



Department of Energy & Climate Change

Developing a framework for further Carbon Capture and Storage (CCS) projects in the UK

Purpose

1. The Government has an ambitious programme in place to facilitate the development and deployment of CCS. We believe the commercial availability of CCS could be a key option in meeting our ambition to decarbonise the electricity system while maintaining security of supply.
2. The negotiations for the £1bn CCS Competition are the means by which price discovery for CCS on power will be take place, where arrangements for sharing appropriate CCS-specific risks on a value for money basis will be agreed, and where key CCS Contract for Difference (CfD) terms will be developed - all for First of a Kind (FOAK) projects.
3. The Government recognises that if CCS is to commercialise and make a significant contribution to the decarbonisation of UK electricity generation, additional projects beyond those in the CCS Competition will be needed. Developers have indicated these may need additional support for a period of time, to bring forward investment compared with that available to more established forms of low-carbon generation.
4. In order to provide clarity to non-Competition CCS developers, DECC is now advancing work to develop arrangements for the potential competitive award of future CfDs to CCS, in order to put in place an appropriate framework by 2016. The purpose of this work is to provide a clear picture for those considering investment in future CCS projects about the terms of support that will be available, subject to future Ministerial decisions on the Levy Control Framework (LCF).
5. The terms for further projects will be partly determined by the final terms agreed with preferred bidders in the Competition. Subsequent consideration of post-Competition CCS contracts will draw to an extent on these arrangements, as a FOAK benchmark which will help determine the appropriate evolution of Government/industry risk share for the next project, and the one after that, etc.
6. It is important to note that the contractual terms for Phase 2 CCS will be expected by Government to reflect the fact that such projects would not be FOAK in nature. Therefore any agreement to specific terms in the Competition CfDs will not automatically mean such terms will be incorporated in Phase 2 CfDs, which will instead reflect an appropriate balance of risk/reward.
7. The Government does not believe it is practical to design a CfD for CCS independently of negotiations in the Competition. This work will therefore be taken forward in such a way as to maximise learning from the Competition, while at all times protecting the integrity and confidentiality of those negotiations, which we do not expect to conclude until 2016.

Key issues

8. Feedback to date suggests that developers believe the following issues will be key ones for further CCS projects. DECC wishes to test the views of a range of stakeholders and experts on whether these are appropriate areas to focus on.
 - Operating costs: The generic CfD uses the CPI to manage fluctuating costs over the term of the contract. Are there value for money arguments for considering arrangements going beyond this, to provide for positive and negative changes to the cost base (e.g. fuel prices)?
 - Contract term: Is there a rationale for departing from the generic CfD's 15-year contract term, given the benefits of comparability, consistency and competition?
 - Storage performance risk: For full-chain projects, the contract will need to reflect the requirement to operate a CCS store, including managing store performance risk and putting in place appropriate financial security.
 - CCS development timelines: Given the commercial uncertainty currently associated with CCS projects, is there a case to use support arrangements to reduce the risk that project development and design costs are not recoverable?
9. In parallel, DECC will also develop options for Ministers on the most appropriate allocation mechanism, ensuring both an attractive market offer and value for money for consumers. This will seek to ensure that there is competitive tension in any allocation of future CfDs for CCS projects.
10. The outcome of this work will help inform the terms and allocation methodology of any future CfD offered by DECC to potential CCS developers.
11. This work will be carried out by DECC's Office of Carbon Capture and Storage together with colleagues in Electricity Market Reform and Commercial Teams.

How will this work?

12. In order to design appropriate Government financial incentives for further CCS projects, DECC will gather and evaluate evidence from the all those with an interest including the CCS industry, the financing community, civil society and consumers.
13. This work will not take the form of negotiation or a prelude to negotiations. DECC is seeking to gather stakeholder input, in order to develop appropriate advice to Ministers on the Government's role in bringing forward further CCS projects.
14. It is anticipated that the CCS Development Forum will retain a key role in contributing its perspective. This will be supplemented by ad hoc expert group(s) drawing on a range of developer and wider expertise.

Timeline	Activity
By early 2015	Building on relevant responses to the CCS Policy Scoping Document, discussion with expert group(s) to test views on the areas of the generic CfD that may need development, with the purpose of defining and narrowing down the scope of work

By March/April 2015	Initiate substantive discussions with CCS expert group(s) on key CCS contract issues Build evidence base on appropriate allocation methods to inform options for Ministers.
April 2015 onwards	Ministers to consider advice on contract issues and allocation, as a basis for planning further work

DECC

November 2014