

CCSA Working Group Summary Minutes

Working Group	Industrial Working Group
Date	27 th January
CCSA Lead	Yanxi Zhou
Chair	Aaron Goater
Co-chairs	(TBD)
# in attendance	21
Recording	NA
Summary Minutes	<p>Introductions & Housekeeping</p> <p><i>Welcome the CCSA members to join this new Industrial Working Group. Introduction of the new co-chair Aaron Goater (Baringa).</i></p> <p>Yanxi Zhou, UK Policy Officer (CCSA) presented on: <i>“CCSA UK Policy Updates”</i></p> <ul style="list-style-type: none"> • Infrastructure Strategy: Reaffirmed CCS/hydrogen funding. • Industrial Strategy: CCUS is designated as a "frontier clean energy industry." • Highlight: expecting Hydrogen Refresh Strategy, Industrial Decarbonisation Strategy, and NPT consultation to be published early this year • Consultations (live): <ul style="list-style-type: none"> ○ Carbon capture, usage and storage (CCUS): Ensuring fair access to CO2 infrastructure ○ SAF revenue certainty mechanism: indicative heads of terms and contract allocation <p><i>“Working Group Structure & Priorities”</i></p> <ul style="list-style-type: none"> • Scope (Terms of Reference) – welcome members’ input: <ul style="list-style-type: none"> ○ Industrial CCUS business models. ○ Low-carbon products & hydrogen. ○ GGRs/carbon markets. ○ Clean energy industries. ○ Cross-border CO₂ transport. • Call for co-chairs for this working group <p>Rebecca Bell, Research & Project Manager (CCSA) presented on: <i>“CCSA low-carbon product study”</i></p> <ul style="list-style-type: none"> • First stage: overview – set out the political content and interlinkage between sectors • Second stage: sector deep-dives <ul style="list-style-type: none"> ○ Cement & concrete first ○ Fuels, chemicals, glass, ceramics, power, hydrogen

Q&A

- AG: support the kind of defence security resilience angle, as no work has been done before. Need input-output data to allow this to be done.
 - CCSA: we would be happy to learn more on what we could do with that, how we can use it
- CCSA: some context of the low-carbon product study - the research and the policy work that we're doing is very much gearing up to the spending review 2027. This is the next real opportunity that the sector sees to secure the next stage in a fiscal outcome or a funding envelope of some sort.
 - We're trying to align these projects to make sure that we're really landing the sectoral and the cross-economy growth benefits that CCUS offers ahead of that spending review.
- CT: For the willingness to pay - is there going to be some work done to look at environmental attribute certificates? Like book and claim mechanisms that are being used more widely now and kinds of building materials. Note that different standards on what counts as a low-carbon cement or steel were published by companies last year, which bridges the demand and supply - would this be a big role in the UK?
 - CCSA: We would like to explore it and are happy to gain more input from our members. This report will also cover European markets.
- CT: It is used more in the US, where the low-carbon product projects are not able to get to the data centre, which demands building materials. Green product certification is a way to circumvent this issue through.

Please contact rebecca.bell@ccsassociation.org if you would like to discuss on this report.

DESNZ presented on:

"Industrial and EfW business model updates"

- Introduction of ICC Business Models
 - CCS market challenges for seeking finance for Industry and Waste (vary by project) - why we have the business model
 - Limited incentive for Waste sector; biogenic CO₂
 - Waste Business Model was developed from the Industrial Business Model
 - Details of the business model components
 - ongoing revenue support and capital grant
 - Risk protection mechanism
 - Note that specific protections are provided for cross-chain risks
- Recent updates for the ICC Business Models

- Capture rate requirements
- Post capture CO₂ measurement
- Special Purpose Vehicle (SPV)
- Cross-chain risks
- Recent updates for the Waste ICC Business Models
 - Capex repayment period
 - Monthly fossil biogenic CO₂ percentage
 - Non-compliance after the ETS is implemented
 - UK ETS price alignment once the waste sector is included in the ETS
 - GGRs
- Next steps

Please see the meeting slides for presentation content.

