



European Carbon Dioxide Capture and Storage Laboratory Infrastructure

**ENABLING LOW TO ZERO CO<sub>2</sub> EMISSIONS FROM INDUSTRY AND POWER GENERATION...  
TO HELP COMBATING GLOBAL CLIMATE CHANGE**

## FLASHNEWS

### Kick-off for ECCSEL Infradev-3

September 2015 has marked the official launch for the implementation phase of ECCSEL. The kick-off meeting, which took place last 10<sup>th</sup> September in Oslo, was attended by representatives from the 9 countries and the 14 entities taking part in the infrastructure and performed the firm basis for actively moving forward. Constituted as a not-for-profit organisation, ECCSEL will promote **international collaboration** with universities, research institutes and industry **in public-private partnership to develop marketable solutions** in CCS field.



### Network of research infrastructure

New techniques and concepts are urgently needed to improve the efficiency of CCS as a climate mitigation option. It is essential to reduce capital investments and operational costs in CCS development and to ensure safety and environmental integrity. Analyses made by the IPCC and the IEA suggest that by 2050, CCS must make up 17% of the global annual cuts in greenhouse gas emissions and 14% of the accumulated cuts from now on. These demands can only be met by intensified research and development aimed at enhancing the scientific and technological knowledge base.

In this sense, ECCSEL will enable high-ranking researchers and scientists from Europe and third countries to access state-of-the-art research facilities to conduct advanced technological research actions relevant to CCS. More information about the **43 outstanding installations in ECCSEL** and how to access is available in the website [www.eccsel.org](http://www.eccsel.org).

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## Industry enjoys ECCSEL because...

Transforming power generation and energy intensive industries so that they can be compatible with the transition to a low carbon economy, while maintaining production volumes, requires concerted, collaborative efforts to develop and invest in novel process designs and solutions that can reduce emissions intensities by over 50%, but which are not yet on the market. In this context, IEA analysis suggests that CCS could be an indispensable tool.

CCS will ensure a clean, affordable and reliable energy exploiting local and diversified

fossil fuel resources effectively, both in terms of cost and environmental impact. Without CCS, two-thirds of known fossil energy reserves must remain in the ground to achieve the two-degree goal. Development and deployment of CCS technologies is therefore imperative.

Within this framework, the proactive approach of industry sector and ECCSEL would result in relevant benefits. **ECCSEL community** is a platform for open innovation and cross-fertilization of the energy intensive industry and other sectors including research

communities focusing on the developments of CCS and research infrastructures.

Being **ECCSEL industrial partner** will provide a better positioning and improve technical understanding via capacity building of latest developments on new emerging technologies and markets. Besides, the network will support access to specific public funds, such as H2020, and take part in research priorities and policy making in CCS field, giving advantage in those developments in the global market and creating business opportunities. Consult terms and conditions in [www.eccsel.org](http://www.eccsel.org).

## Upcoming call for free transnational access to ECCSEL world class research infrastructure

ECCSEL is implementing and operating an European distributed, integrated Research Infrastructure (RI) based on a selection of the best European research facilities for CCS development.

In this sense, ECCSEL aims to open access for researchers to a top quality European RI, devoted to next generation CCS technologies in an efficient and structured way, to help enabling low to zero CO<sub>2</sub> emissions from industry and power generation to combat global climate change.”

The European Union's H2020 programme funding, supporting the current implementation of ECCSEL, also finances Transnational Access to the ECCSEL RI.

***Any researcher with a research project related to CCS can apply.***

The Transnational Access grant allows researchers to access free of charge the 43 outstanding ECCSEL facilities included in this program, including free travel and lodging.

The scheme is open for researchers primarily from institutes located in a European or associated country, but access could be also available to others.

First call for ECCSEL Transnational Access Programme will **start end of January 2016** and subsequent calls will be end of July and November 2016.

