	Goals	
	Advanced scientific instruments and energy- efficient equipment	a, b, c
ස්ස්ස <u>ද</u> ුළුදු	Improved research infrastructures and trained staff to serve future industry needs	a, b, c, d
Ċ Ţ	New / improved software and tools	a, b, c
	New social innovation labs	b, d
	Digital technologies for optimization of RI operation, training and CCS pipeline network	a, b, c, d
(ب ب ب ب ب	Platform for sharing knowledge	a, b, c, d

Call outcomes HORIZON-INFRA-2022-TECH-01

b a **Enhancing scientific** Setting foundations for the development competitiveness of European research of innovative infrastructures companies С d Increasing the tech. level Integrating RIs into local, regional and of industries through the co-development of global innovation advanced technologies systems for research infrastructures and creation of potential new markets



ENCASE brings together Carbon Capture and Storage (CCS) research, operators, manufacturers, academia, and SMEs to increase competitiveness in the industry.

This will contribute to the **development of innovative companies** and the **education of future workforce for the CCS industry**, as well as **improving the design and operation** of CCS infrastructures to **meet EU climate goals**. Social innovation labs and co-creation initiatives will also be developed to address societal needs.



Encase

A European Network

Ö=C=Ö

of Research Infrastructures for CO₂ Transport and Injection

www.encase-eu.com



This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No 101094664. ENCASE is a project aimed at deploying Carbon Capture and Storage (CCS) technologies in different industrial sectors across Europe to reduce greenhouse gas emissions and meet EU climate goals.

How?

By implementing a fast track approach to abate CO₂ emissions by deploying CCS from different industrial sectors across Europe.

By improving 7 world-leading CCS-related research infrastructures (RIs) in the consortium with state-of-the-art scientific instruments, tools, and methods.



The EU aims to cut greenhouse gas emissions by 55% by 2030 and achieve carbon neutrality by 2050.

Deployment of Carbon Capture and Storage (CCS) is a powerful fast track approach to abate CO_2 emissions.

CO₂ **transport and injection** are **essential links** between capture sites and storage reservoirs.

Mission

"Contribute to a safer, more cost-effective, and environmentally friendly CO₂ transport and well injection"

It will do so by **strengthening** the 7 world-leading CCS-related Research Infrastructures (RI), partners in the consortium, and **increasing the personnel's competence**.

It will also **increase the competitiveness of European RIs** by collaborating with operators, service companies, academia and SMEs.

The RIs will be available for the industry and SMEs to **prototype new equipment and technology** for monitoring, controlling and predicting CO₂ streams with impurities.



Impacts



- Lift the knowledge level of industry and academia, leading to the development of innovative companies and the education of future workforce.
- Develop social innovation labs and co-creation initiatives to address societal needs and better integrate RIs in local communities.
- Improve design and operation of CCS infrastructures to help meet EU climate goals.
- Benefit the scientific community, industry, policy-makers, environment, and society.



Benefits



- Safer, more cost-effective, and environmentally friendly CO₂ transport and injection.
- Enhance the capability of RIs, increase competence of RI personnel, and enable RIs to better address key knowledge gaps.
- Provide RIs for innovative products such as pumps, metering technologies, and simulator tools for monitoring, controlling, and predicting CO₂ streams.