Q&A

- NG: To add on to the post capture CO₂ measurement, T&SCos provide additional requirements related to measurement metering as part of the network code for the T&S flow meters and the composition of the meters. Further specifications can be found in Annexe C of the Code.
- AG: Regarding the EU-UK ETS integration – will DESNZ take a look at the potential conflicts between the EU and UK rules on carbon 14 measurement?
 - DESNZ: If the EU-UK ETS is linked, all will be merged into one, and the divergence mentioned will be covered. We doubt it would be a loophole that we would miss.
- CCSA: How much is the potential for this to be amended for future business models? For example, 3 months before an emitter's targeted commissioning window is not much for the project to plan offtakes. Any further information or timelines you can provide to enable these negative emission projects, increasing the value for money for the project?
 - DESNZ: For those initial contracts that have been signed with a restriction in place, they are able to have the engagement with offtakers and cannot sign promises to the credits to be sold. The goal was to have a backstop for the idea when a review may be conducted. Depending on the development in GGR policy there (such as GGR integration into the ETS and the GGR standard), the counterparty may find it appropriate to do a review before that.
 - DESNZ: It will be something for us to look at in the future. We may not need to have restrictions anymore once we have a better understanding/certainty of the GGR from EfW sold
- AG: Will there be any individual decisions for the each EfW plant or the receiver of the contract?

- DESNZ: Not written contractually – if several EfW facilities share the same contracts, the counterparty would conduct a review and it will be applied to all the ICC contract holders, unless there were very specific conditions. The rationale for lifting the review will probably be the same where there is sufficient evidence.
- NG: T&SCos are currently specifying and designing their own central data service network portal. Note that a whole bunch of additional data sets will be needed to generate GGR credits coming from T&SCos – what kind of data sets do GGR projects need to generate credits from T&SCos? And will this be codefined or bilaterally designed?
 - DESNZ: We did not know the answers, we try to ensure the revenue is generated from robust market (with really clear and robust MRV in place). It is why we have the restrict and review process
 - DESNZ: We would envisage it blowing through to the business models through conditions (very related to GGR standards). But we would not envisage the business model to have anything to do with the MRV and contractualise any of that we share the revenues. This will probably play out through the interaction of standards, markets and codes.
- TJ: Will there be business models for utilisation so that the industry will be interested in investment in technology that helps utilise or monetise the captured CO₂, letting it become a good for trade? For example, the SAF mandate is the one to address the utilisation of the captured carbon. I think the industry will further be interested in the idea of how to turn this into money.
 - DESNZ: Would suggest look at the CCUS vision, which covers the storage and utilisation. Potential evolution of low carbon product markets, low carbon fuels, and removals where the CO₂ is biogenic, will have potential revenue streams generated across different sectors.
 - DENZS: The business model is solely focused on the additional costs of capturing and storing, where it goes to permanent storage. We appreciate the building material industry may be a viable CCU, but at the moment we are not supporting that – it is quite complicated and has quite a lot to explore (e.g. multiple products, potential revenue streams, and commercial & technical challenges).
 - DESNZ: The government priorities are now looking to bringing down cost and doing the market transition – so we cannot speak to specific intervention in terms of utilisation elements in business models.
- CCSA: Are these changes that are still likely to be brought up through sort of subsequent expert group meetings and

	<p>kind of subject to feedback within those? Or are those largely changes that you feel have already been addressed through meetings over the course of the last 18 months or so, and are now more in the fine-tuning towards this next phase of updates?</p> <ul style="list-style-type: none"> ○ DESNZ: We have not reached final decisions, but we expect to engage through the expert group – the engagement would not be the same as previous, but seeking feedback and discussions going forwards on final designs – it will take us more time to reach a position which we can share. This is likely to be this year, but it will not happen within a short time.
Actions	<ul style="list-style-type: none"> • Please email Yanxi (Yanxi.zhou@ccsassociation.org) if you have any ideas on: <ul style="list-style-type: none"> ○ ToR feedback. ○ Co-chair position. • For GGR development in the Waste ICC business model and relevant workstream, please reach out to despoina.tsimprikidou@ccsassociation.org • For input to consultation on Carbon capture, usage and storage (CCUS): Ensuring fair access to CO2 infrastructure, please reach out to max.musing@ccsassociation.org
Other Comments	
Next Meeting Date	TBD
<p>All working group materials can be found here</p>	