



## Carbon Capture and Storage in the Clean Development Mechanism: overcoming the stalemate

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### Introduction

Carbon Capture and Storage (CCS) as a Clean Development Mechanism (CDM) project activity has given rise to a raging debate ever since, some two years ago, two projects came forward with proposed methodologies for capturing and storing carbon, along with monitoring proposals. The Executive Board, charged by the Parties to the United Nations Convention on Climate Change with supervision of the CDM, requested guidance from the Conference of the Parties on the eligibility of the proposed activities under the current rules on CDM, and on specific rules related to fundamental steps in the CDM process. Having considered that request, and after a workshop in Summer 2006, the Conference of the Parties decided to ask Parties for views on a number of issues, in order to decide, at Poznan at the end of 2008, whether CCS should be considered as an eligible project activity. Parties submitted their views in the summer of 2007, and the EU in particular presented quite extensive views on how to deal with the many questions related to issues such as site selection criteria, non-permanence, liability and transfer of liabilities to States.

From that submission and those of other Parties, one can realise that, quite apart from ideological objections, there are real-life unsolved issues that would prevent CCS being considered, as of now, under the CDM. Foremost amongst these would be the issue of transboundary effects and impacts of carbon storage, and the issue of long-term liability for storage of carbon dioxide. CDM is a private-sector-led mechanism, and the liability that entities carry for their projects would at some point be transferred to either the host Party, the investor Party (a dubious concept under the CDM) or shared between them. All of these questions, and the liability ones in particular, raise important issues on the role of Parties vis-a-vis private sector.

This, in a nutshell, is the political process, which has been charged with protracted negotiations and very deep divides between Parties, such as Brazil, that are adamant that CCS

should not be eligible, for various environmental, social and market risks, and Parties such as Saudi Arabia, which see CCS as fundamental to their participation in the mechanism. The debate is made more complex by the various positions from NGOs, and other lobby groups, pulling in opposite forces, and in many cases assuming almost ideological overtones, resulting in very simplified messages.

### Take a step back

A discussion may rage on whether CCS is in fact a land use change activity akin to LULUCF, or whether it is more of an industrial activity of the power sector, and whether such differential treatment would allow it, in some shape or the other, to comply with the Marrakesh Accords and be financed through the carbon market. But the first element to note is that the reality we are facing is that there is a dire need for research and development of CCS technologies, as well as site exploration on a large scale, if only to make this option a viable one within a meaningful time-frame. Any long-term scenario that would lead us to the avowed policy objective of 450 ppmv stabilisation level by the end of the century presupposes, in one way or the other, the extensive deployment of CCS by as early as 2020. The European Council recognised as much, when it stated the need for a demonstration programme of 10 to 12 plants by 2020. Given the massive challenge of the Chinese coal programme, even that seemingly ambitious objective is far from being phase-changing. The deployment of CCS at extremely large-scale early on becomes imperative.

But deploying CCS depends on an RD&D effort that requires both an appropriate institutional setting and a clear finance and risk framework. To date, the only visible steps in that framework are the recent European Commission Communication on CCS and the proposal to credit carbon storage into the EU ETS, and the push for deploying CCS in the CDM. Does this amount to a sensible framework? Would the EU ETS and the CDM allow for deployment at the scale required?

No. Both the inclusion of CCS in the ETS and in the CDM are predicated on CCS being a competitive activity in relation to their carbon-reducing activities. It is in fact extremely doubtful that this would be the case, given current mitigation cost expectations for CCS projects (besides some enhanced hydrocarbon recovery activities, which would in many cases be commercially viable anyway). Moreover, the major problem of developing CCS projects is a matter of policy co-ordination among international and national agencies, standard-setting and rule-making on issues such as leakage levels and siting criteria etc. The market cannot operate in a limbo of vague and dispersed regulation. Increasingly even cash rich oil companies will be neither able nor willing to bear the regulatory and policy risks involved.

## What to do?

Allowing CCS in the CDM should not become a fixation for negotiators. The long-term goal should be to promote CCS as a viable policy option in the tool-kit for developed and developing countries alike. Rather than focusing on CDM

per se, discussion under the Convention (and even outside its framework) should focus on how to balance the risks between private and public sector technology development, on the development of risk- and cost-minimizing strategies for the deployment at scale, including through mechanisms such as standard setting and liability provisions.

Thus, regardless of the outcome of Poznan discussions on the inclusion of CCS in the CDM, Parties should focus on CCS as a prime example of the need for a coherent approach to technology promotion and deployment. The Convention's Dialogue on Long-Term Action has a window on technology, where discussions to date have been far from conclusive and rarely descended from the vague clouds of theory. CCS could be well placed to bring these abstract discussions to down to earth and focus on practicalities.

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