



Sylvera's response to the UK ETS GGR consultation

Overarching comments

We are broadly supportive of the proposals to include GGRs in the UK ETS, find the proposals set out in the consultation document broadly sensible, and applaud in particular the emphasis on the importance of the GGRs being high quality (the 'Environmental integrity' Principle).

However we would like to highlight two key risks to the proposals which the questions do not invite us to address, so we do so here, regarding GGR ratings, and GGRs as 'specified investments' under the Financial Services and Markets Act 2000.

Firstly, we are concerned that the consultation misses a crucial facet of the carbon markets, which is that credit quality varies materially at the project level. Two projects using the same methodology can achieve markedly different outcomes for the climate, ranging from no impact at all to high impact. The consultation ignores this fact, for which there is now very clear evidence. Insoing, the consultation also misses an opportunity to leverage the emergence of carbon ratings, which can provide cutting edge, objective and reliable assessments of the quality of individual GGR projects. In addition the carbon ratings industry, born with the incorporation of Sylvera on 1 January 2020, is a major UK clean tech success story, and a green feather in the cap of UK plc.

By ignoring the project-specific nature of GGR quality the consultation risks opening the UK ETS up to GGRs of uncertain or even dubious quality - skewing incentives, misdirecting finance and short-changing the climate - and overlooks a clear potential (homegrown) solution. We would be happy to speak with the relevant policy makers to explore how ratings data can help ensure and assure the quality of GGRs within the UK ETS.

Secondly, we are concerned that the implications of the proposal to include GGRs in the UK ETS (which we broadly support) in light of Art 82B Financial Services and Markets Act 2000 (Regulated Activities) Order 2001 (SI 2001/544) - hereafter, 'the RAO' - have not been adequately considered. Currently, UK ETS allowances are "specified investments" under the RAO, meaning one must obtain authorisation or an exemption to carry out a "specified

activity” relating to a UK ETS allowance. Voluntary Carbon Credits (“VCCs”) are not currently “specified investments”. Typically therefore, market participants in the VCM are not regulated Persons.

If a GGR operator can choose whether or not to issue a VCC or a GGR allowance, and presumably can convert between the two prior to its use / retirement, then careful thought needs to be given to the regulatory treatment of the two, the point at which that changes (if it does) and the implications for a number of existing market participants that are not currently regulated persons. GGRs could flip between, and not being, “specified investments”, depending on whether they are, or become, or cease to be, eligible as allowances within the UK ETS. This could have far-reaching and complex ramifications and unintended consequences for a whole host of GGR ecosystem actors, potentially inhibiting much needed investment and growth in the sector.

Section 1: Principles for Policy Design

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

Yes, though we would strongly urge one addition and two minor amendments.

Firstly, the voluntary carbon market (VCM) has a critical role to play in allowing us to get to net zero faster. Carbon markets, compliance and voluntary, need to be symbiotic. It would be helpful to see a principle that integrating GGR allowances into the UK ETS will not adversely impact the VCM. This should include, for example, working closely with carbon crediting programs and other market infrastructure providers, including carbon ratings agencies. Secondly, the Principle of ‘Environmental integrity’ is too narrowly framed and reflects an out-dated conception of credit quality in today’s carbon markets (including for GGRs). We suggest adding after the words “(including monitoring, reporting and verification” the following: “, as well as carbon ratings)”.

Thirdly, under the Principle of ‘Fiscal impact”, suggest removing the word “overarching”, as this could be read as overriding wider climate objectives, such as the achievement of carbon budgets, meeting the UK’s NDC, etc.

Section 2: Cap

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.

Yes, as an initial integration phase of learning-by-doing we support Option 2 whereby the cap is maintained and any carbon removal meeting the UK Authorities requirements through GGRs can be replaced by a UK allowance (UKA), which represents the most simple pathway forward.

If Option 2 is taken on the cap, then a decision on whether or not to set supply controls for GGR allowances beyond that should be solely dictated by whether greater climate impact would be achieved through (i) the funding being directed towards GGR operators or (ii) the funding being directed towards government has the greater climate impact. As the consultation notes, setting supply controls will dampen the demand signal sent to GGR operators. This signal needs to be as strong as possible given (i) the nascency of the GGR ecosystem, and (ii) the volume of emission removals that GGR operators have already pre-committed to non-ETS participants (e.g., groups such as Symbiosis and Frontier).

