

ENabling Onshore CO₂ Storage in Europe:

Fostering European and international cooperation around pilot and test sites

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Introduction

Deployment of CCUS is an essential component of EU ambitious goal to reduce its greenhouse gas emissions by at least 80% by 2050. To store required 3 to 13 billion tonnes of CO₂, Europe cannot rely solely on the North Sea - CO₂ geological storage also needs to be deployed onshore. Onshore storage, relatively near the emission points, will contribute to reducing the costs of CCS, enable territories to manage their CO₂ emissions locally, and build lasting public confidence in CCS as a mitigation option that can also contribute to local economic development. The ENOS project is an initiative of CO₂GeoNet, the European Network of Excellence on the geological storage of CO₂ and a result of its recognition of the need to support onshore storage as a priority in today's context.

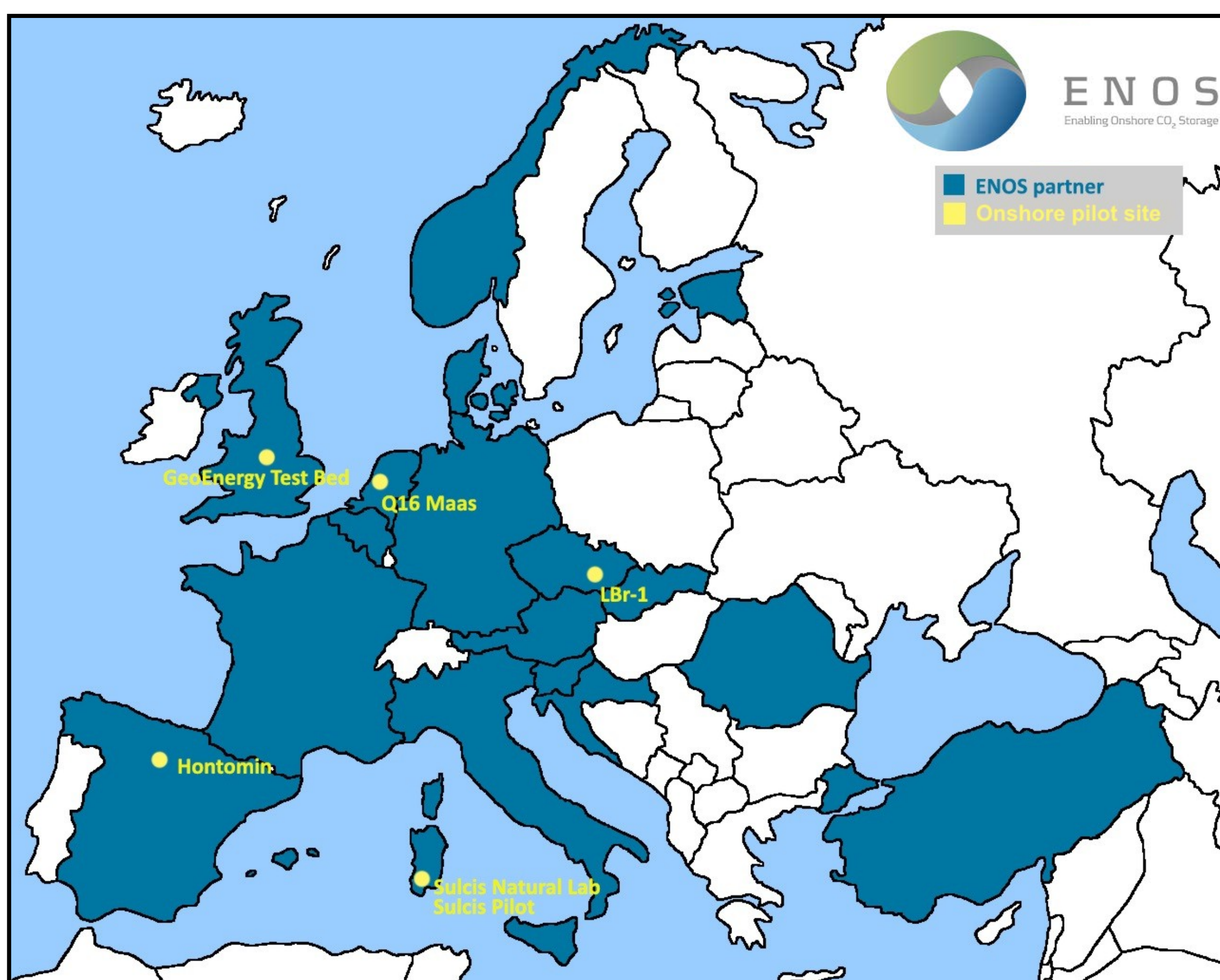
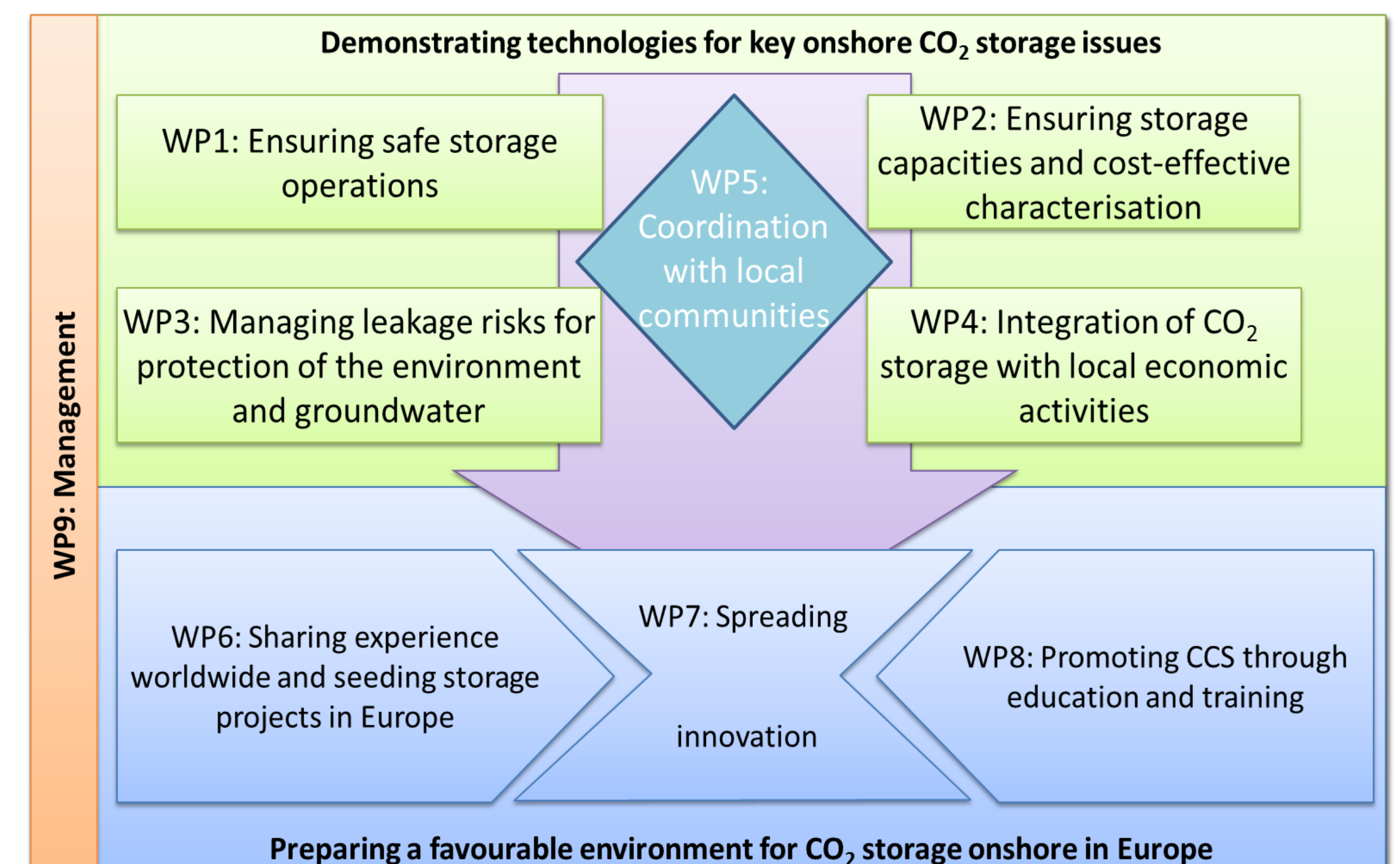


