

TECHNO-ECONOMIC ANALYSIS OF CARBON MITIGATION TECHNOLOGIES CA21127

International Training School
on The Role of CCUS in Industrial Decarbonization
30 June – 4 July 2025, Jaca, Spain



Universidad
Zaragoza

ENERGY AND CO₂
ECO2LAB



Training School Brochure

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Scope and goal:

The primary goals of this training school are to equip participants, mainly MSc, PhD students and young researchers, with a comprehensive understanding of **the role of Carbon dioxide Capture, Utilisation, Transport, and Storage (CCUS) technologies in the industrial decarbonisation process**. Through expert-led lectures, workshops, and real-world case studies, participants will learn to assess the feasibility, cost-effectiveness, and potential of CCUS projects in the process of decarbonising energy-intensive industrial sectors. By fostering collaboration and networking opportunities, the program aims to empower attendees to drive innovation and sustainability in addressing the urgent challenge of climate change through the deployment of CCUS technologies.

Program highlights:

- **Lectures:**

Our expert-led lectures cover a wide range of topics essential for mastering the integration of CCUS technologies into hard-to-abate CO₂ emissions in industry through techno-economic analysis, life cycle assessment and process modelling.

- **Workshops and case studies:**

Put theory into practice through interactive workshops and real-world case studies. Work collaboratively to solve challenges related to the integration of CCUS project in industry through design, economic evaluation, and process optimization.

- **Site visits and field trips:**

Enhance your learning experience with site visits to CCUS facilities and industrial sites. Get a firsthand look at the practical implementation of CCUS technologies and interact with industry experts.

- **Networking opportunities:**

Connect with peers, mentors, and industry professionals passionate about CCUS technology applied to energy-intensive industrial sectors. Build your professional network and explore potential collaboration opportunities for future projects and research endeavours.

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Topics:

- Carbon Capture and Utilization Technologies
- Carbon storage options
- Techno-Economic Analysis (TEA) and Life Cycle Assessment (LCA) of CCUS
- Industrial clustering and decarbonization
- Paper and pulp production: industrial processes and decarbonisation routes.
- Iron and steel production: industrial processes and decarbonisation routes.
- Cement plants: industrial processes and decarbonisation routes.
- Social, economic and technical challenges of industrial decarbonisation

Venue:

Training school will be hosted by **Universidad de Zaragoza**, a hub of academic excellence and innovation in the region of Aragón (Spain). The Universidad de Zaragoza is one of the oldest universities in the world with a 550-year tradition of outstanding achievements and academic reputation. According to the QS ranking, it belongs among the top 550 universities in the world and it is one of the best Spanish Universities.

Application deadline: May 15th 2025

Contact information:

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