UK CCUS Council Meeting Minutes 27th June 2023, hybrid meeting

Attendees	Organisation
Lord Callanan (LC) - Co-Chair	Parliamentary Under Secretary of State for Energy Efficiency and Green Finance
James Smith (JS)- Co-Chair	Former Chair, Carbon Trust
Rodney Allam	8 Rivers & NET Power
Jemima Bruin-Bland (JBB)	Arup
Andy Lane (AL)	ВР
Patrick Dixon (PD)	Carbon Take Back Obligation Committee
David Reiner	Cambridge University
Ruth Herbert (RH)	CCS Association
Olivia Powis (OP)	CCS Association
Georgina Katzaros (GK)	CCS Association
Kirstie Simpson	Chester University
Adrian Topham (AT)	Crown Estate
Rebecca Groundwater	EIC
Luciano Vasques (LV)	ENI
Martin Currie (MC)	ENI
Dominic Martin (DM)	Equinor
Faisal Bachlani	Equinor
Dustin Benton (DB)	Green Alliance
Roz Bulleid (RB)	Green Alliance
Rich Denny	IPA
Lord Hutton (LH)	Make UK
Dr. Richard Hauxwell	MCS Charitable Foundation
Andy Benjamin	National Grid
Ben Burggraaf (BB)	Net Zero Industry Wales
Kristina Dahlstrom (KD)	NSTA
Nick Richardson (NR)	NSTA
Stuart Payne	NSTA
Tim Ince	Ofgem
David Parkin (DP)	Progressive Energy
Stuart Haszeldine (SH)	Scottish CCS
Allan Baker (AB)	Société Générale
Nicola Cocks	Storegga
Chris Rowell (CR)	Tees Valley Combined Authority

Observers	Organisation
Alexander Blades	CCUS Council Secretariat
Alex Milward (AM)	Director, CCUS, DESNZ
Beatrice Filkin (BF)	Deputy Director, CCUS, DESNZ
Emma Bulmer (EB)	Deputy Director, CCUS, DESNZ
Kathryn Aggarwal (KA)	Deputy Director, CCUS, DESNZ
Matthew Taylor (MT)	Deputy Director, CCUS, DESNZ
Will Lochhead	Deputy Director, CCUS, DESNZ
Pumi Perera	Scottish Government
Ron Loveland	Welsh Government

1. Opening remarks from co-chairs Lord Callanan, Parliamentary Under Secretary of State for Energy Efficiency and Green Finance, and James Smith:

LC noted his pleasure in attending the Council and reiterated HMG's commitment to decarbonisation. Emphasising this commitment LC noted that the Government's recent announcements included the Track-1 Project Negotiation list and the launch of Track-2 of the Government's CCUS Cluster Sequencing Process. LC added that a process to enable expansion of the Track-1 clusters would be launched later in the year. LC emphasised the hard work needed, from all parties, to move forward and highlighted the UK's potential to become one of Europe's greatest CO₂ storage bases.

JS thanked LC for his opening remarks and expressed the requirement to deliver significant work in the CCUS industry, at pace. He recognised the commitment from all sides in trying to meet the 2030 targets and beyond, while also welcoming new member Chris Rowell and thanking previous attendees who had departed the Council.

2a. Lord Hutton report update on the Supply Chain Working Group, Including CCSA Presentation on supply chains:

LH reported on the progress of the Supply Chain Strategy report and noted that to maximise the UK's supply chain participation it recommended creating a timeline to understand the industries progress.

OP presented and highlighted that a long-term CCUS industry was required to get to the UK's voluntary local supply chain content target of fifty percent. OP emphasised the need to set expectations on good practice guidance, and that industry needed to work with an independent assessor, reviewing their performance (where necessary), to achieve ultimate alignment across the CCUS industry. Continuing, she noted that the Department for Energy Security and Net Zero (DESNZ) had commissioned ARUP to review CCUS taxonomy and that there are four levels of detail, with the next stage of detail being international procurement codes and systems. OP noted the importance of developing taxonomy alongside reviewing high value opportunities and commencing the good practice report as soon as possible.

