

CCUS COUNCIL

2 November 2020

Eighth meeting - summary

Attendees	
Rt Hon Kwasi Kwarteng MP	
Minister of State for Business, Energy and Clean Growth	
	Co-Chair
James Smith	Co-Chair
Frank Aaskov	Make UK
Allan Baker	Societe Generale
Rebecca Barnett	Ofgem
Paul Booth	Tees Valley Local Enterprise Partnership
Brianda Bugge-Mahrt	BHP
Roz Bulleid	Green Alliance
Martin Cook	National Grid Ventures
Mike Cooper	Exxon Mobil
Will Gardiner	Drax Group
Stuart Haszeldine	Scottish CCS
Phillip Hemmens	Eni
Marta Krajewska	Energy UK
Sinead Lynch	Shell
Colin McGill	BP
Charlotte Morgan	Linklaters
David Reiner	Cambridge University
Laura Sandys	Challenging Ideas
Mike Smith	NECCUS
Fintan Slye	National Grid ESO
Ed Syson	Cadent
Hywel Thomas	Cardiff University
Guloren Turan	Global CCS Institute
Grete Tveit	Equinor
Luke Warren	CCSA
Observers	
Matt Taylor	Deputy Director, CCUS, BEIS
Will Lochhead	Deputy Director, Industrial Energy, BEIS

Introduction by Minister Kwarteng

Minister Kwarteng welcomed members and started by addressing the recent announcement of a one-year Spending Review.

The Minister thanked all who responded to the Government's consultation on business models for CCUS to inform the Government's response, which was published in August 2020, and signalled ahead to the upcoming update on business models for CCUS, which will be published in December 2020.

The Minister acknowledged the recent announcement of the Northern Endurance Partnership, the Industrial Decarbonisation Challenge Fund entering its second phase and encouraged to join up on relevant issues with the Hydrogen Advisory Council.

The Minister also thanked Council members for nominating members for the CCUS Early Careers Professionals Forum, which he was pleased to attend the launch event for.

Introduction by James Smith

James Smith thanked the Minister for reaffirming Government's strong support for CCUS and highlighted encouraging signals to deploy CCUS from across the world, including China's new target for carbon neutrality by 2060.

Deployment pathway – update on business models

Matt Taylor and Will Lochhead provided an update on current policy positions on CO₂ transport and storage, power CCUS business models and industrial CCUS business models.

CO₂ transport and storage (T&S) networks

- Our minded-to-position is a regulatory network model, drawing on elements of other regulatory models, based on a form of independent economic regulation.
- Our expectation is that under the enduring model, T&SCo would obtain a licence from an independent economic regulator to authorise them to operate T&S assets and charge users a fee for its service.

Power CCUS

- Our minded-to-position is for a revenue mechanism which incentivises power CCUS to operate flexibly, dispatching after renewables and nuclear, but ahead of unabated fossil thermal power plant.
- Our current key focus is on consideration of risk allocation between the generator, consumers and Government, for example how payments are affected by outages either of the generation and capture plant or of the T&S network, the interaction between fuel costs and interaction with the electricity market, and the differences between first-of-a-kind (FOAK) and nth-of-a-kind (NOAK) risks.

Industrial CCUS

- Our minded-to position is an industrial carbon capture contract for initial projects, including an element of upfront capital support from Government.
- The model design takes account industry's limited ability currently to pass the costs of carbon capture onto consumers until a market for low carbon goods can be developed.
- We will undertake detailed model design to assess whether it meets our objectives, in particular on Government affordability. Such a model could evolve through three phases:

- Phase 1 industrial carbon capture contract and upfront capital support for initial projects;
- Phase 2 moving to a more market-based mechanism as uncertainties and costs reduce; and
- Phase 3 market-based approach.

Re-use of oil and gas infrastructure for CCUS

- Further analysis and engagement is planned on Change of Use Relief proposals, including how this might interact with the full range of project ownership structures suggested since this proposal was first considered.
- We are proposing an upper limit of 10-years for asset suspension to allow a CCUS project to develop and the transfer of assets to take place (or for a period of time which is deemed technically feasible) and are reviewing the need for new supportive guidance on the preservation of assets.

A key challenge we are considering will be how we integrate all business models, their interaction and balancing risk in a proportionate manner that attracts investments but also provides value for money.

Supply chain capability

Matt Taylor set out key benefits for developing CCUS supply chain capability, including clear economic opportunities as we move to net zero, supporting the levelling up agenda, creating jobs and export opportunities. The UK can also build on its strong skills and academic base. We can also harness oil and gas sector expertise and established skills.

The Council is seeking to establish a collaborative approach to identify how to maximise the supply chain opportunities across the UK.

Representatives from the Energy Industries Council (EIC) presented an overview of their research into current capabilities in UK supply chains.

James Smith then presented a programme for supply chain excellence developed with Luke Warren, which aims to realise opportunities from developing an effective CCUS supply chain, based on top quality, on time, highly cost-effective project delivery and maximising social and economic benefit in all respects, for individuals, regions and the nation in the short and long term.

CCUS Council Members made the following points:

- It is important to learn lessons from the deployment of offshore wind;
- It is important to support large scale process emissions and the contribution from hydrogen;
- The sector should utilise opportunities to sell storage services to neighbouring countries;
- Early engagement is crucial – for example, targeting technology apprentice programmes; and
- It is important to look at how we can ensure UK companies are actively involved in elements of the supply chain from the start.

ACTION: Council members interested in being involved in a CCUS supply chain working group to contact James Smith and the BEIS CCUS Council Secretariat.

CCUS Early Careers Professionals Forum

James Smith updated Council members on the launch of the CCUS Early Careers Professionals Forum which took place on 20 October, acknowledging the positive engagement. One outcome from the first meeting was that a number of randomly forum members can attend CCUS Council meetings as observers who express interest in doing so. James welcomed Maryam Adamji, Navdeep Kahlon and Olivier Whettam, who were observers for this meeting.