



Project no. 038946

Project acronym: CO2NET EAST

Project title: CO2 capture and storage networking extension to new member states

Instrument: Co-ordination Action

Thematic Priority: Sustainable development, global change and ecosystems

## **Periodic Activity Report**

Period covered: from 01/10/2006 to 30/09/2007

Date of preparation: 30/10/2007

Start date of project: 1 October 2006

Duration: 36 months

Project coordinator name: Vit Hladik

Project coordinator organisation name: Czech Geological Survey

VERSION 1.3

## **Publishable executive summary**

### ***1. Introduction***

CO2NET EAST – “CO2 capture and storage networking extension to new member states” - is a project co-funded by the European Commission within the 6th Framework Programme (FP6). It is a Co-ordination Action proposed as a mechanism to involve the new EU Member States and Associated Candidate Countries in the current European CCS networking activities, particularly in the existing Carbon Dioxide Knowledge Transfer Network (CO2NET), which was initiated and funded by the EC 5th Framework Programme as the leading European CCS networking forum. The project is built on East-West cooperation, helping the new member states to add to the co-ordination effort to fast-track the development and commercialisation of CCS technology for Europe.

CO2NET EAST was started on 1 October 2006 for a period of 3 years. The project consortium is composed of 7 R&D institutions representing 5 new EU Member States and 2 Associated Candidate Countries + 1 strong industrial partner (Statoil) responsible for mainly organisational tasks. The 7 Central & Eastern European partners are:

- Czech Geological Survey (Czech Republic – project co-ordinator)
- University of Zagreb - Faculty of Mining, Geology and Petroleum Engineering (Croatia)
- Eötvös Loránd Geophysical Institute (Hungary)
- Dionýz Štúr State Geological Institute (Slovakia)
- Institute of Geology at Tallinn University of Technology (Estonia)
- PBG - Geophysical Exploration Company (Poland)
- National Institute for Marine Geology and Geoecology (Romania)

These institutions can be designated as the pioneers in implementing the CO2 capture and storage concept in their countries.

The Central and Eastern European new Member States and Candidate Countries have reduced emissions of CO2 dramatically since 1990. This has mainly been the inadvertent result of lower industrial and economical activity following from the dissolution of the former Council for Mutual Economic Aid (COMECON, popularly known as the ‘East Block’) and the subsequent economic changes. This situation might, at least for a few years to come, provide the opportunity for the EU to acquire emission credits through the use of the Kyoto agreement flexible mechanisms.

In the longer term, however, these new member and candidate countries will be looking towards rapid development of their economies, modernisation of the industrial sectors, and in a general way striving towards achieving the same standard of living as their neighbours to the west. This cannot be done without increase of their CO2 production, creating a need of CO2 emissions reduction at the same time.

### ***2. Project objectives***

The main objective of CO2NET EAST is to extend the existing European CO2 capture and storage (CCS) networking activities to EU new Member States and Associated Candidate Countries.

The detailed objectives of the project are:

- Provide membership support to new CO2NET member organisations from EU new Member States and Associated Candidate Countries and enable them active participation in networking activities;
- Co-organise the CO2NET Annual Seminar in 2008 and organise 2 regional workshops in new Member States and/or Associated Candidate Countries (2007 and 2009);
- Disseminate knowledge and increase awareness of CO2 capture and storage technologies in new Member States and Associated Candidate Countries during the whole project duration and afterwards;

- Establish links among CCS stakeholders in new Member States and Associated Candidate Countries and between them and their partners in other EU countries using the existing networks, especially CO2NET and ENeRG (European Network for Research in Geo-Energy) as well as links with the European Technology Platform for Zero Emission Fossil Fuel Power Plants (ETP ZEP).

### 3. Results of the 1<sup>st</sup> project year (October 2006 – September 2007)

The 1<sup>st</sup> project year passed off successfully and all the goals planned for this period were achieved.

On 27 - 28 February 2007, a regional CO2NET EAST workshop entitled "Carbon Capture and Storage – Response to Climate Change" was organised in Zagreb, attended by 91 participants from 22 countries. It was organised by the University of Zagreb - Faculty of Mining, Geology and Petroleum Engineering (RGN) with help of Czech Geological Survey (CGS). Lectures on the current European status of CCS and results of the most prominent FP6 CCS projects as well as presentations of R&D results and status quo in new EU Member States and Associated Candidate Countries or plans for future CCS developments were given. The event significantly contributed to CCS awareness raising among stakeholders from new EU Member States and Associated Candidate Countries.



