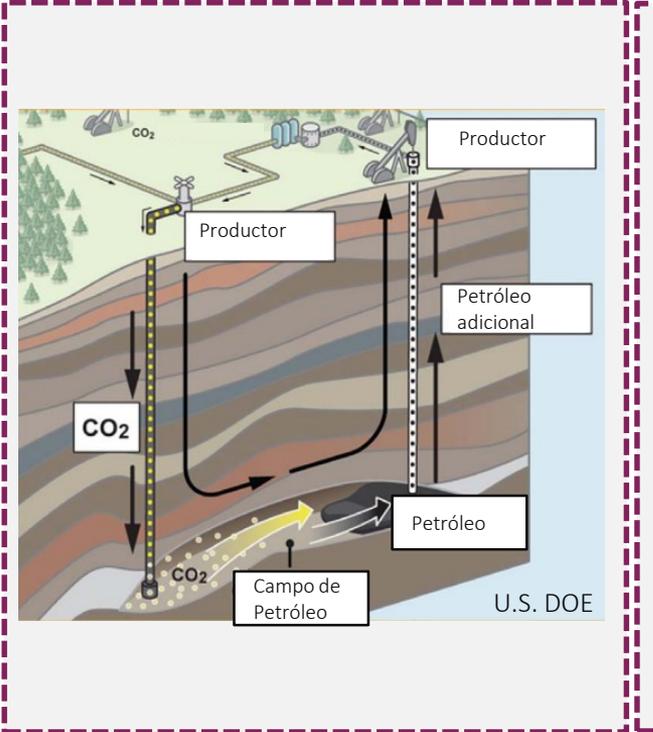
- ✓ Reservorios Depletados O&G

### Claromecó

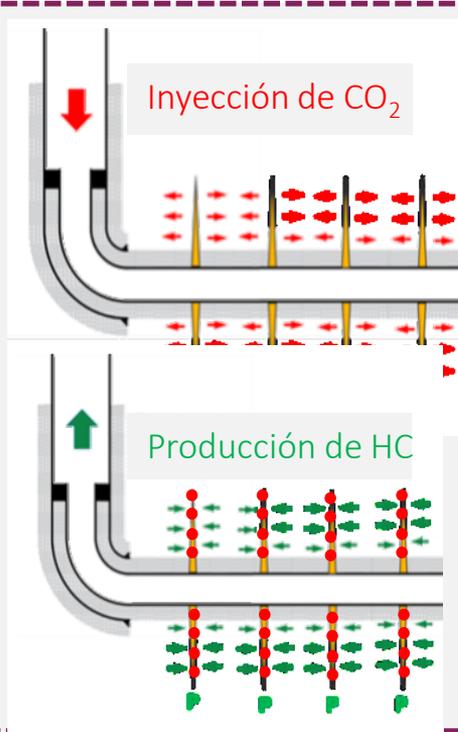
- ✓ Carbón no minable



### CO<sub>2</sub> EOR



### EOR-NoC



### Y-CALCITE

This section displays the Y-CALCITE process at different scales. At the top right is a microscopic image of yellow calcite crystals with a 1 mm scale bar. Below are three circular images: 'Macro-escala' (macro-scale) showing large white crystals, 'Meso-escala' (meso-scale) showing a dark, textured surface, and 'Micro-escala' (micro-scale) showing blue, branching structures. At the bottom, the patent information is provided: 'Patente No: US11473008B2'.



