

CO₂ storage projects in Europe

May 2025

Overview of announced CO₂ storage projects in Europe

BULGARIA

1. ANRAV (IF)

CROATIA

1. Petrokemija Kutina*
2. Bio-Refinery Project*
3. CCGeo (IF)
4. CO₂ EOR Project Croatia*
5. Geothermal CCS Croatia (PCI)
6. KODECO (IF)

CZECH REPUBLIC

1. CCS Moravia

DENMARK

1. Greensand*
2. Bifrost* (PCI)
3. Kalundborg CCS
4. Nørre (PCI)
5. Ruby
6. Greenstore

FRANCE

1. Pycasso* (PCI)

GREECE

1. Prinos CO₂ Storage Project (PCI)

HUNGARY

1. MOL-Hungary CCS Project*
2. Danube Removals (IF)

ICELAND

1. Orca
2. Silverstone (IF)
3. Coda Terminal (IF)
4. Mammoth

ITALY

1. Ravenna CCS (includes Callisto)* (PCI)

THE NETHERLANDS

1. Porthos* (PCI)
2. Aramis* (PCI)
3. L10 CCS*

NORWAY

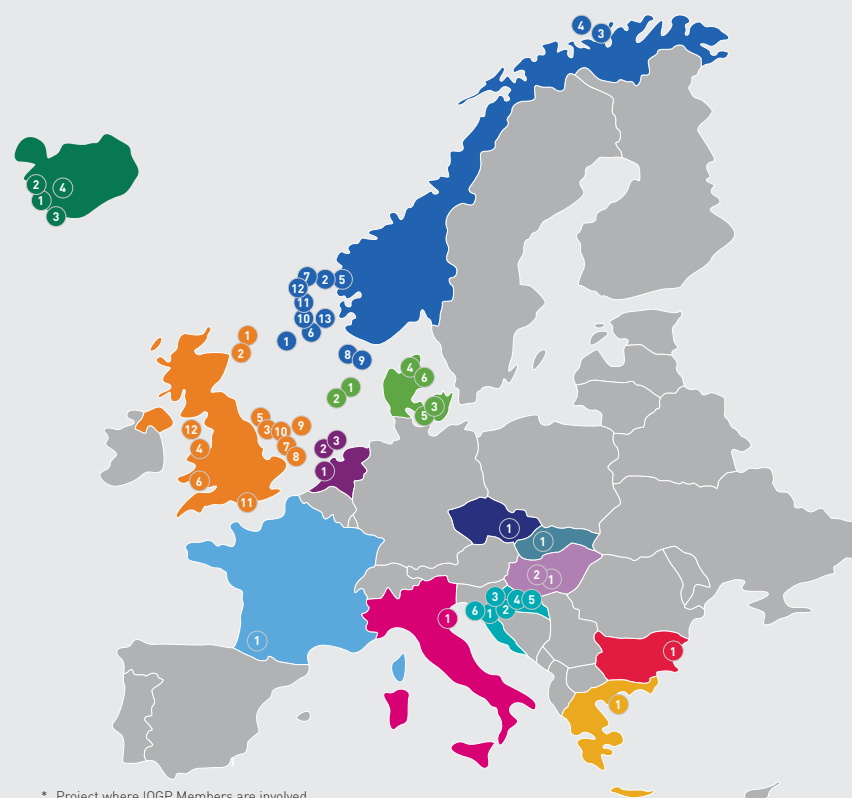
1. Sleipner*
2. Longship (includes Northern Lights)* (PMI)
3. Barents Blue (includes Polaris)
4. Snøhvit*
5. Smeaheia*
6. Trudvang*
7. Luna*
8. Havstjerne* (IF)
9. Poseidon (NO)*
10. Iroko*
11. Kinno*
12. Atlas*
13. Albondigas*

SLOVAKIA

1. Engas CCS

UK

1. Acorn*
2. Caledonia Clean Energy
3. Zero Carbon Humber*
4. HyNet*
5. Net Zero Teesside*
6. South Wales Industrial Cluster
7. Bacton Thames Net Zero*
8. Poseidon (UK)*
9. Viking CCS*
10. Orion*
11. Solent Cluster*
12. Morecambe Net Zero Cluster

