

Integrating Greenhouse Gas Removals in the UK Emissions Trading Scheme

August 2024

Background

The Aldersgate Group is an alliance of major businesses, academic institutions, professional institutes and civil society organisations driving action for a sustainable and competitive economy. Our corporate members believe that ambitious and stable low carbon and environmental policies make clear economic sense for the UK. Our members have operations across the UK economy and include companies such as Associated British Ports, CEMEX, Michelin, Johnson Matthey, National Grid, Suez, Scottish Power, and Siemens.

We develop independent policy solutions based on research and the expertise and diversity of our members. Through our broad membership, we advocate change that delivers benefits to an every-growing spectrum of the economy. The response to this consultation draws on previous Aldersgate Group responses and input from members.

Questions

1. Do you agree with the Authority's principles for policy design?

The Aldersgate Group supports the integration of Greenhouse Gas Removals (GGRs) in the UK Emissions Trading Scheme (ETS). We agree with the eight principles for policy design outlined. Including GGRs in the UK ETS could help incentivise investment in GGRs, engineered and nature-based, by creating a financial reward (through mitigated carbon costs) for using GGRs and tackling residual emissions.

The first principle, to 'maintain the incentive to decarbonise', is paramount. We accept that policy decisions must balance the different principles, however, the first principle must be maintained. One potential risk associated with the inclusion of GGRs is the undermining of efforts to decarbonise if the cost of GGRs falls below the cost of mitigation – maintaining the first principle is essential to manage and mitigate this risk. The policy design should ensure alignment with agreed net zero principles and mitigation hierarchy. The Science Based Targets Initiative's (a widely used standards body) Net Zero Standard says that companies must decarbonise at least 90% of their scope 1-3 emissions by 2050, and following the mitigation hierarchy, use offsets to neutralise the hard-to-abate remaining emissions (with further best practice guidance to use offsets for all scope 1-3 emissions in the meantime, as a method of being 'carbon neutral'). The integration of GGRs into the UK ETS must be aligned with widely accepted net zero science.

The principle for future proofing and flexibility is also welcome. The future ETS market is likely to change substantially and the integration of GGR into the UK ETS must be designed with agility to accommodate potential changes. Changes may include expanding the sectors covered by UK ETS, as well as technology and land use policy.

The Aldersgate Group recommends expanding the description of the environmental integrity principle to also be mindful of nature restoration. Perverse outcomes may emerge where land is valued for carbon only. Unintended consequences for nature and land use

could emerge without robust regulatory measures in place to avoid them. For example, the planting of monocultures for carbon removals can have a negative impact on biodiversity and ecosystem services, such as water filtration and natural flood defences. A framework for nature protection must be in place to ensure sustainable deployment of GGRs included in the UK ETS.

We recommend an additional principle for interoperability with international carbon markets, for example with the EU ETS. The Aldersgate Group supports the linkage of the UK ETS to the EU ETS. A considered approach to linkage will ease compliance for UK companies exporting to the EU, who would not have to produce new documentation of compliance with EU rules. It should also improve liquidity and reduce volatility in the UK ETS, as being part of a bigger market increases the opportunity for trading allowances. Investment decisions for GGR will be challenging in the event the UK ETS is highly volatile and in cases where GGR sites are supported by contracts for difference, market volatility will impact Government underwriting.

The addition of GGRs into the UK ETS should be done in such a way as to not preclude future linkage with the EU ETS. The EU ETS does not currently accept the use of GGRs for compliance purposes. However, the European Commission intends to report, by 31 July 2026, on how negative emissions technologies could be incentivised and covered by the EU ETS. Alignment and linkage with the EU ETS may be important for the development of the UK GGR sector because the UK has significant CO₂ storage potential. Cross-border transport of CO₂ will only be possible if the UK carbon price is competitive. A competitive UK carbon price will be essential to leverage the opportunities from the UK's CO₂ storage potential.

Finally, the wider policy framework, beyond the UK ETS, has an important role to play in the deployment of GGRs and the growth of the GGR industry in the UK.

2. Do you agree the Authority should maintain the gross cap for initial integration of GGRs in the UK ETS (Option 2)? Please explain your answer.

The Aldersgate Group is supportive of Option 2 for the initial integration of GGRs in the UK ETS.