*Fig.1 – Participants of the CO2NET EAST workshop in Zagreb*

8 national CCS information websites (Czech, Slovak, Polish, Estonian, Hungarian, Croatian and Russian) as well as an English project website have been established by 31 March 2007. The websites bring up-to-date CCS-related information and are regularly updated.

Language	Institution responsible	Website address
Czech	CGS	<a href="http://nts1.cgu.cz/co2net-east">http://nts1.cgu.cz/co2net-east</a>
Croatian	RGN	<a href="http://www.co2neteast.rgn.hr">http://www.co2neteast.rgn.hr</a>
Hungarian	ELGI	<a href="http://www.elgi.hu/co2net_east/index.htm">www.elgi.hu/co2net_east/index.htm</a>
Slovak	SGUDS	<a href="http://www.geology.sk/co2neteast/co2net-east.htm">http://www.geology.sk/co2neteast/co2net-east.htm</a>
Estonian	IGTUT	<a href="http://www.gi.ee/co2net-east">http://www.gi.ee/co2net-east</a>
Russian	IGTUT	<a href="http://www.gi.ee/co2net-east/r">http://www.gi.ee/co2net-east/r</a>
Polish	PBG	<a href="http://www.pbg.com.pl/CO2_net_east.htm">http://www.pbg.com.pl/CO2_net_east.htm</a>
Romanian	GeoEcoMar	<a href="http://www.co2net.ro">http://www.co2net.ro</a>
English	GeoEcoMar	<a href="http://co2neteast.energnet.com">http://co2neteast.energnet.com</a>

*Tab.1 – List of national CO2NET EAST websites*



Possibilities of utilizing information flows suitable for CCS-related knowledge dissemination and awareness raising were explored in all CO2NET EAST countries. Dissemination activities started shortly after the start of the project; they are based mostly on national CO2NET EAST websites, dissemination of the CO2NET Public Brochures on CCS (translated to national languages and printed – see Fig. 2), regular e-mail news alerts sent to national stakeholders, presentations of latest CCS R&D achievements at suitable local events and to national decision makers and publications in national technical magazines and media.

To secure financial resources to provide membership support to new CO2NET member organisations from EU new Member States and Associated Candidate Countries and to enable them active participation in networking activities, the CO2NET Support Fund has been established. The Fund is run outside of the EC project scope itself but in close relation with it and under the control of the CO2NET EAST Steering Committee. Industrial sponsors are filling the Fund. At present, 12 stakeholder institutions from new EU Member States and Associated Candidate Countries have been selected for support by the Fund, which covers their CO2NET membership & seminar fees and travel support for participation in the CO2NET Annual Seminar.

#### ***4. Expected impact and results***

The CO2NET EAST project aims at reducing the existing gap between EU-15 and the new EU Member States and Associated Candidate Countries. If Europe is to fulfil the Kyoto obligations and subsequently be able to carry out the much deeper emission reductions needed, the involvement of all 25 members is necessary. To achieve this goal, targeted effort is required to increase public awareness and disseminate knowledge on CCS in new member and candidate countries.

Building on the results achieved during the 1<sup>st</sup> project year, the CO2NET EAST partners are ready to make great strides towards achieving the overall project objectives stated above (see Chapter 2). In 2008, CO2NET EAST will co-organise the CO2NET Annual Seminar in Warsaw (Poland). The planned CO2NET EAST workshop in Bratislava / Slovakia (spring 2009) will be most probably promoted to a big CO2NET EAST – CO2NET common event, which will include the 2009 CO2NET Annual Seminar. Dissemination, knowledge transfer and awareness raising activities will be intensified, putting more emphasis on discussions with industrial CO2 emitters and national regulators, on media communication and on educational activities aimed at university students. Links and liaison with European CCS-related networks, the ZEP Technology Platform as well as with European R&D projects will be intensified, securing bi-directional information transfer between stakeholders from new EU Member States and Associated Candidate Countries and the pan-European structures.

Presentation and demonstration of the CO2 capture and storage technology to all important regional, national and local stakeholders (incl. policy makers), as well as to broader public, as a viable option of climate change mitigation should influence decision making at national, regional and company level in the sense of:

- Increasing support of national R&D activities in the field of CCS;
- Integration of the “zero-emission concept” to energy policies of the governments, regions and big CO2 emitters;
- Preparing “ground” for pioneer demonstrations and/or pilot technical installations in new Member States and Associated Candidate Countries in future

It is a positive sign that first activities of this kind are already appearing in some of the CO2NET EAST countries, including R&D projects financed both from governmental and industrial resources, feasibility studies, industrial initiatives, etc. CCS is thus in a fair way to becoming a respected climate change mitigation option in new EU Member States and Associated Candidate Countries in near future.

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**Project logo:**