Section 3: Allowance design for GGRs

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.

Yes we agree. Issuing credits in advance of removals taking place risks over-issuance and hence over-stated climate impact.

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.

The UK allowance price does not make the business case for the majority of durable GGRs, therefore while it can provide a signal to enable offtake agreements, and corporates to purchase UK allowances, additional measures will be required to make the business case for investment. Another crucial area is the timing of future cap reviews - these should be clearly signposted to give regulatory certainty for high-capital expenditure GGR projects.

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.

One point of complexity for GGR operators, which would place an especially high burden on smaller scale operators, regards the convertibility of eligible VCCs and GGR allowances, and hence the interaction between the VCM and UK ETS.

If there is an upper limit on the number of GGR allowances that can enter the UK ETS, then GGR operators necessarily need to be able to determine the ratio of VCCs and GGR allowances that it issues and sells. The ability to do this is critical to ensuring that a GGR operator can maximise its returns, and therefore drive further climate impact.

This convertibility is also important for the proper operation of early stage financing for GGR operators (e.g., in the form of offtake agreements). Early stage financing agreements, as

noted, often contain future carbon rights (i.e., the right to receive the VCCs generated). Early stage investors typically have one or both of two intentions: to receive a financial return from the investment, or to receive usable carbon rights (e.g., in the form of VCCs that it can use as part of its climate targets). In order to have the least disruptive impact on the early stage financing ecosystem and ensure participants can achieve any ambition, it is important to ensure: (a) convertibility between eligible VCCs and GGR allowances, and (b) the ability of non-GGR operators (e.g., an offtaker who receive an eligible VCC) to both convert the instruments and sell a GGR allowance.

The Authority should therefore be mindful of the additional work created for GGR operators to serve both the VCM and EU ETS, in particular for small scale GGR operators, and seek to minimise this where possible.

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.

CO2 removal suppliers (project developers), normally have agreements with the participating companies on which company registers the project with a carbon-crediting program and therefore this company receives the carbon credits. We expect this should be the same for UK allowances.

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

Yes, though we would advise keeping the route to market as simple as possible (e.g., combined auctions).

The question does not ask 'why', but we think this is a fundamental point worth setting out. GGR allowances, if they are high quality (see overarching comment atop this document), will benefit the climate in two distinct ways: (i) by being directly responsible for 1tCO₂e not in the atmosphere, and (ii) by creating a cost on the entity covered by the UK ETS of emitting 1tCO₂e, and hence in theory incentivising their investment in measures to reduce their own emissions. Benefit (ii) depends on a host of extremely complex and opaque factors, such as each covered entity's marginal abatement cost, the tightness of the UK ETS cap, and so on. Benefit (ii) applies to both traditional UKAs and GGR allowances. Benefit (i), which is much clearer and more directly beneficial, applies only to GGR allowances. Therefore GGR allowances inherently represent greater climate impact than UKAs - hence the benefit of differentiating them.

(The above assessment does not take into account the revenue government receives from the auction of UKAs, which could be deemed to denote a benefit (iii) which only applies to them, however quantifying the climate impact of that revenue would be impossible given HM Treasury's long-standing principle to avoid hypothecating funds.)

9. Do you think that differentiated GGR allowances would attract a higher price than existing emissions allowances and why? To what extent does this depend on the degree of differentiation (e.g. a generic GGR allowance versus a technology specific GGR allowance)?

Yes, partly because of the reasons set out in response to question 8, and partly because experience from the VCM shows that buyers are willing to pay a wide range of prices for a wide range of specific attributes (perceived or real). For GGRs specifically price can depend on factors such as permanence, location, feedstock, and activity. The greater the extent of differentiation, the greater the potential pricing differentials.

10. Will differentiated GGR allowances encourage non-compliance or non-trading entities to purchase these allowances?

Broadly yes, we expect so, because (i) for end users, this would increase the available information and transparency regarding a specific GGR allowance, making it more attractive, and (ii) for traders, investors and speculators, this could increase the potential upside of investment in specific types of GGR allowance.