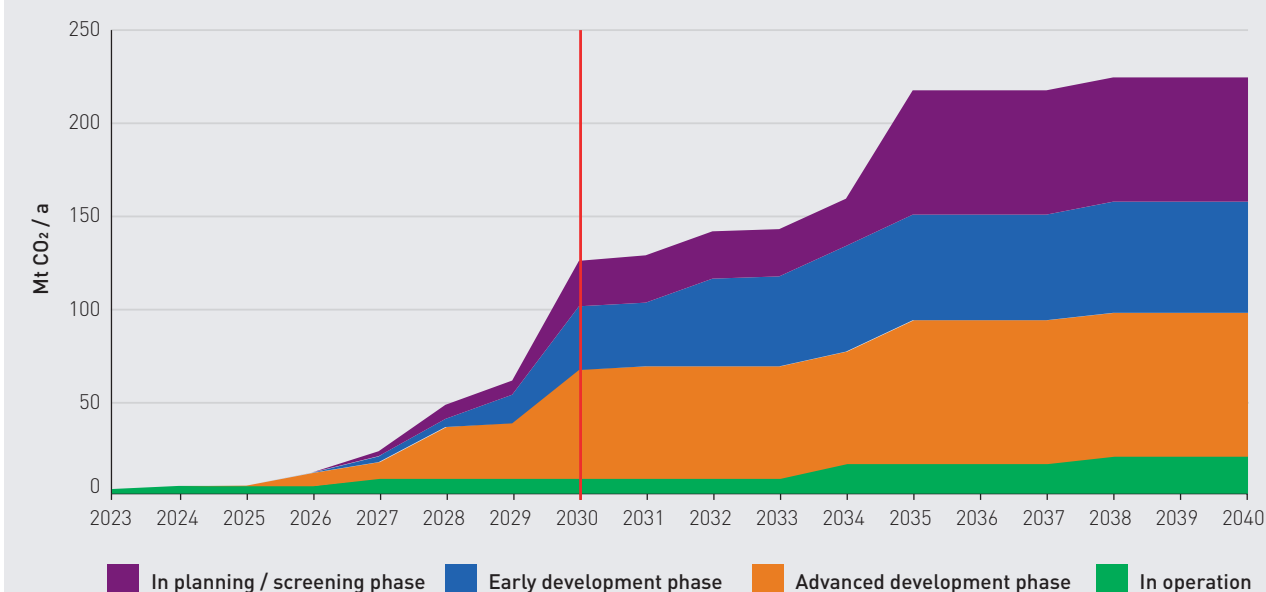


* Project where IOGP Members are involved
Projects listed in **bold** are in operation

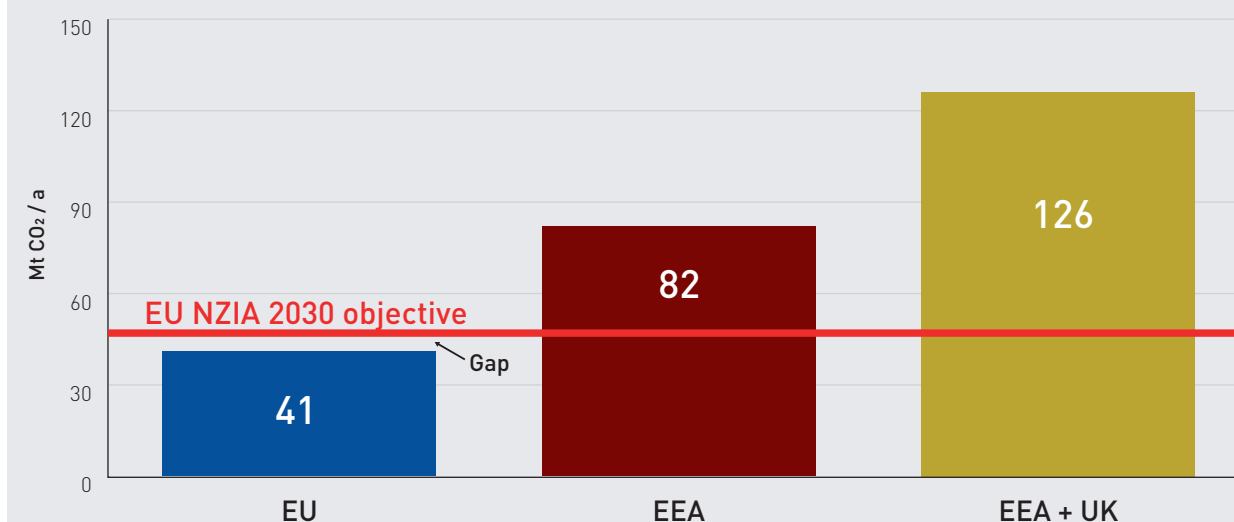
(PCI) – Project of Common Interest
(PMI) – Project of Mutual Interest
(IF) – Project supported by the EU Innovation Fund

| | |
|--------|---|
| EU | 23 projects - 41 MtCO ₂ /yr by 2030 |
| Europe | 52 projects - 126 MtCO ₂ /yr by 2030 |

