



**Carbon Capture &  
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## **Carbon Capture and Storage Association**

### **Submission;**

### ***Carbon dioxide capture and storage in geological formations as clean development project activities***

#### Introduction

The Carbon Capture and Storage Association (CCSA) welcomes the opportunity to submit its views on the two issues identified in Decision -/SBSTA.36, Modalities and procedures for carbon dioxide capture and storage in geological formations as clean development mechanism project activities. This submission should be read in conjunction with the CCSA submission made in March 2012 in response to Decision -/CMP.7 as it builds on a number of the themes raised in that paper. Specifically this paper addresses the issues raised in paragraph 4.

The CCSA brings together a wide range of specialist companies across the spectrum of CCS technology, as well as a variety of support services to the energy sector. The Association exists to represent the interests of its members in promoting the business of Carbon Capture and Storage (CCS) and to assist policy developments towards a long term regulatory framework for CCS, as a means of abating carbon dioxide emissions.

Eligibility of carbon dioxide capture and storage project activities which involve the transport of carbon dioxide from one country to another or which involve geological storage sites that are located in more than one country.

In practice the majority of CCS projects will have project boundaries within the national borders of the host country and there will be relatively few transboundary CCS projects. However, the CCSA does support the eligibility of transboundary CCS projects as CDM project activities. As a principle Parties should undertake every effort to enable every country to access the full range of CO<sub>2</sub> mitigation technologies. Therefore countries without suitable geological formations for CO<sub>2</sub> storage should be permitted to export their CO<sub>2</sub> to another country which has access to abundant suitable geological storage formations. Similarly, allowing two countries to utilise a CO<sub>2</sub> storage site crossing a common national border

enables the selection of the most appropriate CO<sub>2</sub> storage sites maximises the opportunity to deploy CCS technology.

#### Response to specific paragraphs Decision -/SBSTA.36

*Para. 4(a): International law and frameworks relevant to CCS project activities which involve the transport of carbon dioxide from one country to another or which involve geological storage sites that are located in more than one country;*

The CCSA believes that the 2006 IPCC Greenhouse Gas Inventory Guidelines should set the guiding principles for informing the application of the CCS CDM Modalities and Procedures responsibilities to the host Parties of transboundary CCS projects and has provided a number of specific examples below. The 2006 Guidelines outline two scenarios for allocating the responsibility of reporting CO<sub>2</sub> emissions from transboundary CCS projects;

1. Country A captures and then transports CO<sub>2</sub> to country B for storage. Country A as the source of the CO<sub>2</sub> reports and is responsible for the CO<sub>2</sub> emissions from the capture plant and the transportation of the CO<sub>2</sub> to country B. Country B is responsible for the CO<sub>2</sub> emissions during transportation once it enters into the country and any emissions from the CO<sub>2</sub> storage site.
2. Where two countries share a storage site that crosses a common border then both countries will be responsible for reporting the emissions from the CO<sub>2</sub> capture and transportation to the storage site that occurs within their borders. Any emissions from the storage site are to be reported by the countries based on a pre-agreed proportion of the total emissions.

*Para. 4(b.i): The assignment of liability, as defined in decision 10/CMP.7, annex, paragraph 1(j);*

The liability provisions of the CCS CDM M&Ps are contained in Appendix B, Section 5, paras. 22 – 25. Following the principles set out in the 2006 Guidelines for the reporting of CO<sub>2</sub> emissions the liability provisions contained in para. 22 – 24 can be applied, without material modification, to transboundary projects.

Para. 25 addresses the transfer of liability for the storage site from the project participants to the host party. In circumstances where a transboundary CCS project involves the export of CO<sub>2</sub> from country A for storage in country B then the transfer of liability must only be to country B as the host of the geological store. It cannot be transferred to country A which does not host the geological store and has no ability to manage the site which is outside of its jurisdiction.

Where a transboundary CCS project results in CO<sub>2</sub> being stored in a geological formation that crosses a common border between the two countries then both become the host party and the liability for the store should be held jointly. Both host countries should provide written confirmation that they accept this allocation of liability at the point of project validation. In addition one of the host Parties must be clearly identified as the lead authority with the responsibility and power to regulate the CCS project. The powers granted to the lead

regulatory authority must be sufficient to ensure that it can meet the requirements of the CCS M&Ps and must be confirmed by the DOE during project validation.