Objectives

ENOS aims to enable the development of CO₂ storage onshore in Europe by:

- 1) Developing and field testing key technologies adapted to onshore applications;
- 2) Integrating CO₂ geological storage into the socio-economical fabric by involving local population;
- 3) Creating favourable environment for onshore storage across Europe by:
 - supporting knowledge sharing to maximise the benefits of site demonstrations,
 - integrating research results and creating best practices from real-life experiments,
 - supporting preparation of new pilot projects and upscaling to demonstration,
 - bringing innovation to society through dialogue and communication,
 - promoting CCS through training and education.

ENOS WP structure



ENOS participating countries and site locations

Contribution to commercialisation of CCS

ENOS aims to support CCS commercialisation by:

- 1) Demonstration of safe and environmentally sound onshore CO₂ storage ;
- 2) Optimising safe operations and fine tuning of regulatory issues;
- 3) Increased confidence of the local population, operators, emitters and investors;
- 4) Enhanced and effective cooperation between stakeholders and Member States;
- 5) Accelerating demonstration of CCS by:
 - Identifying storage project opportunities across Europe,
 - Enhancing knowledge transfer from existing sites worldwide,
 - Bringing technologies developed and tested in ENOS to operators and engineers,
 - Building roadmaps for upscaling identified synergies of storage and utilisation,
 - Training and educating scientists and engineers to face the challenges of CCS.

Invitation to CO₂GeoNet Open Forum 2017

The 12th CO₂GeoNet Open Forum is a 2-day conference followed by targeted workshops. This year workshops focus on CO₂-storage-related research priorities, opportunities for new storage pilots and international experience sharing.

Join us in Venice, Italy, on 8 – 11 May 2017 - follow www.co2geonet.com.

International collaboration

ENOS is initiating experience sharing and research alignment with on-shore projects in the USA, Canada, South Korea, Australia and South Africa to support the large scale deployment of CCS. ENOS is striving to promote collaboration between sites in the world through a programme of site twinning, leakage simulation alliance and focus groups sharing operational experience issues.

Storage site twinning

Why: To create durable, close working relationships between onshore site owners.

Who: Planned or actual CO₂ injection site owners. Limited to few participants identified in ENOS project.

What:

- mutual visits,
- regular exchange of information and data
- discussions on real-life issues encountered
- identification of collaborative actions where possible

Leakage simulation alliance

Why: To foster cooperation and allow comparison and generalisation of results in understanding CO₂ leakage and its consequences.

Who: Owners of and teams working on CO₂ leakage simulation sites. Contact enos@brgm.fr to join!

What:

- site visits
- workshops
- data exchange
- joint reports/publications

Experience sharing Focus groups

Organised in partnership with GCCSI

Why: To share successes and failures of CO₂ injection. To jointly identify technology and methodology gaps.

Anticipated topics: site characterisation, CO₂ injection management, site monitoring, public acceptance.

Who: Owners and teams working on CO₂ injection sites. Join via enos@brgm.fr!

What:

- webinars
- workshops