2b. Council Discussion on Supply Chain progress

EB welcomed the sector's ambition of a UK voluntary local supply chain content target of fifty percent per cent and stated that DESNZ would respond to the report's recommendations in due course.

KD emphasised a desire to work with, and support, the CCSA and DESNZ on supply chains.

DP asserted that projects drive supply chains and that if projects are built the supply chain will come. DP also felt that 8 projects across Track-1 clusters would not drive a change in supply chains.

AL was against further progressing the Supply Chain Report, citing the difficulties in generating another reporting process. AL was also keen not to duplicate the industries reporting processes.

OP agreed with DP and came back to AL on the duplication of reporting to note that existing reporting was meant to feed into the reporting mechanisms.

LH noted that the groups intention was not to create additional lines of reporting.

AM asserted that energy needs assessment and that the Governments offer was of good strong ambassadorial connections and trade connections which industry could take advantage of to create opportunities. AM also welcomed ideas to be fed into the Government's broader international work.

2c. CCSA update on the skills position paper, with Andy Lane outlining the Green Job Taskforces Scope

GK provided an overview of the CCSA's position paper on skills. GK noted that key challenges included making enough training positions available, making progression opportunities in emerging technology clearer, and making the skills approach less fragmented. GK highlighted that a delivery plan for skills that considered existing workforce and training, alongside the Green Jobs delivery group, could enhance skills. GK added that building up a local workforce could also ensure greater diversity and inclusion in the workplace and that an increase in data would facilitate more, and better decisions, as well as helping with UK capacity mapping.

AL emphasised the opportunity for skills and highlighted the threat of losing skills elsewhere. AL noted that the skills position paper's terms of reference had been developed and that it highlighted energy transition and the multi-duality of most required skills. AL submitted a request for volunteers to aid the taskforces scope and highlighted that the CCSA's work would be one of the key inputs for the taskforces work.

2d. Council Discussion on the skills position paper

JS noted the phenomenal opportunity of enhanced jobs and noted that they could account for 350,000 jobs by the mid-century. JS also added that the skills are applicable beyond sector-to-sector work.

RH praised the consideration of work outside of CCUS to deliver on more skills and that the opportunity to create a positive message to younger generations was vital. RH also noted the need for a coherent strategy across deployment and skills.

BB commented on the inaccuracies of viewing 'Net zero jobs' as new and that skills should be about building on, and framing, existing jobs (such as those in oil, with an overlap with traditional craft skills) in the correct sustainable way.

3a. Presentation from the NSTA on their recent licensing round, with an update from officials on CCUS Deployment pathways.

KA highlighted that the Government has committed to further develop the Track-1 clusters through an expansion process that will launch later this year. For Track-2 KA highlighted that the Government were initially seeking to identify transport and storage systems, and that projects connecting to these will be set out in slower time. KA noted that Acorn and Viking had been named as leading contenders due to the maturity of their plans and that the Government run EOI process for Track-2 contenders, to express interest, closed at the end of April and that an update on next steps will be issued in the summer.

RH responded to KA's update and wanted to look at doing a lesson learnt on the process after Track-1. RH also noted that it was crucial to build trust and transparency moving forward.

BF flagged the lessons learnt being gathered from participants for the Track 1 evaluation report.

NR highlighted that the NSTA had been working with varying partners on co-location. NR highlighted that in some cases up to 100 stores may need to be appraised as part of a long-term target. NR highlighted that 20 licenses had been offered in area covering 12000 km squared and that while the licences were not yet in effect, that following a legal process they would be soon. NR added that there had been firm well tests and that there was a diverse portfolio emerging from the licenses, including both saline aquifers and depleted oil fields. NR added that the NSTA are looking to characterise sites to ascertain the risk and that they intend to evaluate the process to identify areas where they can improve, while also giving industry another opportunity to apply. On challenges NR noted that due to geology the same monitoring for each area is not needed.

DB asked if there was knock on impact on costs.