Build-up of CO₂ storage injection capacity in Europe



Regional breakdown of CO₂ storage injection capacity by 2030



Key numbers

EU

23

CO₂ STORAGE
PROJECTS

10

COUNTRIES
WITH CO₂ STORAGE
PROJECTS

41

MT CO₂/YEAR
CO₂ storage injection
capacity by 2030

Europe

52

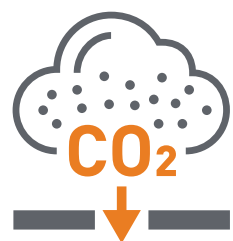
CO₂ STORAGE
PROJECTS

13

COUNTRIES
WITH CO₂ STORAGE
PROJECTS

126

MT CO₂/YEAR
CO₂ storage injection
capacity by 2030



Carbon Capture, and Storage

CCS is a set of technologies that enable the Capture, Transport and Storage of CO₂.

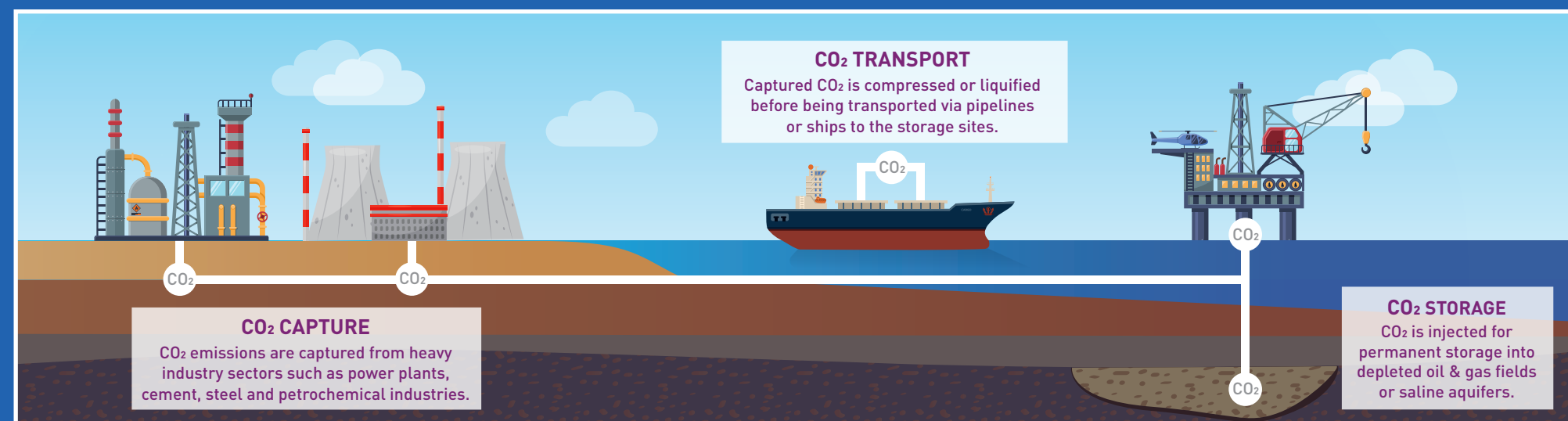
CCS is a proven and safe technology. CO₂ has been captured, transported and stored in Europe successfully since 1996 (Sleipner project, Norway).

It is a key technology for Europe to meet climate neutrality.

More CCS resources at iogpeurope.org

How it works

The 3 segments of the CCS value chain



CCS be deployed at scale, often repurposing existing infrastructures

Where can CCS make a difference?



Decarbonisation of hard-to-abate industries

In the EU, steel, cement, chemical and refining sectors emit 37% of total CO₂ industrial emissions. CCS is one of the only technological options to enable emission reductions in hard-to-abate industries.



Energy transition

CCS can be applied to gas-fired power plants which provide flexibility to an electricity grid with a higher share of intermittent renewables.



Low carbon hydrogen production

Hydrogen production based on natural gas decarbonized with CCS is the most cost-effective. It can supply industrial sectors and decarbonize sectors which cannot be electrified such as aviation and maritime transport.



Negative emissions

Large scale negative emissions can be achieved when BioEnergy production is combined with CCS (BECCS) or when Direct Air Capture is combined with CCS (DACCS).

A European CO₂ storage ambition

IOGP Europe promotes an ambition on CO₂ storage injection capacity availability.



Ambition level of 0.5 to 1.0 GtCO₂ storage availability per year by 2050



Scope covering EU, EEA and the UK



Requires a comprehensive EU policy framework