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Response to DECC Consultation on Electricity Market Reform

2Co Energy welcomes the opportunity to respond to this consultation, particularly in respect of the substantial role fossil fuelled power generation with Carbon Capture and Storage (CCS) can play in the UK's power generation mix.

2Co supports the view of the Committee on Climate Change that power sector CO₂ emissions should aim to be at approximately 50g/kWh by 2030 which would necessitate the addition of 30-40 GW of low-carbon electricity by 2030.

The storage capacity for CO₂ in the oil and gas fields and saline formations of the North Sea means the UK is uniquely well positioned in Europe to apply CCS to the power sector in a cost effective way. Industry's confidence in CCS in the UK is reflected in the fact that nine, or almost half, of the 20 or so applications for funding for CCS under the EU's NER process come from the UK.

2Co Energy Limited is a UK based company formed specifically to take CO₂ captured at power plants, or other energy-intensive industries, and store it permanently in oil fields while also using the CO₂ to produce more oil than is otherwise recoverable.



2Co is committed to delivering the benefits of CCS to the UK at the least cost. By injecting the captured CO₂ into ageing oil fields and using it to recover oil that would not otherwise be recoverable (a process known as Enhanced Oil Recovery (EOR)), the company will generate substantial oil production taxation revenue for the UK. A single commercial scale EOR project can be expected to generate several hundred million pounds of taxation revenue per year that would reduce the net cost to the UK of the first generation of CCS plants by about a third.

At the same time CCS with EOR would improve the country's security of energy supply situation, sustain substantial numbers of valuable offshore jobs that would otherwise disappear as North Sea oil production continues its decline and create skills and technology that will be exportable around the world. Combining CCS with EOR is unique in the way it delivers on climate change, energy security and the low-carbon economy policy objectives.

The current market will not deliver on the Government's objective of decarbonising the power sector and the EMR process provides an opportunity to create a pricing premium to adequately reward the higher costs and higher added value of low-carbon power.

Support for the UK's CCS demonstration programme.

Whether the support for the UK's four CCS demonstration projects should be delivered via the EMR process, or separately is an important question. The process to select these projects is already underway – applications for EU funding have already been made - and, in late 2012 when the EU selects the projects it would support, the UK needs to be both in a position to confirm which projects it will co-fund and also stipulate how that co-funding will be provided.

Without this clarity at that point in time, companies will not be able to put in place the necessary financing for the projects and, will be unable to deliver the projects in time to access the EU funding. The UK risks losing access to what could be more than €1bn of funding from the EU. Because of these timing issues, and the urgent need for the UK to demonstrate CCS on an industrial scale, 2Co believes support for the CCS demonstration programme should be put in place as soon as possible and before the EMR process is completed.

2Co recommends the UK incentive for CCS demonstration plants should be in a form, such as the levy that has already been legislated for, that creates an obligation on the utilities to take the power to the entire market in order to reduce the cost at the individual consumer level. The incentive should also be linked to the overall objective of avoiding tonnes of CO₂ emitted.



Recognition should also be given to projects that find ways of offsetting some of the costs of CCS, particularly during the demonstration phase. Examples of this include projects that use the CO₂ for EOR which will generate hundreds of millions of pounds of oil production taxation revenue for HM Treasury.

Support for wider deployment of CCS.

2Co recognises an EPS set at an appropriate level, and that is steadily reduced over time, sends a clear policy signal. It can encourage early movers provided those projects are grandfathered and the incentive received reflects the high costs of early mover projects.

2Co believes the 600g/kWh and 450g/kWh described in the EMR consultation document are too high to drive any of the change the UK needs. Given the Government has recognised the need to apply to CCS to gas fired power generation as well as coal, 2Co also believes EPS levels should be set for both fuels which, amongst other things, should help avoid another dash for (unabated) gas that a coal only EPS might do. As currently written, the EPS proposal is a missed opportunity.

As the EMR Consultation recognises, an EPS has to be combined with other mechanisms that will help deliver the financial incentive to enable the deployment of the technologies needed for the low-carbon future. California, for instance, combines an EPS with a defined dispatch order which, in order, dispatches hydro-electric power first, then renewable followed by CCS, gas-fired power with all other forms of power coming after that.

CCS projects, beyond the four demonstration projects, need to be accommodated in the UK's reformed electricity market and selected on the basis of what they will achieve in mitigating the effects of climate change, rather than the labour and time intensive process of competitive procurement that has been being used for the first project.

In an ideal world the new arrangements would be technology neutral but given the differing levels of technology maturity, CCS and other technologies, will need technology support for a transitional period.

2Co supports the Government's approach that means there are likely to be a number of different mechanisms such as the EU ETS, a carbon floor price, capacity payments and feed-in tariff that will form the overall support package for CCS. However, the benefit of these incentives is not additive and the interaction between the different mechanisms needs to be explored



fully in order to avoid unintended consequences and to be sure they will achieve the desired objective.

Summary

2Co is concerned the timeline for the EMR process could delay the UK's CCS demonstration programme so encourages the Government to incentivise these outside of the EMR process, and that those projects be grandfathered.

2Co supports the use of the CCS levy which has already been legislated for. The levy is attractive as it would enable the UK to meet the timeline for providing the co-funding to match and access the EU NER funds and is also a mechanism that would provide the level of certainty investors need for financing major investments in first of a kind plant.

2Co urges the Government to recognise the significant level of oil production taxation revenue that can be realised if the CO₂ from CCS projects is used in EOR projects and the advantages this brings in substantially reducing the overall cost of CCS to the UK.

Given the lead times for CCS projects and the amount of CCS capacity that needs to be on the grid by 2030, there is an urgent need to plan now for the wider deployment of CCS and for this to be accommodated within the EMR from the outset. The EMR consultation addresses an appropriate range of support mechanisms that should enable the deployment of CCS.

