CCSA Working Group Summary Minutes

Working Group	GGR & Carbon Markets
Date	07/07/2025
CCSA Lead	Despoina Tsimprikidou
Convenor	Greg Williams (Evero Energy)
# Attendees	30
Recording	https://vimeo.com/1099600498/5aa0a0ab31?ts=0&share=copy

Summary Minutes	**1. Introductions & CCSA Competition Law Policy Notice** (Greg Williams – Evero)
	• Introductions for new attendees
	• Housekeeping and competition law policy notice
	
	2. CCSA GGR Updates (Despoina Tsimprikidou & Mark Sommerfeld – CCSA)
	
	UK GGR & Carbon Markets policy developments:
	• CSR published – positive signals in terms of funding and subsequent clusters to be deployed
	• Industrial Strategy – Clean Energy Sector plan had specifically mentioned GGRs (CCSA advocated for its inclusion).
	• VCM Consultation – CCSA shared second draft last week. **Response will be submitted on Thursday 10 July.**
	• BSI GGR Standards – will be published between 10th – 14th July.
	  o **Action**: If members have any questions on the topics that have been discussed in the advisory group, please let the CCSA know.
	• ETS decisions upcoming (due to be released by the end of the year): integration into the ETS for GGRs and expansion scope for the waste sector.
	• GGR Review outcomes to be published in Autumn 2025.
	• Additional publications with unclear release dates: Carbon Crediting Programme (DESNZ), and GGR & Power BECCS Business Model Update (DESNZ)
	• CCSA next steps: we would like to create a position paper to act as an external facing publication building on CCSA positions submitted for the GGR Review (to be published around Autumn 2025).
	  o **Action**: If members have views on additional contents and direction of this position paper, please let the CCSA know.
	
	Biomethane developments:
	• CCSA working with Green Gas Task Force who are looking to demonstrate the role of GGRs within biomethane. A report is being produced for biomethane

	GGR potential and the role it will play in decarbonising the heat and power sector. Green Gas Task force is aiming to also feed into GGR review before it concludes. *Refer to the slides and recording for full details of updates.* **3. External Presentation – Growth through removals: Making greenhouse gas removals a vibrant part of the UK economy** (James Townsend and Francesca Battersby – Carbon Gap) *Refer to the slides and recording for full presentation details.* Q&A Q: First recommendation to kick-start demand by using public GGR procurement – just wondering what mechanisms are you thinking about there? And is that aimed at UK Government or broader? A: We are not prejudging specific mechanisms that would be used – it is primarily targeted at UK Government but with a focus on crowding in private investment. Q: Messaging from the Government is to move the whole CCUS sector (including GGRs) onto a commercial fitting as soon as possible – wondering if the solution to the demand question is Government steps in to buy removals. Is this a justifiable with constrained public spending? A: Fair question – we have grappled with this a lot but have landed on the idea to gear the mechanism around bringing in private investment. Government involvement can act as a bridge to more private purchasing. Q: Regarding jobs – how far does the data go on specific roles (in terms of granularity), and in which regions? A: Not so much granularity in this exercise in terms of specific roles – it splits between project investment and operations and maintenance. We are keen to do more bottom-up analysis to get more results rather than just a headline figure – it will be challenging as GGRs is a nascent sector but will see how much granularity we can get with that. C: Be interested to see how the Carbon Gap numbers compare with others – for example compared to modelling for other CCS application types. Q: The paper expressed concerns around whether including GGR into the ETS without a sub-mandate would drive enough volume. Could you expand on the point that the volume aspect not being sufficiently developed yet? A: The paper is suggesting that in a world where GGR allowances are differentiated from regular allowances, if there is no benefit to purchasing a GGR allowance over a regular allowance for the purpose of your compliance, why would they be chosen over a

