

PRESS RELEASE

13th November 2017

Global taskforce tackling climate change head-on in a bid to 'Pre-ACT' to protect our planet

Key players from Europe, Australia and the USA are joining forces to tackle the challenge of removing CO₂ from the atmosphere and storing it underground in a bid to make a real difference to our future climate.

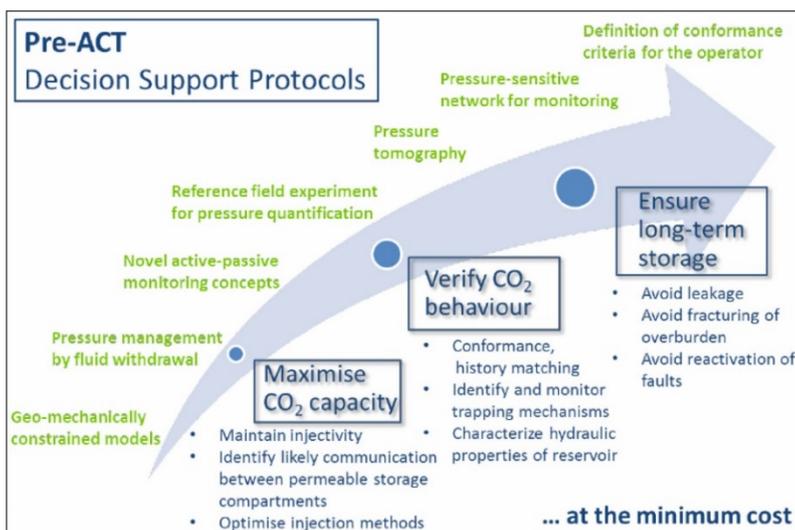
The 'Pressure control and conformance management for safe and efficient CO₂ storage' or 'Pre-ACT' project, aims to improve the cost effectiveness of safe CO₂ storage. This will be done by developing a pressure-based monitoring and verification workflow. Great work on this has already taken place at several sites around the world and now those teams are joining forces to accelerate the technology and move towards large-scale deployment.

The Department for Business, Energy & Industrial Strategy (BEIS) has recently published a UK Clean Growth Plan. As part of this, CO₂ capture and storage is identified as a key part of the UK's decarbonisation strategy, being linked directly to our industrial hubs and to future expansion of the hydrogen economy.

The main challenges to CO₂ storage are capacity, confidence and cost. Five European Governments: Norway, Germany, The Netherlands, UK and France, with co-operation from the US and Australia, make up the team bringing together both researchers and industry to tackle these challenges through a number of applied research projects.

For the UK, the research team is a joint group from British Geological Survey (BGS) and Plymouth Marine Laboratory, funded by BEIS.

To aid the future operation of CO₂ storage sites, Pre-ACT will analyse and use the wealth of data acquired from many of the existing storage projects to equip operators and regulators with robust pressure-driven decision support protocols. This will then enable them to establish a safe and efficient system to assess site conformance.





Pre-ACT will develop:

- Optimised CO₂ injection planning strategies to maximise storage capacity via effective pressure control.
- Novel monitoring concepts using a combination of continuous passive monitoring and targeted active surveys.
- An experimental setup at the Svelvik CO₂ storage laboratory site just outside Oslo, Norway, to test techniques for pressure and saturation discrimination.
- Robust and practical protocols for verification of conformance.
- Data-driven guidelines for selecting the optimal response to non- conformance.

The project launched in August 2017 and runs for three years.

Ends

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Notes for Editors

The following are available for interview:

- Jonathan Pearce, British Geological Survey
- Jim White, British Geological Survey

For additional information go to: www.bgs.ac.uk

The British Geological Survey

The British Geological Survey (BGS), a component body of the Natural Environment Research Council (NERC), is the nation's principal supplier of objective, impartial and up-to-date geological expertise and information for decision making for governmental, commercial and individual users. The BGS maintains and develops the nation's understanding of its geology to improve policy making, enhance national wealth and reduce risk. It also collaborates with the national and international scientific community in carrying out research in strategic areas, including energy and natural resources, our vulnerability to environmental change and hazards, and our general knowledge of the Earth system. More about the BGS can be found at www.bgs.ac.uk.

The Natural Environment Research Council

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