NR emphasised the need to be careful and noted knock on costs regarding co-location opportunities, such as with wind, and that current licensing has tried to ensure minimal co-location overlaps with wind. NR highlighted that co-location could be a long-term option leading to synergies and emphasised the need to be smart at a project level, as this couldn't always be done at a planning level. NR then highlighted the need to appraise sites early and

that accelerated appraisal could benefit wind, as if a site wasn't suitable, they could still initiate wind projects there.

MC noted that as a developer ENI were concerned on deployment and emphasised that the commitment with speed was not going as quick as desired. MC requested top-level down commitment from Government with timings, and highlighted the need to move forward so industry does not lose extra momentum- especially in the field of T&S leads.

AL echoed this and wanted to move quickly in focused areas.

3b. Presentation on the Carbon take back obligation (CTBO) report

PD noted his impartiality, that he hadn't been paid in CCUS industry since 2019, and that his aim with CTBO was to produce an objective piece. PD noted that the review concluded 3 things: A) that it should be seriously considered. B) that it should be considered in conjunction with a synergy of other policies, such as low carbon product standards, extending and modifying the ETS, and the Carbon Border Adjustment mechanism and C) that a detailed study should be setup promptly.

PD noted that these conclusions were drawn from 4 reasons: 1. Financial support (subsidies) should not continue indefinitely and that the ETS can drive sufficiency of CCUS delivery without financial support; 2. Funding CCUS will relieve the Government from this task; 3. Greenhouse Gas Removals (GGRs)- DACCS, and BECCS require a reference price which can be solved by the CTBO; 4. The design principles include several attractive design features, such as a competitive market-based system which uses private sector money, as well as the fact that CTBO and ETS are strongly complementary in incentivising the pace, innovation, and cost effectiveness of CCUS.

PD noted that the consensus was not to implement CTBO now, as while none of the issues were dealbreakers they needed to study the issues further and in more depth. PD added that the next steps would be a more detailed study with CTBO being considered in conjunction with other enduring policy options, and that during evaluation a consideration would need to be placed on the approach in other countries.

3c. CCUS Council Discussion on CTBO

DM asked if the CTBO's proposed focus of work was too narrow, and questioned how a subsidy free CCUS industry would run.

DP wondered if CTBO was a distraction and wanted an emphasis on Track-1. DP also added that the leading policy issue is CBAM and agreed with looking at wider set of issues.

AM added that the real focus was moving the industry towards subsidy-free deployment and operation and highlighted that the Government needs to be confident enough is being done to advance this area. AM highlighted that the CCUS industry needed to give HMG confidence that industry would not be dependent on subsidies in the long term and that more was needed to be done to ensure subsidy free stages in future. LV responded to AM and highlighted that he was ready to work towards building a system not focused on government subsidies. LV emphasised a commitment to Track-2 and that at the current pace industry may not be able to reach the Government's target of 20 mtpa by the end of 2030. LV added that the best way to help reach this target was increasing the number of projects.

RH highlighted that the deployment plan over the next decade was crucial for investors and that there was a need to work together on the deployment plan. RH added that there was a need to highlight that business models are moving forward.

KD agreed that there was need to move away from subsidies.

MT added that work needs to be started to establish how the sector might move from one state where it was dependent on subsidy to one where it was not. CTBO may or may not enable that.

MC reiterated LV's points and added that industry would deliver what is needed if this is part of what is preventing the next step in the process.

DB commented that he did not want to see stop-starts in the CCUS industry and that a solution was moving quickly on CTBO.

4a. Officials response:

SM thanked members for their contribution and highlighted that it was important to work together to drive down costs.

AM then highlighted that the Government and the private sector represent different stakeholders and that it was important to negotiate sensibly to move at pace.

4b. Forward look:

BF outlined the forward look for next meeting in June which included deployment pathways and an update on business models. BF also updated that due to building relocation the time and date of the Autumn meeting will be issued in due course.

5a. AOB and Close

LC thanked attendees for coming and participating and noted that having vital discussions is important. LC then reiterated that Track-1 expansion would be covered in the future.

JS thanked attendees for their contribution and noted that the session had been a productive meeting and that he was appreciative of the attendees' work.

LC echoed JS thanks to attendees, and officials, and then closed the meeting.