

The **CGS Europe** Project

CO2 Geological Storage Europe

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CGS Europe is different

- **CGS Europe** is a *collaborative* project, involving extensive structured networking, knowledge transfer and information exchange
- FP7 project set up to address the need to accelerate the spread of CCS knowledge and technology throughout the whole of Europe and thus to:
 - support the implementation of the Directive on the geological storage of CO₂ in all relevant EU member states and associated countries
 - support large scale demonstrations and, ultimately, commercial deployment

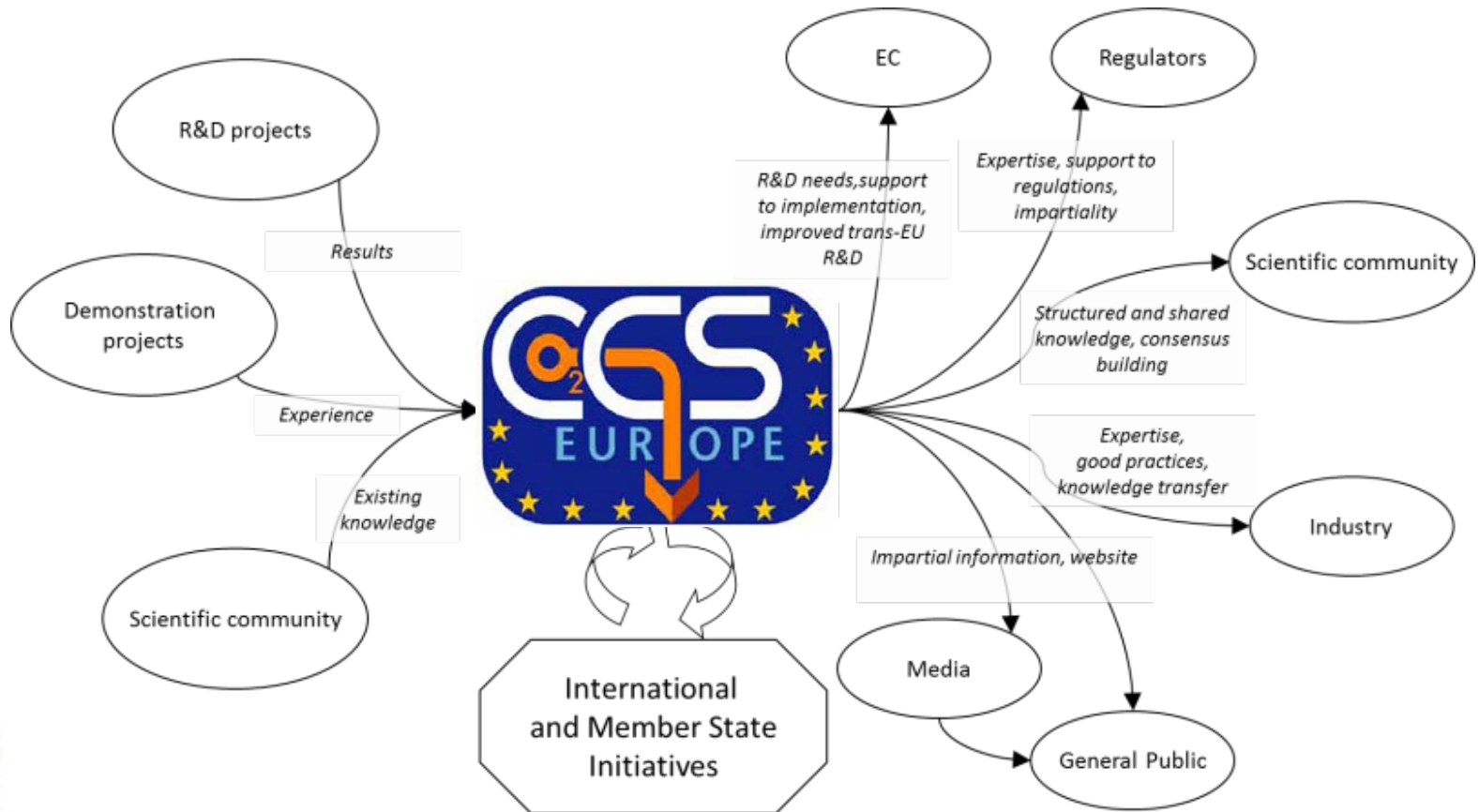


Project aims

- To create a durable pan-European network of experts in the geological storage of CO₂, and a centralised knowledge base which will provide an independent source of information, research and advice for national, European and international stakeholders
- Reduce the gap between 'forerunner' and 'follower' countries
- Liaise and coordinate its activities with other stakeholders in Europe
- **CGS Europe** aims to be the cornerstone on which to build the large-scale implementation of CO₂ geological storage throughout Europe
- It builds on the sound basis of the **CO₂ GeoNet Association**