Option 1 creates a potential mitigation deterrence for UK ETS participants as unrestricted integration of GGR allowances could counteract the role of the decreasing net zero aligned cap. Additionally, Option 1 could suppress allowance prices and the financial viability of GGR activities, especially as GGR deployment increases over time.

Option 3 requires accurately predicting annual GGR deployment rates to adjust the cap and maintain the mitigation incentive. There remains significant uncertainty about the overall scale of GGRs that can be achieved within practical limitations of renewable energy availability, biomass availability, raw material availability and consideration of impacts on nature, landscape, and culture. In the short term, while the GGR sector is nascent, pre-empting GGR deployment rates would be challenging and risks resulting in excessively high allowance prices or increased emissions for sectors covered under the UK ETS.

Option 2 is a pragmatic initial approach. It reduces the mitigation deterrence risks inherent in Option 1 by maintaining, rather than increasing, an identical supply of allowances in the UK ETS, following GGR integration. It also allows for uncertainty as the sector develops. The policy design approach must yield a robust enough price to incentivise supply and a route to market while not being so high that it is unpalatable for emitters who face wider challenges beyond cost for mitigation, including lack of access to low-carbon fuels or electricity grid connections. Wider mitigation support is needed from the Government to tackle these issues.

We agree that, in the longer term, it will be important to consider if Option 2 continues to sustain demand for the scaling of the GGR sector. We strongly support the evaluation of this approach to consider the long-term development of the GGR sector. This evaluation should be scheduled on a defined timeline, to give businesses certainty and any changes made should be consulted on and clear information and timelines provided.

3. How can the UK ETS sustain demand for GGRs in the long-term, taking into account the consideration of setting a new cap (Option 3)?

In the longer term, with a better understanding of sector decarbonisation roadmaps (in terms of the extent of a sector's decarbonisation and ongoing progress) and of the supply of GGRs, the Authority may be able to reduce the cap to drive demand and maximise economic efficiency whilst continuing to achieve climate targets.

Option 3 where the Authority reduces UK ETS caps by the expected supply of GGR allowances entering the UK ETS could provide greater demand in the long term as the revised caps would not limit the number of allowances distributed to GGR operators.

One option for how the UK ETS could sustain demand for GGRs in the long-term, while also driving the incentive to decarbonise, would be to expand the sectors covered by the UK ETS. This would increase the size of the compliance market and ensure the sectors with likely residual emissions by 2050 are compliant.

A scheme design that ensures international interoperability will also enable GRR operators to take advantage of international markets with greater ease, further driving demand.

We agree that the UK ETS has a role to play in building demand. However, it will be important for the Government to evaluate the potential of other demand-creating or supporting policies and their relative effectiveness. It may be the case that the UK ETS is not the appropriate vehicle for maintaining the long-term demand of GGRs, given its primary purpose is driving mitigation.

4. Do you agree that GGR allowances in the UK ETS should be issued ex-post (i.e. after the removal has taken place and been verified)? Please explain your answer.

We agree that GGR allowances in the UK ETS should be issued ex-post. Awarding allowances only after the activity has happened and been verified represents the most

environmentally robust form of crediting. Ex-post is an established practice in existing voluntary carbon markets which means businesses will be familiar with the approach. The GGR market must be developed in a manner that builds confidence and trust in the methodology. Clear standards and ongoing robust monitoring, reporting and verification will be essential for maintaining confidence in GGR allowances.

We agree that using ex-ante allowances could disrupt the assessment of supply and demand of GGR allowances, particularly in cases where GGR operators fail to deliver the carbon removals promised. The use of ex-ante risks undermining the market and disrupting progress towards statutory carbon budgets and net zero targets.

- 5. Does the Authority need to consider any additional measures for the UK ETS to ensure GGR operators are able to arrange offtake agreements? If yes, please provide specific details of which measures should be considered.**

We agree that offtake agreements outside of the UK ETS present an important opportunity for financing GGR operators upfront. The Authority should seek to understand from GGR operators the possible scale of offtake agreements, how this may impact the availability of GGR allowances for UK ETS and how this may change over time. Enabling GGR operators can take advantage of both UK ETS markets and voluntary carbon markets will ensure alignments between methodologies, carbon accounting, and measurement, reporting, and verification systems.

