# CARBON CAPTURE LEGAL PROGRAMME

## The Implementation of the EU $CO_2$ Storage Directive: Challenges and Opportunities

### INTRODUCTION

On 7th November 2011 the CCLP, in association with Natural Resources Law Group, University of Oslo, hosted a conference on the implementation of the 2009 EU CO2 Storage Directive and the role of public engagement on CCS at University College London Faculty of Laws, London.

The EU C02 Storage Directive (31/2009/EC) was adopted as an element of the EU 'Climate and Energy Package' and represents one of the first CCS-dedicated legal frameworks in the world. The Directive requires all EU Member States to adopt domestic measures to implement its provisions within national law ('transposition') by June 25 2011.

The CCLP launched the 'EU Case Studies Project' in January 2011. The project analyses the implementation process of the EU C02 Directive in selected European jurisdictions including the United Kingdom, Germany, Poland, Romania, Spain and Norway. Each jurisdiction, for different reasons, provides an example of distinct approaches to transposition and to CCS in general.

The conference provided a platform for the CCLP to present the key findings from its EU Case Studies Project. This document provides a brief overview of the conference proceedings. For further information and a collection of conference materials, please visit the publications section of the CCLP website at <http://www.ucl.ac.uk/cclp/ccsthink.php>.

### SESSION 1
### The status of the transposition: Key messages from the case studies

In the first session of the day the authors of the case studies presented their conclusions for the first time. Martina Doppelhammer from the European Commission Directorate-General for Climate Action, providied an overview of the transposition process and reported that only two of the 27 countries – Spain and Romania – had submitted national legislation that claims to fully transpose the Directive in time to meet the 25 June 2011 deadline. The remaining 25 member states have been issued with letters of formal notice by the Commission, which are the first step in possible infringement proceedings.

Ms. Doppelhammer also highlighted the importance of the transposition to the NER300 process since the awarding of this funding will depend on a Member State having properly mplemented the Directive.

The result of the project is a series of reports from the six jurisdictions based on key legal and policy questions, and on a critical reading of the CCS Directive. The CCLP is coordinating the overall research and has carried out the UK case study. Independent experts have been commissioned to carry out research in Germany, Poland, Romania, Spain and Norway.

## GERMANY

**Prof. Ludwig Krämer** described the political difficulties in Germany in adopting national CCS legislation due to public opposition. He pointed out that the clause in the current bill giving Länder governments the power to not allow CO2 storage on their territory is the first occurrence of such a veto power in German federal law. The situation in Spain was quite the opposite, with a transposing law being adopted with an overwhelming majority in Parliament without considerable public debate. Despite the successful transposition, there remains some tension between regional and federal governments as to the allocation of powers under the law.

## ROMANIA

**Professor Mónika Józon** explained that, like Spain, Romania has successfully adopted a framework law transposing the CCS Directive. However, the bulk of the implementing secondary legislation has yet to be developed. Professor Józon called this more of a "transplant" than a transposition of the Directive and was sceptical of the ability of the adopted legislation to deliver clear rules for site selection, financial security, and conflicting uses.

## UNITED KINGDOM

**Chiara Armeni** noted that although the United Kingdom missed the formal transposition deadline, the legislation and regulations it has put in place represent a comprehensive implementation of the Directive. The UK chose to integrate the CCS provisions within existing legislation and mirror it closely with the offshore oil and gas regime, making the new processes more familiar to developers. She highlighted areas where the UK has gone beyond the requirements of the Directive, for example, for carbon capture readiness and long term liability.

## POLAND

The delays in adopting Polish legislation were explained by **Professor Jerzy Jendrośka**. Despite agreement on basic principles in March 2011, the Polish government has yet to pass a CCS bill. Professor Jendrózka identified Poland's unclear climate change strategy and the lack of public consultation on CCS as serious issues.

## NORWAY

Finally, **Professor Hans Christian Bugge** discussed the situation in Norway, which is not an EU Member State but is part of the European Economic Area. Norway has historically chosen to adopt EU environmental legislation for its onshore territory, but the CCS Directive raises a particular issue since its scope extends to the offshore activities. While Norway already has robust national legislation in place for CCS due to its longstanding CCS projects, it would likely have to implement the Directive for stored CO2 to be eligible under the EU ETS.

There was considerable discussion as to whether a Member State could choose not to transpose the Directive, with some panellists arguing there are precedents in EU environmental law where countries were not obliged to implement EU directives due to individual national circumstances. Other panellists observed that problems could arise with transporting CO2 for storage in neighbouring countries should a Member State not implement the CCS Directive.

## SESSION 2
## Public engagement in CCS and the role of law: Developments in Practice in the European Union

After lunch, the discussion turned to public engagement and CCS implementation in the EU. Eelco Kruizinga of the EU CCS Project Network gave an overview of the public engagement lessons learned in the past two years from the development of the CCS projects being funded through the European Energy Programme for Recovery. Mr Kruizinga highlighted three categories of current issues: shared local factors, technological factors, and international/global factors. He also described how public engagement is moving from broadly communicating the CCS technology to using local value propositions to explain the benefits of CCS. A focus on the economy instead of solely on climate change is another shift. Explaining that the regulatory and economic frameworks are being put in place to accompany CCS implementation is also important.

