



WWF

BRIEFING

OCTOBER

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Scotland

PARLIAMENTARY BRIEFING

Scottish Government debate on Carbon Capture and Storage (CCS)

Introduction

WWF Scotland is pleased to brief MSPs for the debate on Carbon Capture and Storage (CCS). Analysis for WWF and others by energy experts Garrad Hassan demonstrates that a 100% renewable power generation system is possible in the long term. Alongside improvements in interconnection, storage and greater energy efficiency, Scotland could phase out all conventional thermal generation capacity by 2030 and still deliver a secure and reliable electricity supply. However, WWF sees a potential role for CCS as a transitional technology in the global shift to a renewable energy future. With its existing infrastructure and skills in the North Sea, Scotland also has a massive opportunity to demonstrate progress and export expertise abroad, accelerating decarbonisation in other countries like China. As a good global citizen, Scotland should seek to mitigate the risks and uncertainties around the feasibility of CCS.

Scottish power sector and the context for CCS

Scotland aims to generate 100% of its electricity needs from renewables by 2020, with the longer term goal of largely decarbonising the power sector by 2030. The Government has set a 2030 decarbonisation target of 50gCO₂/kWh for 2030, in line with the Committee on Climate Change's (CCC) recommendations. It also aims to capitalise on its potential natural storage advantages in the North Sea.

Assumptions regarding the role of CCS

The latest Report on Proposals and Policies and the recently published Electricity Generation Policy Statement rest on an assumption that CCS will be shown to be economically and technically viable by the early 2020s. The Government's aim is to demonstrate CCS at commercial scale in Scotland by 2020 with full retrofit across conventional power stations thereafter by 2025-30. It assumes that 500MW of CCS is operational by 2020, with a further 500MW added in 2024-25. By 2027, it assumes that 1.6 GW of CCS gas plant will be operational.

Concerns about CCS delivery

WWF is concerned by the reliance on CCS in Government policy and the slow pace of CCS commercialisation in Scotland and globally. This situation is not helped by the fact that current proposals under UK Electricity Market Reform (EMR) are likely to lead to a 'dash for gas', undermining efforts to test and deploy CCS at commercial scale. The projected roll out of CCS described in the Scottish Government's power sector policy places a significant assumption on the technology being both economically and technically viable despite little evidence to encourage this. There is far too great a reliance on the viability of this untested technology in the achievement of our climate change targets.

We believe that the RPP2 is over-reliant on CCS. In order to give confidence that the commitment to a 2030 decarbonised power sector target can be met the Scottish Government must come forward with clear policies that show how emissions can be and will be reduced. Currently there is no Plan B in Scotland for reducing emissions in case CCS does not deliver.

A Scottish solution - Incentivising CCS

Given the heavy reliance on a technology that may or may not deliver, WWF Scotland believes that greater regulatory certainty and stronger incentives for CCS are necessary to drive investment. WWF Scotland believes that a strong Emissions Performance Standard (EPS) is needed to incentivise CCS.

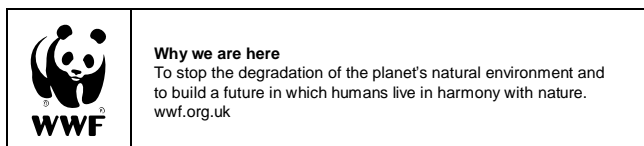
At an EU level, the low carbon price has not incentivised the technology, and even the UK carbon price floor is thought to be too low to incentivise CCS. In addition, the EPS as currently designed under the UK Energy Bill (at 450gCO₂/kWh) is wholly insufficient to incentivise CCS, essentially enabling unabated gas to continue through to 2045. This is incompatible with legislated carbon budgets, according to the CCC.

In the absence of a sufficiently strong UK mechanism to incentivise CCS, we believe the Scottish Government should set a Scottish EPS in line with the CCC recommendations and their own 2030 decarbonisation target for the power sector.

FOR MORE INFORMATION

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CCS in Scotland

WWF believes that there is a case for a demonstration project for CCS in Scotland.

We support the testing of CCS on existing power stations. However, WWF does not support the consenting of "CCS-ready" plants, for example the possible new gas plant at Cockerzie. A 'CCS-ready' power plant offers none of the necessary assurances that it will be able to fit CCS even if at some later date the technology has been proven to work.

We therefore welcome the award of preferred bidder status to the SSE/Shell Peterhead retrofit project in the UK's CCS Commercialisation Programme Competition in March 2013. This project needs to progress as a matter of urgency.

We also believe that the Captain project in Grangemouth is an interesting proposal that has the potential to reduce emissions from heavy industry. However, it should only be able to process on the basis of being fully fitted with CCS from the outset and not integrated with enhanced oil recovery.