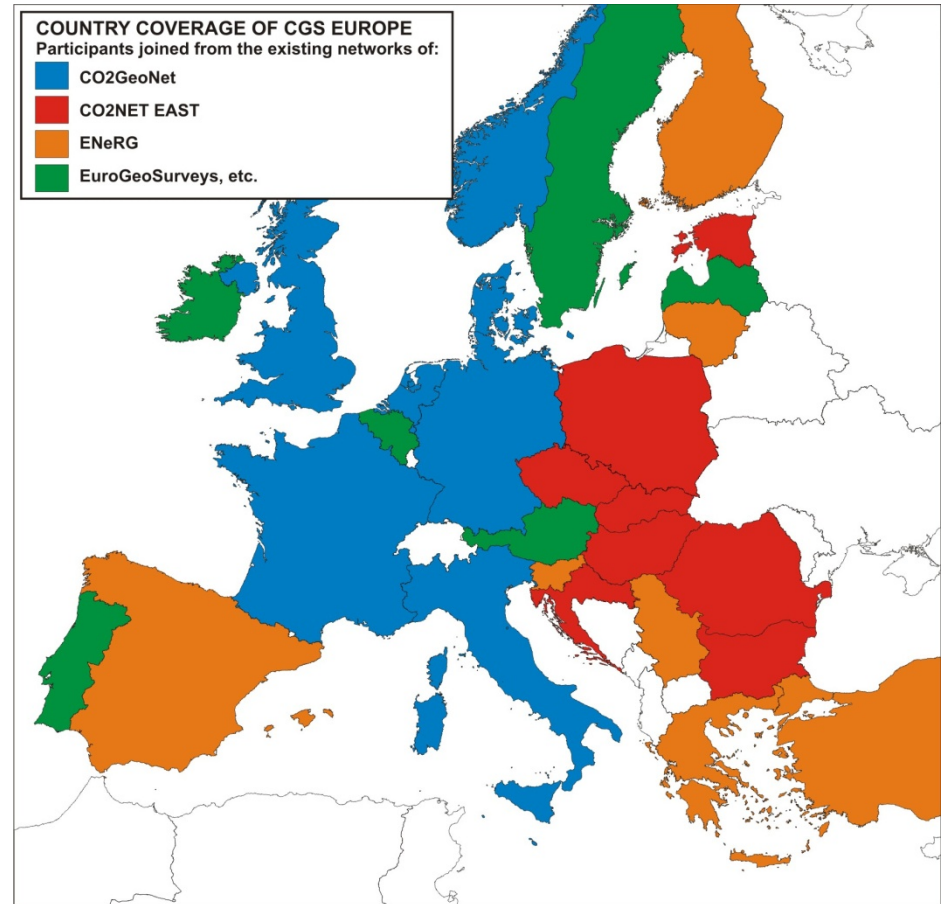


Project aims



Who is involved?

- **24 partners** (one of which, the **CO2GeoNet Association**, comprises 11 of its members as third parties) from **28 participant countries**
- Almost complete European coverage and specifically includes all countries with considerable storage potential
- All participants are key research institutes in their countries and many are leaders on CO₂ storage research at national and international levels, working as independent bodies