Louise Barr of the UK Department for Energy and Climate Change emphasised the difference in the role of the national government in public engagement versus the role of project developers. Government can play an important role in informing the public about the role of CCS in climate change and energy security, while project

developers can engage with local community directly. Mr Barr stressed that effective engagement must go beyond statutory requirements. She highlighted that the recent Eurobarometer poll showed very low public awareness of CCS, with 70% of UK respondents indicating they had never heard of CCS.

An explanation of what went wrong in Germany was then presented by Alexander Boehringer, who identified some of the reasons behind public opposition to CCS and the difficulties in passing German CCS legislation. He pointed to lack of transparency and late engagement of the public as sources of the lack of support for CCS.

ENEL's Francesco Giorgianni spoke about engagement strategies at Italy's Porte Tolle CCS project. Overall, the Italian population is critical of coal and has a low awareness of CCS. However, at the local level, there is strong support for Porte Tolle, which ENEL has built through early dialogue and discussion with employees and the community. Mr Giorgianni emphasised that legislation for public engagement will play a large role in the project authorisation process.

Finally, another CCS project developer, Jane Paxman of 2CO Energy, characterised the Don Valley Power Project as bringing an economic boost to an economically depressed area. Job creation is a priority for the Hatfield region where the project is located. 2CO has already received UK planning permissions and have held a pipeline consultation meeting where no major issues were encountered.

A recurring question in the Q&A session was about the purpose of public engagement and how to define whether or not it has been successful. Participants and panellist discussed if the purpose should be to determine whether to do CCS or how best to do CCS. Some project developers considered that the main purpose of public engagement was to be a responsible operator. Other participants stressed its importance as an exercise in participatory democracy. The idea that successful engagement must lead to acceptance of a project was challenged, with community opposition leading to project cancellation cited as an example of effective engagement.

## SESSION 3
## Panel and open discussion - Public engagement and legal process: The wider context

The discussion broadened in this session, comparing the public engagement issues facing CCS with the experiences of other novel technologies. One of the lessons CCS can take from other novel technologies is that the end-use of a technology often matters to the public. Professor Martha Roggenkamp gave the example of the Netherlands where CO2 is already treated differently depending on whether it is used (e.g. in greenhouses) or stored. Professor Ludwig Kramer noted that although there is strong opposition in Europe to the use of genetically modified organisms (GMOs) in food production, their use in manufacturing pharmaceuticals is more widely accepted.

The relevance of the Aarhus Convention to CCS was raised by Professor Jerzy Jendrózka, who explained that the Convention deals with public participation for traditional activities where the risk is known and predictable, but that the Convention's approach is not well-suited for high-risk technologies. He suggested that public debate about CCS should take place at the level of policy decisions so that basic issues can be considered before moving to programme- and project-level activities.

Professor Andy Stirling observed that many vested interests involved in CCS are not in agreement with the purpose of public engagement. He recommended that CCS stakeholders "avoid doubletalk" and be more open about the declaring their positions on issues. Professor Stirling pointed out that with new technologies often the only means of expressing concern is to raise safety issues. He cautioned against misunderstanding NIMBYism as it can be the last remaining outlet to voice opposition to a technology.

## SESSION 4
## Panel and open discussion - Assessing the future: The strengths and weaknesses of the European Union as a CCS regulatory leader

The title of this session was challenged by Martina Doppelhammer, who stated the goal of the EU's regulatory action on CCS was not to be a leader but to create an enabling framework for demonstration. Global CCS Institute's Bob Pegler told the audience that although the EU's emissions are not large in comparison to other parts of the world, it is still an important test bed for CCS projects. He noted that the EU CCS Directive is as much about environmental impacts and economics as it is about energy security.

Juho Lipponen of the International Energy Agency considered that the EU's political vision for CCS in the future energy mix was a strength of its leadership. However, he acknowledged that without national will to implement the Directive, CCS progress will stagnate in Europe.

Commenting on whether the EU CCS Directive should serve as a model for other jurisdictions, Professor Richard Macrory raised a number of weaknesses, such as the failure of the guidance documents to clarify how certain broad conditions of the Directive should be satisfied. He questioned whether linking the Directive so strongly to the Emissions Trading System was the right choice, given the implications for liability. He also criticised the decision to use existing environmental impact assessment procedures to deal with public participation instead of including explicit provisions in the CCS Directive.

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Critique of the Directive continued in the Q&A session. Participants discussed whether CCS is really a "bridging technology" and the reasons for the inclusion of this language in the Directive's preamble. The need for CCS in the energy mix was also debated, as were alternative models for dealing with long term liability.

Overall, panellists agreed that from a regulatory perspective the European Union has reacted quite quickly and effectively to CCS, a new technology that has only come to the forefront in the last four years. European action on regulation and public engagement strategies for CCS could serve as a model as more controversial greenhouse gas mitigation technologies, such as geoengineering, continue to develop.

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