*Para. 4(b.ii): Options for sharing the obligation to address a net reversal of storage;*

Transboundary projects have a number of options for sharing the obligation to address a net reversal of storage that are consistent with the CCS CDM M&Ps. The CCSA believes that the following arrangements should be permissible to Parties;

1. Country A accepts the entire obligation.
2. Country B accepts the entire obligation.
3. Both country A & B accept to jointly meet the obligation in a pre-determined proportion contained in the host Parties' letters of approval.
4. Neither country A or B accept the entire obligation and the Annex I parties holding the CERs are responsible to meet the entire obligation.

As with the allocation of liability both host countries should provide written confirmation on the agreement to meet the obligation to address a net reversal of storage at the point of project validation.

*Para. 4(b.iii): Environmental and socio-economic impacts and remedial measures to address them;*

Host Parties to a transboundary CCS project should undertake the environmental and socio-economic impact assessments as stipulated under the CCS CDM M&Ps validation and registration requirements for those parts of the CCS chain that located within their national borders. If remedial measures - as defined in the CCS CDM M&Ps - are required then these should be implemented by the host country where the environmental and socio-economic impact has occurred.

In the event that the impact results from a storage site that crosses a common national border then both host Parties have responsibility to implement the remedial measures. For such project the project validation and registration phase must clearly identify one of the host Parties as the lead authority with the responsibility and power to regulate the CCS project. These powers must be sufficient to ensure that it can undertake remedial measures as required in the CCS M&Ps and confirmed by the DOE during project validation.

*Para. 4(b.iv): Monitoring requirements in the context of transboundary CCS project activities;*

Host Parties must meet the CCS CDM M&Ps monitoring requirements in full for transboundary CCS projects. Again the monitoring obligation for a particular part of the CCS chain should fall on the country hosting that portion of the project. For storage sites that cross a common national border then both the host Parties should have responsibility for meeting the monitoring requirements. In these circumstances the project validation and registration phase must clearly identify one of the host Parties as the lead authority with the responsibility and power to regulate and monitor the CCS project. These powers must be sufficient to enable it to meet the monitoring requirements of the CCS M&Ps and be confirmed by the DOE during project validation.

*Para. 4(c): Possible resolution mechanisms for any disputes, including with regard to liability, that may arise between host Parties.*

The CDM EB, or any other body under the UNFCCC, does not appear to have the competency to establish and operate dispute resolution mechanisms between Parties. The core competencies of the CDM EB are to ensure that projects are developed and operated in a manner that is consistent with the CDM M&Ps agreed by Parties. In the event that a project is not in compliance with the CDM M&Ps then it should be suspended as a CDM project activity. If this results in a dispute between the host Parties then this should be managed through the well established legal processes that govern international disputes.

The establishment of a global reserve of certified emission reduction units for carbon dioxide capture and storage project activities, in addition to the reserve referred to in paragraph 21(b) of the annex to this decision

As it noted in the earlier submission on this issue in March 2012 the CCSA strongly believes that there will be no benefit from the establishment of a global reserve of CERs. The CCS CDM M&Ps provide robust financial provisions to ensure that any net reversal of storage is adequately addressed. The discussions at SBSTA 36 did not provide any further information on the rationale, objectives and operation of a global reserve of CERs.

The adoption of a global reserve would hinder the CO<sub>2</sub> reductions that could be achieved through the deployment of CCS as it would reduce the project's revenues and economic viability. A global reserve account might even result in unintended consequences which could negatively impact on the environmental integrity provided by the CCS M&Ps. The existing CCS M&Ps correctly place a strong emphasis on ensuring that project developers select and operate sites to a high standard. This is the most effective approach to reducing the risk of CO<sub>2</sub> seepage from the geological formation. The establishment of a global reserve that is not returned to the project developer essentially results in the application of a CO<sub>2</sub> emissions factor to CCS projects which does not reward effective store management. The global reserve could, if poorly implemented, introduce a moral hazard for project developers. This would occur in the event that the global reserve accrues enough funds that it effectively shields the developer from any costs associated with a poorly developed CCS projects. The CCS strongly recommends that Parties do not introduce a global reserve.

*The view expressed in this paper cannot be taken to represent the views of all members of the CCSA. However, they do reflect a general consensus within the Association.*