The Authority may also need to understand the perspectives of buyers and their needs to engage in an offtake agreement. Buyers may want a degree of confidence before signing an agreement. Building this confidence may be potentially challenging for new GGR operators without a track record or those who operate particularly innovative GGR technologies. There may be a role for government policy to ensure GGR operators can build that track record (for example public support for demonstrator projects) and other frameworks, guidance or standards to support the development of these agreements.

- 6. Does the Authority need to consider any specific measures for smaller scale GGR operators, including smaller scale landowners if woodland is included in the scheme? If yes, please provide specific details of which measures should be considered.**

The Authority should seek to understand the MRV capabilities of smaller operators, alongside their overall capacity to participate in the UK ETS. Where possible the authority should seek to use existing standards, align with existing methodologies, use standard legal contracts and use or expand existing registration infrastructure, to reduce the administrative burden on small operators. While still maintaining robustness, the Authority should minimise the complexity of the scheme, provide clear information in a timely fashion and offer appropriate support to GGR operators.

The Authority will also need to consider how smaller innovative start-ups and scale-ups bring new GGR technologies to market and the approach that may be needed to support their specificities.

7. Who should receive the GGR allowance? Please consider whether this would also apply for GGRs that involve multiple actors in the value chain and provide examples.

The GGR allowance should be received by the entity or entities responsible for preserving the carbon removals. The Authority should seek to understand how this would work in practice and the operational risks. The Authority will need to ensure there are clear processes for tracking the 'ownership' of carbon in removal projects. It is vital for the environmental integrity of GGR allowances and trust in the approach that responsibility for preserving and monitoring removals is clear.

8. Should allowances from GGRs be differentiated from UKAs and, if so, how?

Differentiation could be worthwhile if it means GGR allowances can attract higher prices. Differentiation will give holders of those allowances more information on how they were generated, and this transparency would allow purchasers to express preferences for GGRs and UKAs. This would also build useful market information. Further differentiation between different GGR approaches would create the opportunity for purchasing certain types of GGR allowances for non-compliance reasons. For example, preferring to purchase a nature-based GGR due to the additional nature restoration value. Alternatively, purchasers may prefer engineered GGRs due to a lower risk of reversal.

However, the Authority must carefully consider the potential unintended consequences of differentiation. The risk of unintended consequences will likely be higher the higher the level of differentiation. GGR differentiation could lead to volume and liquidity issues resulting in poorer market function which could in turn reduce market confidence. Market preferences could also lead to competition between removal types and subsequent impacts on GGR project financing and deployment. This may not align with the intended policy outcome.

The risk caused by further GGR differentiation could also disrupt the function of wider policy aimed at supporting the initial deployment and scaling of the GGR sector. The proposed business models for GGRs will be challenging to operate in a very volatile and illiquid market which would reduce certainty in terms of payments or revenue over time to these projects.

The policy must fulfil its aim to support tackling residual emissions and develop high quality GGRs, not be a mechanism to drive certain types of GGR. Differentiation introduces a risk of moving away from driving this desired outcome and creating preferences.

There is the additional question of whether differentiation boosts demand for allowances from outside the regulated industries under the UK ETS. The voluntary market is effectively built on differentiation because businesses choose to participate in the voluntary carbon market to differentiate themselves and build a positive reputation. However, it is not immediately clear that in the context of a compliance market, regulated businesses would see the benefit of buying a different 'type' of allowance. Given the primary role of the UK ETS to drive mitigation of compliant

sectors, the Authority should particularly consider feedback on differentiation from regulated businesses.

Differentiation presents advantages and potential risks. At this stage, we would support differentiation between GGRs and UKAs. However, the potential risks or unintended consequences from further differentiation should be carefully considered and mitigated if the Authority is minded to pursue further differentiation.

11. What should the Authority's role be in facilitating a route to market for allowances from GGRs?

We support the Authority facilitating auctions on behalf of GGR operators, with the revenue received being distributed back to those operators. This is in line with the way the scheme currently works with the Authority auctioning UKAs and will be straightforward for compliant businesses to engage with. The Authority must facilitate a route to market that ensures participants in the UK ETS can trust the integrity and fairness of the scheme (trusting that others are not being rewarded for impermanent removals, for example).

