



## **CO<sub>2</sub> Capture and Storage – Response to Climate Change**

Regional Awareness-Raising Workshop

13-14 April 2011, Vilnius, Lithuania

### **Organised by:**

Nature Research Centre, Vilnius, within the EU-FP7 'CGS Europe' project

**Meeting venue:** Institute of Botany of Nature Research Centre

Zaliju Ezeru str. 49, LT-08406 Vilnius, Lithuania

CGS Europe is delighted to announce its Regional Awareness-Raising Workshop entitled 'CO<sub>2</sub> Capture and Storage – Response to Climate Change', to be held on 13-14 April 2011 at Vilnius in Lithuania. The first of three such workshops to be organised under CGS Europe, this is actually the third of its kind, following on from two previous workshops in the same series organised by the CO<sub>2</sub>NET EAST network. The workshop is targeted at EU Member States and Candidate Countries of the Baltic Sea Region and Central & Eastern Europe.

**CGS Europe**, the "Pan-European coordination action on CO<sub>2</sub> Geological Storage", is a project funded within the 7<sup>th</sup> Framework Programme of the European Community for research, technological development and demonstration activities. **CGS Europe** pools together the expertise of the key research institutes in the area of CO<sub>2</sub> geological storage in European Member States and Associated Countries. It sets up coordination and integration mechanisms between the CO<sub>2</sub>GeoNet Association - the European Network of Excellence on the Geological Storage of CO<sub>2</sub> - and 23 other participants, thus covering most of Europe with 24 EU Member States and 4 Associated Countries. **CGS Europe** provides an independent platform and reference source where national, European and international experts, institutes and regulators are able to access the most up-to-date results of CO<sub>2</sub> storage-related studies, share experiences and good practices, discuss the implementation of regulations, identify research needs to face upcoming challenges, and build new projects.

### **What is CCS and why is it important?**

It is widely accepted today that mitigating climate change within the context of sustainable development is of the highest importance for European citizens, besides securing the supply of energy and economic competitiveness. In this context, CO<sub>2</sub> Capture and Storage (CCS) associated with cleaner power plants and other industrial plants is deemed to be an essential factor in adapting our use of fossil fuels so that they can form part of the sustainable energy scenario. The European Union has made significant progress in advancing CCS as a bridging technology for combating climate change, but this progress must now accelerate and be spread evenly throughout EU Member States and Associated Countries.

By signing the Kyoto protocol, the European Union countries committed themselves to decrease their CO<sub>2</sub> emissions by 8% in 2008-2012. After 2012, further cuts can be expected, with at least 20% by 2020. A reduction in CO<sub>2</sub> emissions can only be achieved by applying a portfolio of different approaches, among which CO<sub>2</sub> Capture and Storage can play an important role.

The CCS technology is a staged process incorporating (1) capture of CO<sub>2</sub> produced by fossil fuel combustion, (2) transportation to a site and (3) injection and storage in a geological formation.

At present, CCS technologies are high on the agenda in the European Union. The EC Communication of 10 January 2007 "Sustainable power generation from fossil fuels: aiming for near-zero emissions from coal after 2020" envisages massive implementation of the CCS technology in Europe in the near future. The European Directive of April 2009 on the geological storage of carbon dioxide which lays down the rules for CO<sub>2</sub> geological storage is now being implemented in national legislation of EU Member States.

The aim of the workshop is to provide a basic overview and status of the CCS concept in Europe, with a focus on EU Member States and Candidate Countries of the Baltic Sea Region and Central & Eastern Europe. The

workshop will bring together experts from leading research institutions and companies to share their knowledge with other stakeholders on various CCS issues. The expected outcomes are i) to raise general awareness of CCS among the various stakeholders, including policy makers, regulators, industry, researchers and students, and ii) to facilitate the implementation of the EU CCS Directive in the target countries, thus helping to reach European climate change mitigation targets.

#### Workshop Organisation Committee:

Saulius Šliaupa – Nature Research Centre, Lithuania

Alla Shogenova - Institute of Geology at Tallinn University of Technology, Estonia

Vít Hladík – Czech Geological Survey, Czech Republic

#### How to register?

Registration will be open **from 15 February 2011** on the CGS Europe website:

<http://www.cgseurope.net>

**Registration deadline is 1 April 2011**

#### SESSIONS

<b>CLIMATE CHANGE AND THE CCS CONCEPT</b>	Climate change: a natural or man-made phenomenon? Why CCS? The CCS life cycle
<b>EUROPEAN POLICY AND LEGISLATION</b>	EU policy and regulations Development of a legislation base in the EU member states and in the Baltic Region
<b>CCS INITIATIVES</b>	The ZEP Technology Platform and the EU Demonstration Programme for CCS The CGS Europe project – pan-European networking initiative
<b>CO2 CAPTURE SESSION</b>	Pre-combustion, post-combustion and oxy-fuel CO <sub>2</sub> capture technologies and research
<b>STORAGE SESSION: METHODOLOGY, NATIONAL PROGRAMMES, STORAGE POTENTIAL</b>	Key CCS initiatives - research, pilot and demonstration projects (CO <sub>2</sub> storage experience of Statoil; CO <sub>2</sub> SINK, <i>etc.</i> ) EU potential (EU GeoCapacity project results) Potential of Central & Eastern European countries Potential of the Baltic Sea region – offshore and onshore Potential of non-EU countries (e.g. Belarus, Russia)
<b>ALTERNATIVE STORAGE TECHNOLOGIES</b>	Enhanced Oil and Gas Recovery Mineral carbonation (CO <sub>2</sub> binding by ultramafic rocks - Finish and Slovakian examples; CO <sub>2</sub> carbonation by oil shale ash and waste water – Estonian example) CO <sub>2</sub> storage in coal seams
<b>SAFETY &amp; PUBLIC SUPPORT</b>	Monitoring of storage sites CO <sub>2</sub> storage integrity Public support of CCS

#### Who should attend?

The target audience is stakeholders from the Baltic Region and Central and Eastern Europe, although guests from other regions are welcome – CO<sub>2</sub> emitters, ministries and regulators, researchers, representatives of NGOs, etc.

The workshop is free of charge, although a financial contribution will be requested to attend the workshop dinner.

Oral presentations will be upon invitation. Proposals of **poster presentations** showing CCS-related research & development results are welcome – please contact the organisers for details.

Workshop places are limited and will be assigned on a first-come/first-served basis, so please do not delay with your registration.

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For **further information** visit <http://www.cgseurope.net>