

Newsletter from the SUCCESS centre – October 2012 – no. 5

SUCCESSful seminar:
Political and scientific aspects of CCS



The SUCCESS Fall Seminar 2012 was held in Oslo on October 22.–23. This year, four keynote speakers had been invited. The first one out was **Nick Riley** from British Geological Survey, who gave an attention-grabbing talk about why the world urgently needs

CCS. His message was that the Arctic is heating up much quicker than predicted and that we most likely will not be able to keep global warming under 2 degrees. The only ways to avoid the global temperature from rising up to 5 degrees, are to either ban fossil fuel, at least coal, or to capture and store the CO₂ produced.

The next speaker was **Stuart Haszeldine**, Scottish Power professor of CCS, who gave an interesting talk about the UK and Scottish commercial competition system. He showed that there are large sedimentary basins on the east coast of Scotland and England which are suitable for CO₂ storage. In



contrast to Norway's use of large amounts of state money on CCS, the UK government expects the industry to take most of the bill. To make CCS economically feasible, Haszeldine suggests making clusters of gathered CO₂ on the mainland, then to share pipelines and store the CO₂ in a few large reservoirs. The main challenge with CCS is that there is no market for it. Hopefully, there will be a market prize for CO₂ which can make it possible for the UK to sell secure storage space.

SUCCESS manager **Arvid Nøttvedt** from Christian Michelsen Research also wants us to think big. He suggested European CO₂ hubs where 200 Mt/yr of CO₂ will be gathered and stored in 1–4 large reservoirs offshore. He stated that the world needs fast track projects where execution is performed parallel with R&D. To be able to make income on CCS, it is important to find synergies like CCS and EOR (enhanced oil recovery).



The last keynote speaker was **Egil Meisingset** from the Norwegian Ministry of Petroleum and Energy who gave insight into the Norwegian CCS policy and status and challenges for the Norwegian CCS projects. The goal is to reduce global GHG emissions by the equivalent of 30 percent of Norway's 1990 emissions by 2020 and to be carbon neutral by 2050. He expects TCM (Technology Center Mongstad), which is the world's largest facility for testing and improving CO₂ capture, to come up with knowledge which will prepare the ground for CO₂ capture initiatives to combat climate change.



The seminar also had interesting presentations of SUCCESS findings, on new infrastructure, on field-related research and on results from sister projects. Around 70 persons attended the seminar, mostly from industry and research, but also some from environmental groups and the media.

SUCCESS Outreach:

Geology Day and Oslo Science Fair

In September, researchers from the SUCCESS centre attended both Geology Day 2012 and Oslo Science Fair with stands showing how CO₂ can be stored in the subsurface. Geology Day is a yearly Norwegian event and was arranged for the 8th time on September 15., while the Oslo Science Fair (September 21.–22.) is part of the National Science Week in Norway (*Forskningsdagene*).

Both events took place at Universitetsplassen, downtown Oslo, and the goal was to make geology, science and research available to the public. The events were successful with thousands of visitors, and we were able to explain and discuss CO₂ sequestration to people of all ages.

At the stand, visitors could study reservoir rocks (sandstones) and caprocks (shale) in hand specimen. We also let kids help us with a small



SUCCESS researcher Therese F Loe (middle) and head engineer Michael Heeremans of UiO explain CCS to school children at Oslo Science Fair. Photo: Nils-Roar Sæhltn

experiment showing how CO₂ gas moves upward in water and thereby illustrating the importance of a good caprock. This simple experiment gave the stand – as well as the geological and geochemical principals of CO₂ storage – a lot of attention.

New partner in SUCCESS

We are very pleased to welcome **Lundin Norway** as a new industry partner in the SUCCESS consortium. Lundin Norway is wholly owned by Lundin Petroleum AB, an independent Swedish oil and gas exploration and production company with Norway as the principal area of operation. Lundin Norway is also a partner in the UNIS CO₂Lab project at Svalbard.



On the other hand, we are sorry to announce that industry partner Store Norske Spitsbergen Kulkompani (SNSK) has decided to withdraw from our consortium as of January 1st, 2013. We thank SNSK for its valuable contributions to the project.

The SUCCESS winter workshop

is set to March 11.–12., and will take place in the Bergen area. The winter workshop is an annual SUCCESS event, mostly focusing on the work of students and junior researchers in the project. More info will follow.

SUCCESS (Subsurface CO₂ Storage – Critical Elements and Superior Strategy) is one of several Norwegian centres for environment-friendly energy research, funded by the Norwegian Research Council and industry partners. For more info and contact address: www.fme-success.no.

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