

History of Czech- Norwegian cooperation on CCS

Vít Hladík (Czech Geological Survey)
vit.hladik@geology.cz

CO₂
SPICER

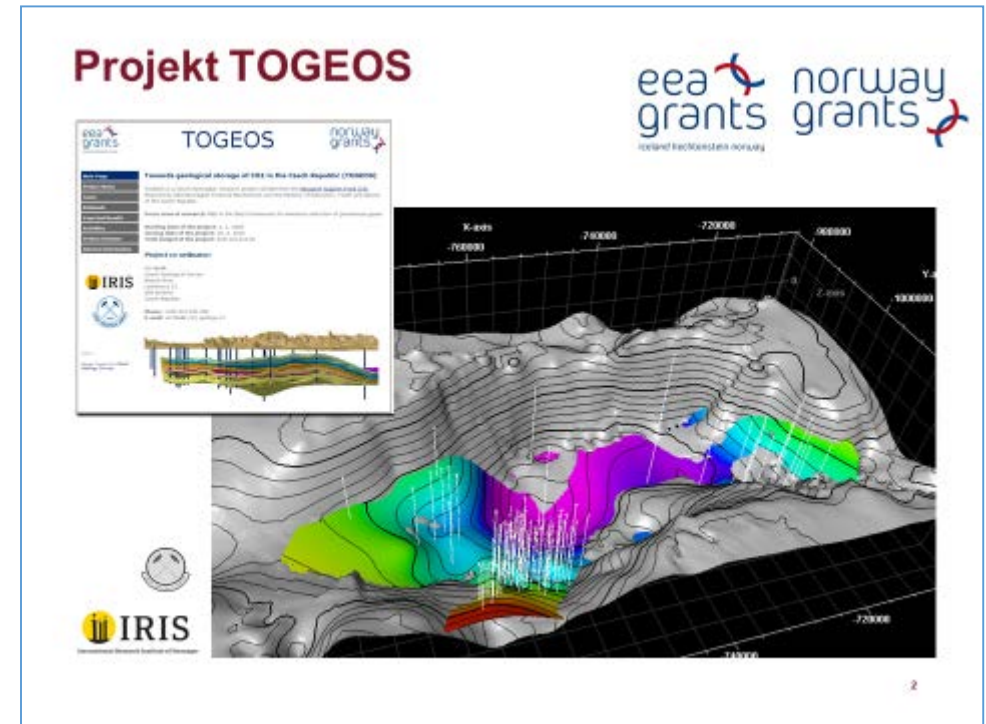


Programme **Kappa**

T A
Č R

Start in 2003 – cooperation on CO₂ storage

- 2003 Czech Geological Survey joined ENeRG (European Network on Research in Geo-Energy), start of long-term partnership with Rogaland Research (later IRIS, now NORCE)
- 2009-2010 TOGEOS (Towards geological storage of CO₂ in the Czech Republic) - first CGS-IRIS bilateral project funded from EEA/Norway Grants 2004-2009 - Research Support Fund
- Joint participation in several European projects



CO2NET EAST (2006-2010)

- „CO2 capture and storage networking extension to new member states“ – EU-FP6 project coordinated by CGS
- Industrial partner Statoil



Norwegian-Czech CCS webinar, 7 September 2021

CO2NET EAST – CO₂ capture and storage networking extension to new member states



CO2NET EAST 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 new EU Member States and Associated Candidate Countries in the current European CO₂ Capture and Storage (CCS) networking activities. 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 October 1, 2006 for a period of 3 years. The project consortium consists of:

- Czech Geological Survey (Czech Republic)
- 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)
- StatoilHydro ASA (Norway)

During the 1st project year, the partners created eight national CCS information websites, published an information brochure on CCS in eight Central&Eastern-European languages, organised an awareness-building workshop in Zagreb (Croatia) and undertook extensive knowledge dissemination and awareness raising activities in their home countries. This included numerous presentations at local events and to national stakeholders, publications in technical and infotainment journals, media briefings, participation in TV news and radio broadcasts, newspaper articles as well as educational activities at universities. Close links and liaison were established to all important European CCS entities like knowledge networks, the ZEP Technology Platform, etc. As a result, CCS is becoming more and more an important topic in new EU Member States and Associated Candidate Countries.