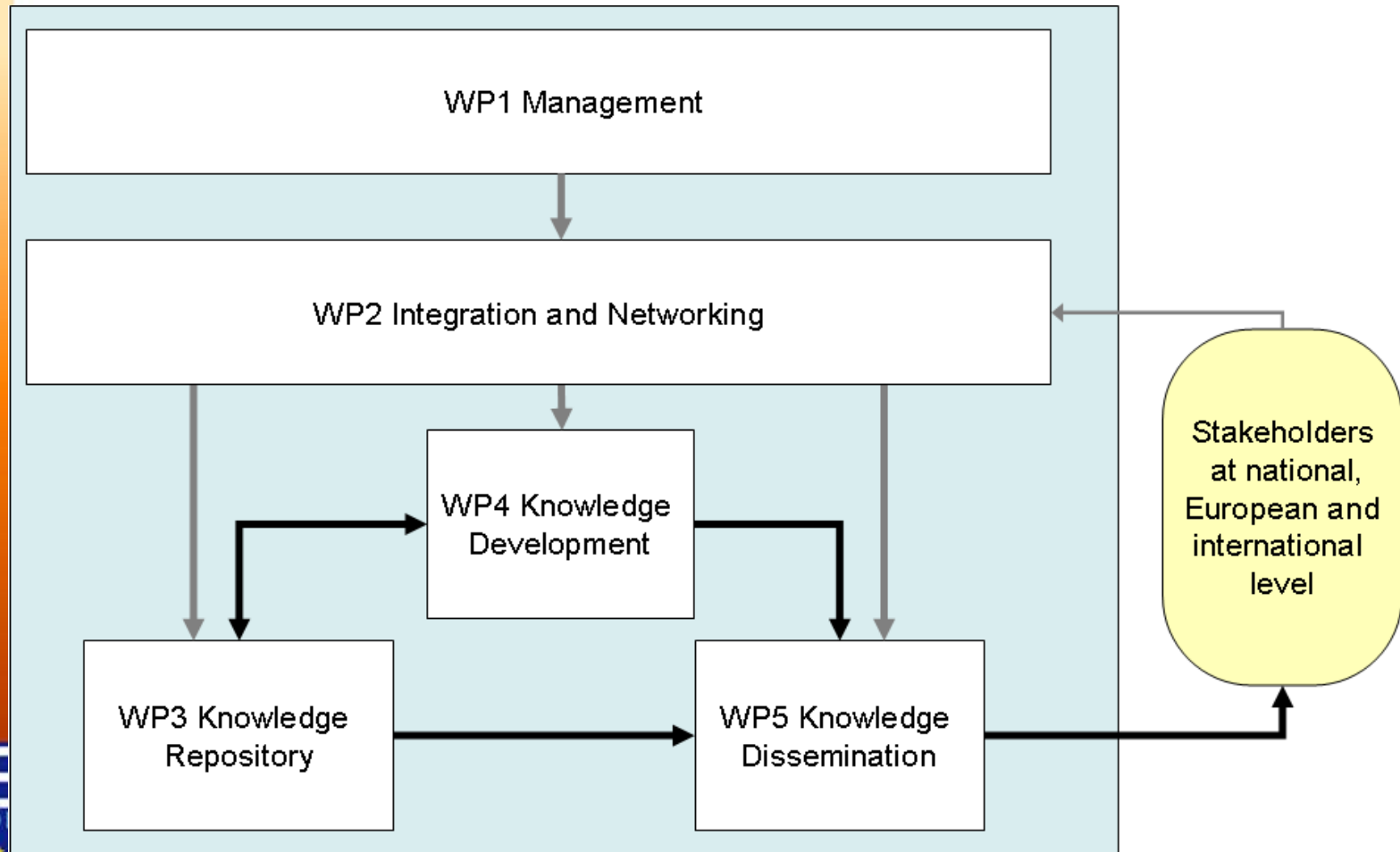


Project details

- A 'coordination action' financed by the EC FP7: total budget of 2.9 M€
- 3 year funding duration: launched on 1st November 2010
- Aim to continue as a long-lasting organization well beyond period of EU funding
- Advisory board comprising key participants from ZEP, Global CCS Institute & WWF will provide external feedback and advice as to how best to orientate CGS Europe activities



Project outline



Integration & networking (WP 2)

- Encourages participants to work together, develop networking activities with external bodies and search for expansion of activities through external funding
- Specific tasks are:
 - Internal coordination actions towards integration and durability
 - Preparation of a legal framework for a durable CGS Europe body
 - External strategic actions towards collaboration with European, National and International bodies and initiatives
 - Operation of the CGS Europe secretariat
 - Search for external funding to support additional activities promoted by CGS Europe participants



Knowledge management

- Includes **knowledge repository (WP 3)**, **knowledge development (WP 4)** and **knowledge dissemination (WP 5)** work packages
- A great variety of types of information will result from the project, the majority of which will be made available from the **project website** and associated web pages
- This will be a key dissemination tool and will detail project scope and progress
 - The public part will offer information about the project, including events, news, 'contact us', FAQs, etc.
 - Visitors will be able to access search tools and sub-pages to obtain project-related and CGS-related information
 - It will also offer links to related national websites in other languages



Knowledge management: Knowledge Repository (WP 3)