	UK allowance. The Government can substitute regular allowances for GGR allowances at whatever volume they choose – but if they are worth the same in terms of fulfilling a compliance obligation, there is no reason why they would command any price premium without further design mechanisms beyond regular allowances. The answer being heard is that GGR business model CfD to bridge that gap but are we expecting all of that gap to be bridged between the current allowance price and the cost of delivering GGRs. If there is going to be differentiated demand and therefore pricing for these credits, we do not see a way of getting to that without a sub-mandate or an equivalent mechanism. Q: What are the next steps and immediate actions? A: We have tried to keep this intentionally slim – for all these recommendations we see a need for them to be progressed in the near term besides the 'Place GGR at the heart of the CCUS clusters programme' which has a longer-term vision. There needs to be improvements to existing policy processes. We are feeding all of this into the independent review – the hope is this work will be picked up and carried on from that. Q: What specifically would the strategy look like for placing GGRs at the heart of the CCUS clusters programme? A: CCUS clusters programme is the peak of GGR related climate policy in the UK – but the scheme is almost entirely focused on CCS. Would like to see more of a role for GGRs in that scheme be that Indirectly or more directly seeing more GGR projects in the programme. C: 'Place GGR at the heart of the CCUS clusters programme' is subordinate to the other recommendations as if you get the demand for GGRs coming in, then on a subsidy cost per tonne basis, GGRs will compete very well with other forms of CCS in the cluster sequencing framework. C: In CCSA's response to the GGR review, selecting GGR projects alongside other carbon capture emitter projects in the cluster sequencing was highlighted – connecting them to available stores to demonstrate not only the business model but the technology itself and how that sits alongside the wider CCUS infrastructure. **4. Discussion – Additional-demand side measures: SAF sub-mandate** (All) • SAF Mandate: for airlines, there is a mandate that you have to buy a certain percentage of your aviation fuel demand as SAF. 2% currently but will rise to 10% by 2030 – over a million tonnes should be purchased. • The SAF element of decarbonising aviation is catered for – but CCC estimate by 2050 roughly the same or potentially more of the work of decarbonising aviation will need to come from GGRs than SAF.

	• SAF sub-mandate proposal would be to look at existing mechanisms for the SAF mandate and try to apply these to GGRs. This would be to the extent to which airlines would be allowed to buy GGRs as opposed to paying for the SAF buy out price. • Airlines have expressed interest into buying GGRs rather than paying the SAF buy out price as then can contribute towards decarbonisation plans. <u>Q&A</u> C: Something to think about is what this would do to the existing SAF mandate in terms of costs i.e., cost of a GGR as opposed to obtaining SAF. Along with a GGR sub-mandate within SAF there is also discussions about a sub-mandate for e-fuels within SAF. C: May create the issue of pulling demand out of the SAF market as the cost of GGR is cheaper than the SAF buy out price – this could be the opposing argument to it from SAF developer point of view. C: For the purposes of how the SAF was designed, it would make sense to have a mechanism to ensure that GGRs are more expensive than the SAF option to ensure a hierarchy. C: Few ways that could integrate this – with one being through the buyout mechanism mentioned. Another point is that the UK SAF mandate takes a carbon intensity and volumetric approach – because they use certificates as a mechanism, the more carbon intensity is reduced, the less certificates are needed effectively with a 70% baseline. GGRs could be used as well but is about attaching it to a unit of SAF to lower the carbon intensity as emitters are awarded through it. The issue with the buyout price is mapping out how much that is going to be. C: In some SAF production, carbon is a component of the fuel structure. If could allow SAF producers to use non biogenic CO2 supported by GGR certificates. Therefore, allowing GGRs to help in the production of the SAF rather than choose between GGRs and SAF. C / Q (**Action**): The group needs decide on a proposal for a mandate so that the CCSA can start to develop it further. The CCSA's work could build out how this could operate. Are there any opposing views? A: We have concerns with the 'sub-mandate' title (i.e., how it is named) – as it implies that there is a mandatory requirement to procure a level of GGRs under the SAF mandate, whereas the discussion today expressed there would be optionality. A sub-mandate within a mandate where there are already other sub-mandates is something we would not support. C: We are broadly supportive of the sub-mandate – but there are questions how this would work, and we have not had a closer look yet. C: The idea of this measure has been based on discussions we had during the GGR review period. The demand certainty point

