

EUROPEAN COMMISSION IMPACT ASSESSMENT BOARD

Brussels, D(2009) 27-62

Opinion

Title

Impact Assessment on: Financing Carbon Capture and Geological Storage (CCS) in emerging and developing countries: The EU-China Near Zero Emissions Coal project (ENV)

(draft version of 10 March 009)

Lead DG

DG ENV

1) Impact Assessment Board Opinion

(A) Context

One of the operational goals of the 2005 EU-China Partnership on Climate Change was to 'develop and demonstrate in China and the EU advanced, near-zero emissions coal technology through carbon capture and storage'. Negotiations to bring this date forward to 2015 from 2020 are under way. The IA aims to analyse a concrete project in China that could also serve as a model for this kind of project in other developing countries. While the IA refrains from giving a precise costing of the project, the total public funding is estimated at €600m, of which the Community would fund 60 m euro out of the existing ENTRP. The proposal is presented in the run up to the international negotiations in Copenhagen.

(B) Positive aspects

The IA is well structured. It provides a comparison of different financial arrangements currently used in the EU in terms of their feasibility for the project in China. The scope of the assessed impacts appears to be appropriate.

(C) Main recommendations for improvements

The recommendations below are listed in order of descending importance. Some more technical comments have been transmitted directly to the author DG and are expected to be incorporated in the final version of the impact assessment report.

General recommendation: The IA needs to clarify whether it is seeking to identify a model for co-operation with other (coal dependent) developing countries on large scale deployment of carbon capture and storage, or a financing mechanism that would fit best for a one-off investment in China. In either case, a significant number of issues needs to be clarified, including involvement of private and public funding, local conditions and purpose of the investment as such (deployment vs. demonstration). The IA must also better demonstrate the value added of the proposed initiative and explain implications for ongoing

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international negotiations on climate change. During the IAB meeting, DG ENV agreed to revise the IA along the lines below.

- (1) The objectives of the financial mechanism should be spelled out. The IA should make clear to what extent what is proposed will be duplicated in co-operation with other developing countries that rely heavily on coal (e.g. India, Ukraine, South Africa) and if so what are the plans and financial means available for investment in these countries. Moreover, the IA must be clear whether the special purpose vehicle is designed as a technology deployment tool, or as a one-off demonstration project. Finally, the initiative should be placed more clearly in the context of the on-going international negotiations on climate change.
- (2) Details of the sources of financing and of the financing mechanism need to be more clearly established. In particular the IA should clarify whether the current impact assessment is intended to serve as an ex-ante evaluation or whether that will be done under the framework for implementing the Environment Natural Resources Thematic Programme (ENRTP), as well as the external lending conditions of the European Investment Bank (should it take part). The IA needs to specify with a greater precision what scenarios are envisaged for securing the remaining estimated needs of €540m of public financing (EU/EIB, Member States, China). The IA should also include a more detailed assessment of the major challenges for attracting sufficient private investment and clarify to what extent the success of this initiative depends on the revenues from enhanced oil recovery, clean development mechanism credits, and revenues from electricity sales. For this purpose a brief analysis of existing CCS policy in China should be used. Finally issues concerning managing and controlling the fund should be clarified.
- (3) Potential impact of the Chinese local conditions should be analysed. The IA should at least briefly discuss the legal framework, and in particular the potential impact on the CCS project of the restrictions concerning foreign investments in the energy sector, regulations concerning carbon capture and storage, including monitoring, as well as existing and planned policies (such as e.g. Eleventh Five Year Plan) that may affect the project. In this context, the arguments for and against an option of retrofitting an existing power plant should be added to the IA.
- (4) The stage of development of the CCS technology and its overall significance for the reduction of the green house gases need to be clarified. The IA should make more explicit whether the CCS technology has been tested either in the EU or in any developing country, and what is the policy of China towards CCS development and deployment in the country. The potential contribution of CCS technology to a reduction of green house gases should be discussed for different time horizons (e.g. 2030 and 2050).

(D) Procedure and presentation

Regarding the stakeholder consultation (p. 6) the IA should clarify why consulting general public was not considered to be necessary. If there were any commitments from the Chinese side after conclusion of 2005 EU-China partnership on climate change these should be clearly referred to. The IA should also clarify what the next steps will be and what role the feasibility studies to be launched later in 2009 under the ENRTP programme will play in the further process concerning this initiative.

2) IAB scrutiny process

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