More info:  
<http://www.eccsel.org/Sections.aspx?section=554>

## Exchange research programme & ECCSEL Training Courses

One of the strengths of ECCSEL is the opportunity offered to a wide international scientific community to access to facilities through the Transnational Access (TA) Programme, but a major problem for a researcher accessing a new facility may consist in not being expert enough in its use. In order to fill these knowledge gaps, specific training courses will be carried out to provide potential users of the facilities with the necessary skills and, consequently, positively impact the research results produced during the TA experience.

Organized in the form of **practical short courses**, this specific training will be focused in experimental techniques, methods and instrumentation related to the facilities and addressed users related with CCS activities in industry, university and research community.

In accordance with the practical concept of the courses, training will be driven by relevant figures and experts in the field of CCS, as well as by the proper staff who operates the facilities.

Three courses will be taken place in 2016. **CO<sub>2</sub> storage on the research infrastructure for CO<sub>2</sub> storage R&D** is the first ECCSEL Training Course which will take place in OGS facilities in Italy and focused on capacity estimation techniques and experimental methods, models development and validation, storage integrity, site monitoring and fields lab testing issues. Next course will be **Monitoring large scale CCS pilot R&D facilities**. Organized in the industrial facilities of CIUDEN in Spain and it will mainly consist on the scientific and technical experience developed in Hontomín site, including geophysical methods (micro-seismic grid or geo-electrical

measurements in wells), deep sampling and safe operation. The third session **Research infrastructure for CO<sub>2</sub> Capture R&D** will be organized by NTNU in Norway with a focus on experimental methods, instrumentation and model development covering: solvent, sorbent and membrane development for CO<sub>2</sub> capture.

10<sup>th</sup> February, Sgonico (Italy)  
**CO<sub>2</sub> storage on the research infrastructure for CO<sub>2</sub> storage R&D**

Contact: Michela Vellico,  
[mvellico@ogs.trieste.it](mailto:mvellico@ogs.trieste.it)

24<sup>th</sup> February, Hontomín (Spain)  
**Monitoring large scale CCS pilot R&D facilities**

Contact: Sandra Ramos,  
[sm.ramos@ciuden.es](mailto:sm.ramos@ciuden.es)

25 April, Trondheim (Norway)  
**Research infrastructure for CO<sub>2</sub> capture R&D**

Contact: Volker Röhling,  
[volker.rohling@ntnu.no](mailto:volker.rohling@ntnu.no)



CIUDEN Hontomín plant in Spain will be hosting the course on monitoring large scale CCS pilot R&D facilities.

## AGENDA

10 February 2016  
**ECCSEL Training Course  
on CO<sub>2</sub> Storage on the  
research infrastructure for  
CO<sub>2</sub> storage R&D**  
Sgonico (Italy)  
[eccsel.org](http://eccsel.org)

24 February 2016  
**ECCSEL Training Course  
on monitoring large scale  
CCS pilot R&D facilities**  
Hontomín (Spain)  
[eccsel.org](http://eccsel.org)

25 April 2016  
**ECCSEL Training Course  
on research infrastructure  
for CO<sub>2</sub> capture R&D**  
Trondheim (Norway)  
[eccsel.org](http://eccsel.org)

21 - 23 June 2016  
**Power Gen Europe**  
Milan (Italy)  
[powergeneurope.com](http://powergeneurope.com)

14 - 18 November 2016  
**GH-GT13**  
Lausanne (Switzerland)  
[ghgt.info/ghgt-13](http://ghgt.info/ghgt-13)

## Innovation is the key Info Days are the clue

Innovation is an essential competitive enabler to maintain strong economic growth in a globalised market and the principal mechanism for changes in an organisation is innovation.

ECCSEL entails a strong potential for innovation due to the integrated approach. Next to this ECCSEL offers a venue for confronting ideas to broaden the communicative basis within the ECCSEL platform and with industrial players around the world. As such managing innovation in ECCSEL means a collaborative approach and deployment environment for planning and deploying a network of open innovation.

**ECCSEL National Info Days**  
will take place organised  
by the National Nodes during  
first quarter 2016.



### ASK ECCSEL

For further information, please contact:

Volker Röhling, [volker.rohling@ntnu.no](mailto:volker.rohling@ntnu.no)



### ECCSEL partners