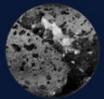
Rocas  
reactivas

+

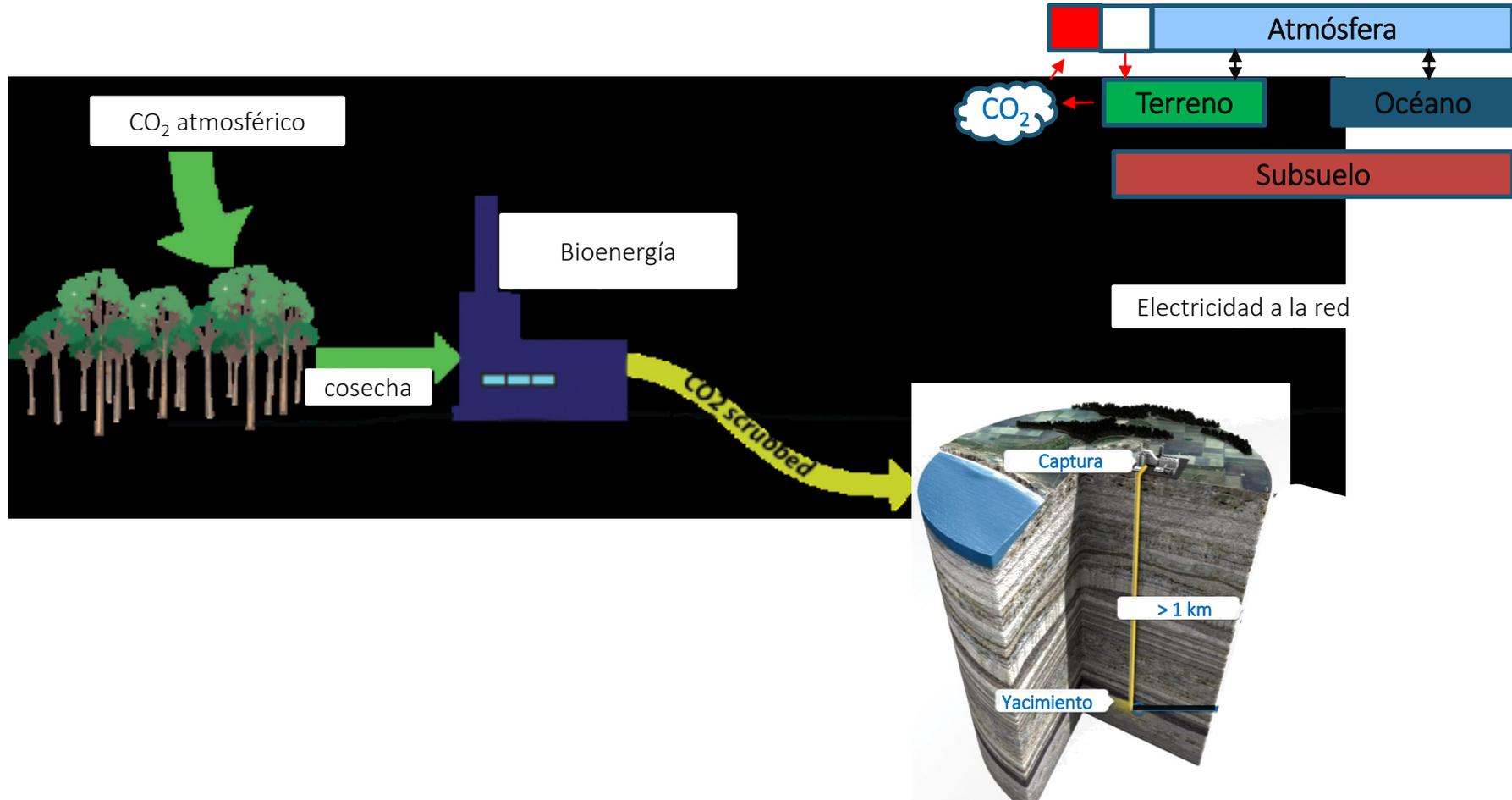


CO<sub>2</sub>  
disuelto

=



Carbonato  
sólido



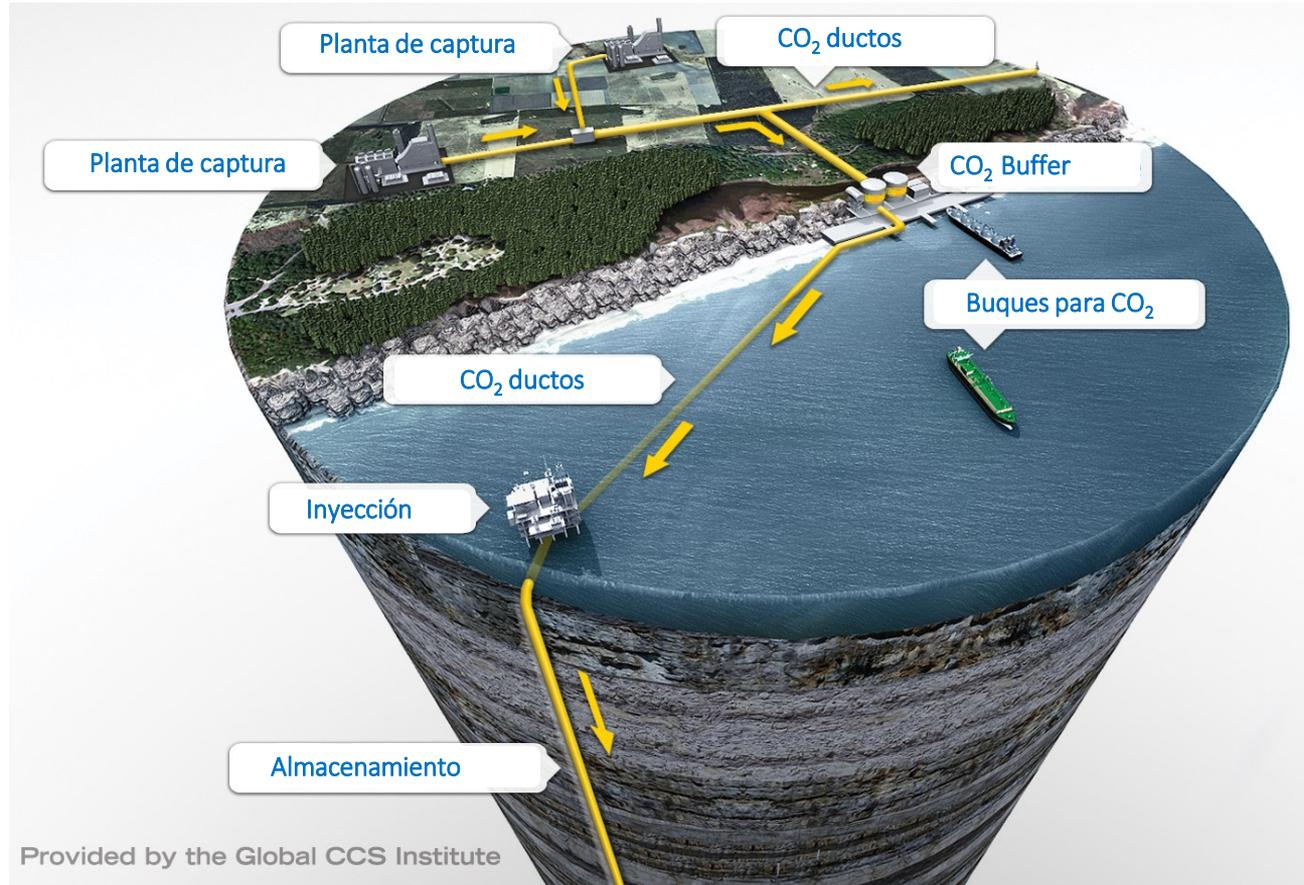


# ¡Muchas gracias por su atención!

Sitios de interés

- IEA Net Zero by 2050 (& Status Report 2023)
- GCCS (Global CCS Institute)
- EDX - EdinburghX: Climate Change: Carbon Capture and Storage
- MAyDS, 2023. Inventario Nacional de Gases de Efecto Invernadero: Argentina 2023

TRANSPORTE



Provided by the Global CCS Institute