- The objective of this WP is to produce relevant, concise, complete and ultimately helpful CO₂-storage-related information
- Tasks include:
 - Definition of structure and prioritization of knowledge repository topics
 - Development of knowledge repository database
 - Key reports. Currently the following are envisaged:
 - Monitoring methods to evaluate storage system performance
 - Storage site selection criteria / methodologies and requirements for granting the CO₂ storage site permit
 - Directives and regulatory regimes related to operational and safety risks



Knowledge management: Knowledge Development (WP4)

- Will help bridge the gap between ‘forerunner’ and ‘follower’ countries
- Defined tasks are:
 - Coordination of research activities and promotion of research groups
 - Internal Knowledge-sharing workshops (2 p.a.) in countries where the first CCS demo projects are under preparation
 - Legal and regulatory issues for implementation of EU directive
 - Latest developments of national research
 - International collaboration
 - Lessons learned from pilots and demos
 - Natural analogues
 - Other promising storage options
 - Staff exchange



Knowledge management:

Knowledge Dissemination (WP5)

- Aim is to spread the results to a broader audience in a clear and appropriate manner to:
 - CCS Policy makers / regulators
 - Industrial stakeholders
 - Broader research community
 - Students and young scientists
 - Environmental NGOs
 - Media
 - General Public
- Specific Tasks are:
 - Websites
 - Annual Open Forum in Venice
 - Awareness-raising and knowledge-transfer workshops (Lithuania 2011, Turkey 2012 & Bulgaria 2013)
 - CGS Europe spring school on CO₂ storage
 - Presentations and publications
 - Interaction with the media



Knowledge development and dissemination events



Awareness - raising: CO₂ Capture and Storage - Response to Climate Change
13-14th April 2011, Vilnius, Lithuania



1-day workshop on legal and regulatory Issues for the implementation of the EU Directive on the geological storage of CO₂
Venice May 2011

Internal communication workshop, Brussels, Belgium. September 22 – 23 2011

**2nd CGS Knowledge sharing workshop:
Natural analogues
17th – 19th October 2011 Maria Lach, Germany**



Masterclass and booth on CO₂ geological storage. SciTechEUROPE, Brussels November 24th 2011

3rd CGS Europe knowledge-sharing workshop April 17-19th 2012. Venice

Spring 2012: 1st edition of the CGS Europe Spring School, Belchatow, Poland



Why should CSLF endorse CGS Europe?

- **CSLF will promote the technical environment for the development of CCS (Article 1)**
 - This is at the core of the CGS Europe project. It will encourage this throughout Europe, through its Integration and networking, knowledge repository, knowledge development and knowledge dissemination work packages (WPs 2,3,4 & 5)
- **CSLF will seek to ‘identify potential areas of multilateral collaboration on carbon storage technologies’ (Article 2.2)**
 - CGS Europe will promote this through its integration and networking work package (WP 2)
- **CSLF will seek to ‘foster collaborative research...’ (Article 2.3 and description of types of collaborative projects CSLF will encourage)**
 - CGS Europe will encourage this across Europe through its knowledge development work package (WP 4.1)
- **CSLF will organise ‘collaboration with all sectors of the research community, including industry, academia, government and non-governmental organisations’ (Article 2.8)**
 - CGS Europe will foster this through its Integration and networking, knowledge repository, knowledge development and knowledge dissemination work packages (WPs 2,3,4 & 5)
- **CSLF may endorse collaborative projects that include information exchange (Description of types of collaborative projects CSLF will encourage)**
 - CGS Europe will enable this to take place from a large range of projects through its knowledge repository and knowledge development work packages (WP 3, 4). This will enable linking of the entirety of what is happening in Europe in CCS to elsewhere



Goals

CGS Europe will build a credible, independent and representative pan-European scientific body of expertise on CO₂ geological storage that will:

- instigate a durable networking of research capacity across Europe;
- liaise with other initiatives in Europe to help coordinate CGS Research at national, European and international level;
- help reduce the existing gap between the 'forerunner' countries, and those countries where these actions are not yet happening;
- contribute to the large-scale demonstration and industrial deployment of CCS;
- support the implementation of the European Directive and other regulatory regimes on CGS.

Key Facts

3-year project: Nov 2011- Oct 2013

Funding: EC FP7 Coordination Action

Budget: 2.9 M€

24 Participants

34 institutes specialized in CO₂ storage

24 EU Member States and 4 Associated Countries