Policy design around the route to market and the Authority's role will need to consider how GGR allowance sales and subsequent revenue for GGR operators and their investors will be affected. A clear timeline and guidance on access to the market through auctions will be important to reassure investors and build long-term confidence. This will be particularly important for smaller businesses that may have limited financial runways and flexibility.

Once in place, we encourage a regular review of the policy approach regarding the route to market to ensure the policy design continues to fulfil its purpose.

Alignment of this approach and wider Government policy and support for GGRs, including timelines, will be important to ensure the successful implementation of policy. The Government can provide a strong signal for the industry and must ensure the wider policy framework is enabling.

12. Do you agree that allowances should only be awarded to UK-based GGRs? We welcome views from all stakeholders including sector-specific considerations. Please explain your answer.

We support the approach to only award GGR allowances to UK-based GGR initially. It may be challenging for the Authority to validate non-UK-based GGRs and assess the impact on the market. Opting to only award allowances to UK-based GGRs is an opportunity to develop a novel policy and learn from it before increasing the geographic scope. The Authority can learn from the experience with UK GGRs to better understand what is needed for non-UK-based GGRs. Additionally, this approach should help to stimulate the UK GGR sector which is an economic growth opportunity, supporting job creation and UK-based project deployment.

We would welcome a review of the approach to only award allowances to UK-based GGRs in order to ensure the policy design continues to fulfil its purpose of supporting the development of the sector and tackling residual emissions. The Government will need to continue to play an active role in the development of international agreements (including Article 6.4 of the Paris Agreement which established an international carbon crediting mechanism) in order to define robust international-based GGRs, international trade of removals and compatibility with ETSs. At present there remain high risks associated with trading carbon credits across borders, the differing strength of regulatory and legal frameworks in other geographies, and the lack of robust institutions to enforce compliance with standards across borders.

Review of the inclusion of non-UK-based GGRs should be carried out at a defined time which provides businesses with sufficient notice of the policy review and any change made should be clearly explained as early as possible to allow businesses to prepare and be compliant.

It will be important to design the UK policy in a manner that is aligned with international approaches as the design should not preclude linkage in the future. The EU is currently focusing on defining eligible permanent CO2 removal methods and the Authority should consider alignment where possible.

13. Do you agree with the proposed permanence framework of both a minimum storage period, a liability measure and a fungibility measure? Please explain your answer.

We are supportive of an approach that prioritises robustness alongside functionality of the market. GGRs must not be integrated into the UK ETS without adherence to robust standards and methodologies to ensure the technologies that are integrated represent real, verifiable, monitorable and sufficiently permanent removal. Ensuring that participants in the UK ETS can trust the integrity and fairness of the scheme is essential for both the functioning of the scheme but also the development of the GGR sector.

We agree with the approach to have a minimum storage period and liability measure to ensure GGRs are high quality and durable and maintain high standards to avoid and minimise reversal events. We agree a fungibility measure is necessary.

15. How should the Authority manage potential reversal events from GGRs? Please consider the liability options outlined above, whether any options exist that have not been considered, and how the potential liability options could be used together or in sequence.

We agree that the Authority needs to balance the need to ensure that GGR operators are liable for reversal events with the need to protect the functioning and integrity of the UK ETS market. The Authority must take a long-term view when designing the management of potential reversal events, including scenarios where the UK ETS is no longer functioning.

We are supportive of a combination of both measures with the Authority taking responsibility for robust monitoring. The option where the liable entity could be required to purchase negative emissions from a GGR outside the UK ETS (which meets the UK ETS market participation requirements and is available at the scale required) would reduce the potential disruption to the UK ETS market in the case of a large reversal event. Additionally, this option has longevity beyond UK ETS which may function differently or not be in operation in future. By using this option, the Authority would need to carefully monitor and adjust the cap accordingly to ensure the UK ETS remained net zero aligned. We support the flexibility of combining the methods: in the case where the liable entity has purchased GGR allowances from a different GGR operator outside the UK ETS minimising market impacts, they could also buy allowances from the UK ETS to compensate for any remaining elements of the leakage if needed.