	that underpins the discussion, regardless of CCSA positioning on this, I would invite the DESZN GGR review team to explore this further as would be good to have this as a central point of the GGR review outcome. C: Dft spent a long time looking at technology uptake, available supplies of feedstocks etc. – the dynamics of the pricing and against the buyout would be something that would be of concern to project developers. Adding another mandate would totally upset the dynamic that would be created by DfT and would be of concern to dedicated SAF project developers in the UK. C: Just to note, in the review, DESNZ are reaching across other departments for their views on some issues in the GGR Review. C: In a roundtable discussion there was also concerns expressed by a SAF developer who noted that possibility of disrupting the SAF mandate after it took a long time to get it to that point. We do need to be mindful of the progress that is being made in that sector. **5. Discussion – GGR Review Call for Evidence & Next Steps – key member takeaways, key emerging themes, outstanding gaps** (All) CCSA perspective on roundtables: • Demand certainty measure is of high importance. • Needs for GGRs to address residual emissions – positive steps in this area. • Gap that needs to be addressed in terms of how to balance supply and demand, and how to provide certainty to investors. • Need to move further from Government subsidised model to a self-sustaining market – long-term goal, but steps that need to be taken to achieve this (including CCUS cluster programme decisions and developing an investable business model for early projects). • UK is positioned well to be a leader in GGR space but have identified gaps in terms of what does that look like within potential further studies e.g., export driven growth, aviation demand. • Cost reduction piece and lessons learned is something that the CCSA has being doing work on separately to this in terms of what does future allocation models look like and how can we enable cost reductions through enabling lessons learned of early projects. Q&A C: Roundtable on BECCS that covered large scale and small scale – one key theme was the impact of renewable obligation expiry. End of RO support has been covered for large scale BECCS developers, but not for smaller sites. To keep biomass CCS options for smaller sites there is a funding gap between the

	current support mechanisms and future possibilities – main concern for small producers. C: A message taken away from that roundtable was about the investment risk and the difficulty with attracting capital – firstly the type of investment, as GGRs is seen as too risky. But also, the scale that is needed in terms of DEVEX and CAPEX is high. On top of this, the cluster sequencing programme is competitive – not guaranteed a space in the pipeline. C: A point made was that DEVEX is not at risk – capital may be at risk, but DEVEX will never see that money back. Also, small-scale BECCS should be an area where can really get cost savings – because if can get modular CCS solutions then have economies of scale. C: We need to know immediate signals in the market –a project negotiation list will be published soon which would help. Also need Government to advance NPT – there are concerns within the CCSA that progress in this policy area is slow. CCSA is happy to provide further input from industry regarding how to help develop the GGR sector including NPT. C: One other question raised at the roundtable was what BECCS is for – is it for power generation or CO2 removals. C: EfW roundtable – one point flagged was EfW business model is at a different stage to that of Power BECCS and GGR business model. In its current form the Waste ICC business model includes a restrict and review clause – essentially meaning that a developer would not be able to monetize any sale of GGR credits. Discussion around revenue stacking leading to cost reductions over time.
Actions	1. For further information about topics discussed in the expert group for the BSI GGR Standards, please ask the CCSA. 2. Reach out to the CCSA if you have any initial views on the framing of the CCSA GGR Position Paper. 3. CCSA to further test the SAF sub-mandate discussion with wider membership. 4. CCSA to send out details to members for GGR Review Parliamentarian event. 5. Reach out to Carbon Gap if you have questions or comments regarding the Carbon Gap report on carbon removals.
Next Meeting Date	15th September 2025
All working group materials can be found here	