

ECCSELLENT CCUS Training Courses series

The ECCSELLENT (Development of ECCSEL-R.I. Italian facilities: user access, services and long-term sustainability) project offers a series of training courses on CCUS (Carbon Capture Utilisation and Storage). The series of courses will provide an overview of the capture, transport, utilisation and storage aspects of CCUS. The technical and safety requirements of each phase of the chain will be assessed and put into a wider context using case studies and real-life examples. Special focus will be given to Italian CCUS infrastructures.

The courses will take place online.

Calendar

TOPIC	DATE
Training Course on research infrastructure for CO ₂ Capture R&D	January 31, 2025
Training Course on research infrastructure for CO ₂ Transport R&D	February 6, 2025
Training Course on research infrastructure for CO ₂ Storage R&D	March 13, 2025
Training course on research infrastructure for CO ₂ Utilisation R&D	March 26, 2025

[Link to the Course](#) - ID meet: **311 838 830 548** Passcode: **k2Zx7oL6**

Program of Course 3 – Storage (March 13, 2025)

Time	Title	Speakers	Institution
9:30	Welcome and introduction to the ECCSELLENT project	Vincenzo A. Laudicella	OGS
10:00	Lectures	Valentina Volpi	OGS / ECCSEL OC
	- <i>CO₂ storage: geological modelling</i>		
	- <i>Seismic monitoring at CO₂ storage sites</i>	Davide Gei	OGS
11:00	Case study 1 - <i>Coupling CCUS and Geothermal Energy: innovative monitoring technologies by active-source seismic data acquisition in the Hellisheiði geothermal field (Iceland).</i>	Erika Barison	OGS
11:30	Break		
11:45	Case study 2: <i>Studying natural carbonation systems in ultramafic rocks. The STORECO2 project</i>	Federico Da Col	OGS
12:15	<i>CCS offshore shallow focused monitoring – the importance of natural laboratories</i>	Marco Graziano	OGS
12:40	<i>PITOP: a facility for geophysical studies applied to CO₂ and energy storage site characterization and monitoring</i>	Cinzia Bellezza Andrea Travan	OGS
13:00	Conventional and innovative technologies for CCS offshore monitoring	Lorenzo Facchin	OGS
13:15	Closing remarks		

ECCSELLENT Project

CCUS is a cross-sector solution essential to mitigate carbon emission in many sectors, including power and industry. CO₂ is captured at the source of emission and either used to create valuable products (CCU) or for underground permanent confinement (CCS) in deep geological formations. CCUS is identified as a future key technology for reducing emissions from fossil fuels to be consistent with the goals of the Paris Agreement.

The general objective of the **ECCSELLENT** project is to upgrade most of the Italian facilities part of **ECCSEL ERIC** and to expand the Italian node to promote the development and internationalization of our country's research in the full chain of CCUS (CO₂ Capture, Utilisation, Transport and Storage).



Facility Name	Access Provider	ECCSEL ERIC Catalogue
POLICAP	POLITECNICO MILANO	
CO ₂ -BOX	LEAP	
MEMLAB	ENEA	
ZECOMIX	ENEA	
MADE4CO ₂ Lab	STEMS	
GTL4CCU	ITAE	
Sotacarbo FAULT lab		
ADVANTEST ROCK		
MECO ₂	SOTACARBO	
PEC lab		
COHYGEN		
XtL Pilot plant		
PITOP		
CTMO		
Research Aircraft		
BioMarineLab	OGS	
DeepLab		
Latera NatLab-Italy		
Panarea NatLab-Italy		



ECCSELLENT partners are: **OGS** – Coordinator, www.ogs.it; **Politecnico di Milano**, www.polimi.it; **Bologna University**, www.unibo.it; **ENEA**, www.enea.it; **CNR-STEMS**, www.stems.cnr.it; **CNR-ITAE**, www.itae.cnr.it.

Transnational Access

In **June 2024**, the Italian National Node **launched a call**, funded by PNRR ECCSELLENT project, to finance the **transnational access** to all Italian ECCSEL ERIC facilities.

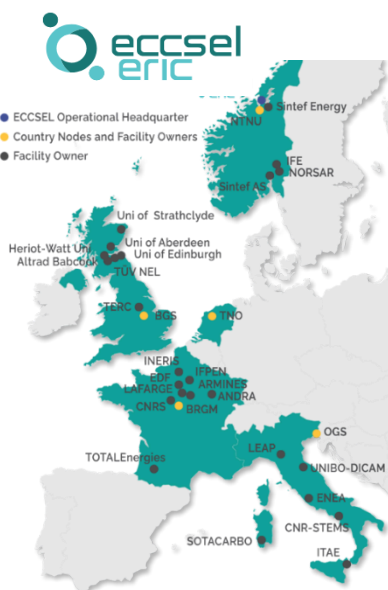
The call is open to applications from European industry, small-medium enterprises (SMEs), Universities, and Research Institutes.

Each project will be reviewed by a panel set up by the Italian National Node.

[Link to the call](#)

ECCSEL-ERIC

ECCSEL, founded in 2017 on EU level, as an ERIC, HQ in Trondheim, Norway, is the European Research Infrastructure for CO₂ Capture, Utilisation, Transport and Storage (CCUS) and Carbon Dioxide Removal (CDR).



5

28

100+

Member
Countries

Research
Facility
Owners

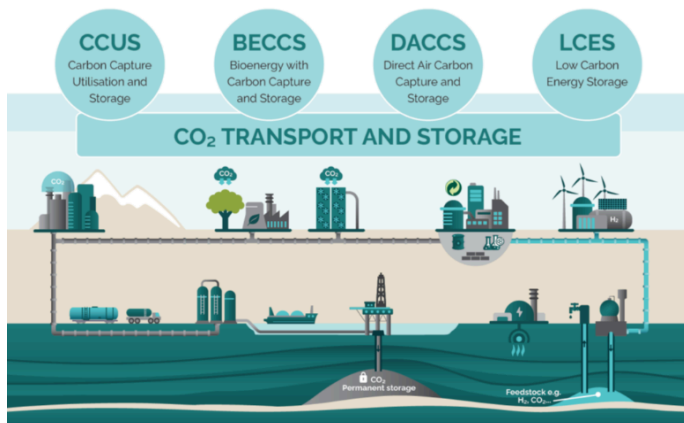
Research
Facilities



The ECCSEL vision is to empower Research, Academia, and Industry to accelerate Research & Development to achieve net-zero CO₂ emissions across industrial sectors and power generation.

Mission:

ECCSEL facilitates and coordinates open access to over 100 world-class CCUS & CDR research facilities across Europe, bolstering both national and EU Industrial Carbon Management Strategies. The R.I. actively engages with pertinent industry, academia, and research communities to address identified research needs across



the TRL1 to TRL7 spectrum. ECCSEL offers a comprehensive single-point open access of research and validation resources to accelerate the development and industrialization process, and eventual scaling up of the CCUS and CDR value chain to:

- Reduce costs** > make CCUS&CDR commercially feasible;
- De-risk Investment** > to ensure asset integrity;
- Support safe operation** > to achieve societal acceptance.