The Authority will need to monitor the reversal risk across the portfolio of GGR allowances in the UK ETS and consider the availability of GGR units inside and outside of the UK ETS to manage this risk.

The Authority must consider and design mechanisms to manage GGRs beyond the existence of the UK ETS, the Authority's current role, and with consideration of potential developments to the GGR sector and operators themselves. For example, operators may cease trading or be in a position where they cannot meet their liability obligations. The Government may wish to consider creating a fund held and available to the Government to address the risk of reversal. Payments to the fund could be a set amount per tonne of carbon stored, a percentage of sale value or weighted based on the scale of risk of reversal. This approach has similarities with the 'fungibility' measures proposed but addresses the risk of unexpected reversal over long time periods rather than managing the fungibility of carbon with different expected storage periods.

16. Where should the liability for any re-release of stored emissions apply if there are multiple actors in the GGR value chain?

There should be a clear liability responsibility as a requirement for GGR actors to participate in the UK ETS. Where possible the Authority should seek to align with existing liability frameworks for GGR as this will ease business participation.

17. Should the liability measure differ if the GGR is also subject to a fungibility measure? For example, if the reversal event was avoidable (i.e. within the control of the GGR operator) or unavoidable (i.e. due to factors outside of control of GGR operator).

We understand the need to balance environmental integrity with the use of the UK ETS to support GGR deployment. It will be important to ensure the standards for GGRs are high to keep the risk of reversal as low as reasonably possible.

We support the liability differing if the reversal event was avoidable as opposed to unavoidable. This helps to maintain the highest standard for GGR. This practice is in use under the Woodland Carbon Code. Where possible alignment with existing approaches will minimise the complexity of the scheme and burden on businesses wanting to participate.

The measures must drive the intended outcome of minimising avoidable reversals and mitigating unavoidable reversals. The liability measure must be sufficiently high to incentivise the highest standards and not become a cost that businesses are willing to pay instead of investing in reducing the risk of reversal.

18. Should the Authority use a buffer pool or equivalence ratio?

A fungibility measure is useful if GGRs with shorter minimum storage periods or with greater risk of reversal are allowed into the UK ETS.

We are supportive of methods that ease the participation burden on businesses where possible. The buffer pool approach may be preferable as it is currently used by the UK's Woodland Carbon Code and the four biggest carbon credit registries (Verra, Gold Standard, American Carbon Registry and Climate Action Reserve) and as such is a familiar approach for GGR operators. The ETS would also be better aligned with voluntary carbon markets.

19. How could the Authority set the contribution rate for a buffer pool? Should this be a flat rate contribution across all applicable projects, or should this vary per project?

It may be appropriate to vary the contribution rate based on the extent to which the riskiness of a project or project type can be reasonably and confidently assessed. The higher the risk, the greater the contribution to the buffer. We are supportive of an approach that maintains the highest environmental integrity in the short, medium and long-term.

26. Should new ex-post woodland units generated in line with UK Woodland Carbon Code standards be considered for inclusion in the UK ETS? Please base your response on the evidence outlined around permanence, costs and wider land management impacts, and on the policy options outlined in the rest of this consultation.

The Aldersgate Group supports the Authority's choice to consider new ex-post woodland units generated in line with UK Woodland Carbon Code standards for inclusion in the UK ETS.

We understand that the inclusion of ex-post woodland in the scheme could enable an injection of funding to help plant woodlands and increase natural regeneration.

However, there are significant risks that need to be mitigated. Key risks include (1) the lower price of new ex-post woodland units competing with more expensive engineered GGRs, (2) incentivising the planting of monocultures for carbon sequestration with negative impacts on nature and ecosystem services, (3) the conversion of agricultural land and subsequent impact on food security, (4) social and cultural impacts of loss of access to land or changes to landscape.

The Climate Change Committee has asserted to reach net zero the UK woodland cover needs to increase from 13% now to 17-19% by 2050. This would require the planting

of 30,000-50,000 hectares of woodland each year. There is a clear need to increase woodland cover. Ultimately, the Authority must weigh up the value of adapting the policy design to manage the risks and complexities associated with the inclusion of new ex-post woodland units, with the overall contribution that woodland GGRs could make to the UK ETS and whether other policy mechanisms could be used outside of the UK ETS to support new ex-post woodland units.

