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Photo By: Sebastian Sikora

Fulfilling a vision as an international show case

Spring arrives in Longyearbyen the sun is back along with the tourists. Snowmobiles pass the CO₂ Well Park on their way out into the field. The season is optimal for visiting groups with an interest in the science of carbon storage, both over and underground. The potential reservoir identified for CO₂ storage in Adventdalen is well visited.

In addition to regular updates of the project to the Lokaltstyre (local government), during the last 3 weeks we have acknowledged visits to the UNIS CO₂ lab and Well Park from the following delegations:

Ministry of Food and Agriculture, The party Venstre and Innovation Norway, Ministry of Petroleum and Energy and The Norwegian Petroleum Directorate and Gassnova. They were impressed and enthusiastic about the goals achieved and the knowledge gained on Svalbard into the science of CO₂ storage.

To date no CO₂ has been injected into the reservoir. This has not prevented the Longyearbyen CO₂ project from realising its vision to become an international showcase; we attract large numbers of visitors both nationally and internationally each year and are asked to present our work all over the world.

The CO₂ guided tour starts from UNIS with information on the institution: Research and education, climate and environmental and the position and challenges being based in the Arctic.

We now start the snow scooters; 5 km away we stop for the story and vision of the project. The scientific insights these 8 wells have provided: Pressure data, core studies, loggings, and seismic, drilling description of the wells, injection test and HSE issues. The story concludes that we have a reservoir with extensive storage potential and a tight cap rocks. During 2013 our final conclusion will be announced.

The mountain range tilts slightly towards the North East. After 15 -20 km in this direction we can observe the reservoir coming up to the surface in Helvetiadalen. It is quite unbelievable that these shaly layers act as cap rocks of the reservoir – but they do! Underground they are hard, but exposed in the open they have been subject to erosion over a long period of time.

Further along into deGeer valley out on the coast across the fiord we see the layers (both the reservoir and the cap rocks) This picturesque environment makes for a perfect setting for field study. The CO₂ Lab each year takes out groups of students furthering their knowledge.

The tour continues with a visit to Store Norske Spitsbergen Coal Company (SNSK), they introduce their company and its activities.

- Mining on Svalbard and the export market for the high quality of coal produced here.
- The application the coal is used for in global energy consumption.

Their message is; coal is essential to the global energy production of a wide range of industry products from steel to mobile phones. SNSK underlines the importance of CCS as a part of realising the full carbon chain. SNSK is one of the UNIS CO₂ Labs early partners coming on board in 2007 they have supported the project both financially and scientifically.

The tour comes to an end at Norway's only coal fuelled power plant. The challenge is a stable energy supply coupled with Svalbard's need for CCS. These challenges are brought under the microscope opening up for presentations and discussion.

The local community on Svalbard look to the sun; in March they wait for it to raise once again above the horizon it symbolises the energy source here in the high north. However it could never be the only one.....

With this newsletter we wish you all a happy Eastern holiday.