CO2NET EAST NATIONAL WEBSITES		
Language	Institution responsible	Website address
Czech	CGS	http://www.geology.cz/co2net-east
Croatian	RGN	http://www.co2neteast.rgn.hr
Hungarian	ELGI	www.elgi.hu/co2net_east/index.htm
Slovak	SGUDS	http://www.geology.sk/co2neteast/co2net-east.htm
Estonian	IGTUT	http://www.gi.ee/co2net-east
Russian	IGTUT	http://www.gi.ee/co2net-east
Polish	PBG	http://www.pbg.com.pl/co2_net_east.htm
Romanian	GeoEcoMar	http://www.co2net.ro
English	GeoEcoMar	http://co2neteast.energinet.com

Project Co-ordinator:
 Vit Hladik (Czech Geological Survey)
 Phone: +420-541634288
 E-mail: hladik@gfb.cz

Norway Grants 2009-2014

- Special programme CZ08 - Pilot Studies and Surveys on CCS Technology
- 4 projects funded in 2015-2017, total grant ca. 3.5 mil. €
- Additional activities funded from the Fund for Bilateral Relations
- An additional project funded from the Czech-Norwegian Research Programme (CZ09) - Phase behaviour in CCS systems (coordinator: Institute of Thermomechanics AS CR, Norwegian partner: SINTEF Energy Research)



Norway Grants 2009-2014 / CZ08 projects

- Study of CCS pilot technologies for coal fired power plants in the Czech Republic (coordinator: Czech Technical University in Prague, Norwegian partner: SINTEF Energy Research)
- HITECARLO - Research of high temperature CO₂ sorption from flue gas using carbonate loop (coordinator: University of Chemistry and Technology Prague)
- REPP-CO₂ - Preparation of a Research Pilot Project on CO₂ Geological Storage in the Czech Republic (coordinator: Czech Geological Survey, Norwegian partner: IRIS – International Research Institute of Stavanger)
- CCS-ShaKE - Carbon Capture & Storage – Sharing Knowledge and Experience (coordinator: Masaryk University Brno, Norwegian partner: NTNU)

Norway Grants 2009-2014 / additional activities

- CO2GeoNet Open Forum – workshop „CO2 Storage Pilot projects in Europe“ in Venice, May 2016
- 13th Conference on Greenhouse Gas Control Technologies (GHGT-13) - Czech-Norwegian workshop on “Cooperation between forerunner and follower countries in CCS research: The example of Norway and the Czech Republic” in Lausanne, November 2016
- 9th Trondheim Conference on CO2 Capture, Transport and Storage (TCCS-9) – Czech-Norwegian workshop in Trondheim, June 2017

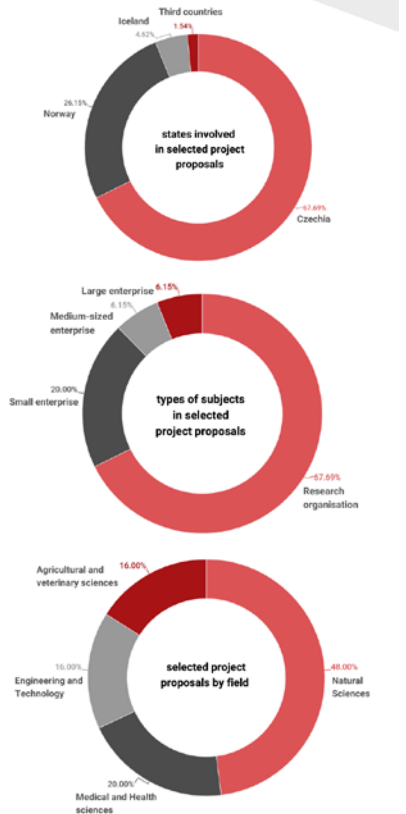


EEA/Norway Grants 2014-2021

- TAČR KAPPA programme (Programme „Research“) – special part on CCS - two projects funded out of 15 submitted, 9 projects recommended for funding!
- Successful projects – **CO2-SPICER** (coordinator: Czech Geological Survey, Norwegian partner: NORCE) and **METAMORPH** (coordinator: InoCure, Norwegian partner: SINTEF Industry)
- **Fund for Regional Cooperation** – one project with Czech and Norwegian partners - “Building momentum for the long-term CCS deployment in the CEE region” (EUROPEUM and Bellona)
- **Fund for Bilateral Relations** – one CCS project funded – „CCUS CZ-NO“ (BeePartner and TCM)

• 25 projects
• 32,5 mil EUR

Programme
Kappa



Acknowledgement

This presentation was prepared within the CO2-SPICER project. CO2-SPICER benefits from a € 2.32 mil. grant from Norway and Technology Agency of the Czech Republic.

Czech information portal on CCS technologies:

<http://geology.cz/ccs>