- 27. If the Authority does include new ex-post woodland units generated under the UK Woodland Carbon Code in the UK ETS, should any changes be made to the Woodland Carbon Code? For example, this could include changing the 20% flat rate buffer contribution, or changes to the MRV and measures to mitigate wider land management impacts. Details of the woodland carbon code can be found here: <https://woodlandcarboncode.org.uk/standard-and-guidance>**

We support alignment on methodologies and MRV to ease the compliance burden on businesses. The policy must be developed to align with wider land use policy. The Government's upcoming land use framework has an important role to play in ensuring this wider policy alignment, as well as other land use policies such as Local Nature Recovery Strategies.

- 28. If the Authority does include new ex-post woodland units generated under the UK Woodland Carbon Code in the UK ETS, should any measures be taken to mitigate potential social and cultural impacts? Please provide details of the impacts, including consideration of impacts on different land ownership models, and potential measures.**

If the Authority does include new ex-post woodland units, we recommend the Authority works across the Government to explore the potential social and cultural impacts. These can be considered as part of the National Policy Statement and National Planning Policy Framework and then managed at the planning stage of GGRs. Strategic spatial planning, public support and community and nature considerations are paramount. We are supportive of the Defra and BSI Nature Investment Standards Programme which is committed to exploring how social impacts should be considered across all nature markets.

We are concerned about the potential risks of unintended consequences for nature restoration and food security. Should there be too great an incentive for abatement through nature-based GGRs such as afforestation, perverse outcomes such as the excessive conversion of natural habitats and agricultural land, or the planting of damaging monocultures as carbon sinks may emerge. Policy design must ensure these risks are addressed.

The California Cap and Trade Scheme is integrating nature-based removals, providing an opportunity to learn lessons.

- 29. Do you agree with the Authority's assessment of peatland restoration?**

UK peatlands currently account for 6% of UK emissions and this is expected to rise. The Climate Change Committee recommends over 1 million hectares of peatland to be restored by 2050, or approximately 40,000 hectares per year on average. Last year, around 10,000 hectares of peatland were restored in the UK.

Evidence suggests that peatland restoration largely delivers emission reduction rather than significant carbon removal. The Authority should seek further evidence on this and consider its position further.

Moreover, outside of the UK ETS the Government should review the incentives available for peatland restoration under the Environmental Land Management Scheme and evaluate if it is sufficient. If it is not sufficient, further mechanisms should be considered to better incentivise peatland restoration.

30. Do you agree with the Authority's assessment that, by maintaining the gross cap on emissions, additional controls could be used to target wider impacts but not mitigation deterrence?

We agree that maintaining the gross cap on emissions is the primary lever for ensuring that UK ETS participants continue to decarbonise and will not delay abatement via the purchasing of GGRs.

33. Do you agree with the Authority's minded to position to adopt supply controls to target other objectives, such as phasing GGR integration or addressing market impacts? Please consider how supply controls can be used in a way that is compatible with providing a strong demand signal for GGRs.

We are supportive of an approach that maintains the environmental integrity and the purpose of the policy to help stimulate the GGR market while minimising disruption to the existing UK ETS market and maximising ease of participation for businesses. Supply controls may help to manage the integration of GGRs into the UK ETS and preserve market stability. However, there is also a risk of damaging investment signals and delaying the scale-up of supply, particularly for smaller developers. It will be important for the Authority to consider how best to design the market to meet its different policy objectives including how it will support the Government's targets for GGR deployment.

34. What would be the optimal timing for GGRs to be integrated into the UK ETS, taking into account the considerations set out above? Please explain your answer with reference to impacts on both the UK ETS and GGR deployment.

We support GGRs being integrated into the UK ETS at the suggested feasible integration date of 2028 subject to appropriate standards and policies being in place. Time will be needed to develop GGR methodologies and standards, design new auctioning regimes, align with legislative timetables, implement necessary updates to the UK ETS registry and reporting platform, as well as ensure the UK ETS Authority is adequately resourced for this new functionality. Sufficient time must also be factored in, alongside clear information, to give businesses time to prepare once the design is

finalised. Additionally, the Authority and wider Government will need time to factor in the loss of revenue from the UK ETS caused by the integration of GGR allowances.