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 believe that the UK ETS should allow for an international element given that the UK may also be a net exporter of GGRs in the future. We consider it important to support a global approach to solving climate change and potential future exports from UK plc. Removals might not be delivered in the UK, certain projects may have supply chains which are reliant on UK supplies, this could be a screening criterion to open up to non-UK based projects. Other considerations could relate to ownership structures (as distinct from territoriality, as per the distinction between GDP and GNI) and/or UK involvement in the value chain of the GGRs (as South Korea as part of its admission of international carbon credits into its ETS).

Section 4: Permanence

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.

Regarding the minimum storage period, the proposal that “GGRs will be required to prove they can store carbon for a minimum period of time in order to be eligible for UK ETS participation” is problematic, because the consultation is unclear regarding what is meant by ‘prove’, and also whether this requirement will be applied at the GGR method level, or at the

individual GGR project activity level. Provided proof of durability for carbon reservoirs is especially challenging where the security of storage is entirely dependent on the ongoing management regime applied to the site (e.g. soils, forests) and/or where efficacy or durability remains subject to scientific uncertainty (e.g. enhanced weathering or ocean alkalinity enhancement).

A well-managed forest may offer carbon storage for hundreds to thousands of years or changes in land management can lead to multi-century scale sustainable changes in soil carbon stocks. On the other hand, a poorly executed or operated geological CO₂ storage site or changes in land management practices can result in rapid depletion of the carbon reservoir. For some GGR methods, the durability of carbon storage remains uncertain. In most cases it can be difficult to discern these risks ex ante, and the situation may change over time. As such, an ex ante defined permanence duration becomes somewhat arbitrary and subjective.

A risk-based approach informed and continually iterated according to real-time data, on a project-by-project basis, would be more robust and practicable. This is an area where we, as the leading carbon ratings firm, have extensive experience and insight on, which we would be happy to share with the relevant policy makers to assist in optimising the design of this initiative.

Regarding the liability measure, the proposals are broadly sound. We would simply highlight that the UK is home to a fast-growing carbon insurance sector which could be well-placed to help manage these reversal risks - benefitting both the climate and UK plc.

Regarding the fungibility measure, the effect of buffers pools and equivalence ratios is effectively identical, so for simplicity we would suggest applying the latter. (Buffer pools' track record among the major VCM crediting standards is less than stellar, as we set out here.) However the most accurate and effective way to set the equivalence ratios would be on the basis of climate impact, conceived holistically. This would include expected durability, both in terms of likely duration and likely stability, but also other factors such as the LCA carbon inputs. Carbon ratings should be used to inform this approach, as it would allow for the most accurate, up-to-date carbon accounting and risk measurement possible, resulting in maximum integrity of the system.

14. What minimum storage period duration should the Authority set for GGRs entering the UK ETS? Please explain your answer.

It is impossible to state a minimum duration in isolation from a risk tolerance threshold. However the Oxford Principles provide a helpful guide here, by suggesting that the use of carbon credits writ large should evolve over the coming decades, based on the expected availability of and need for different types of mitigation. If the overall goal of all climate policy

is to reduce peak warming, then getting a handle on short term emissions is the most urgent priority, and a lower risk-weighted expected storage period - for example forty years - should be considered.

This period should rise predictably and rapidly, so that by a given point in the 2040s (depending on a range of factors, including cost) the minimum risk-weighted expected storage period is a thousand, or five thousand, or ten thousand years.

When combined with the concept of equivalence ratios this approach could balance the need for maximal reductions in the short term with the need for adequate and ever-rising investment in technologies and infrastructure able to ensure carbon is geologically stored.

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.

As stated above in response to question 13, the emerging carbon insurance sector is worth consideration in this regard.

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

As stated above in response to question 13, of the two options - which in effect are very similar - we would recommend an equivalence ratio.

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?

In all cases risks, contributions and equivalence ratios should be addressed at the project level, given the wide range of, and increasing clarity on, the project specific factors that determine climate impact.

20. Which factors should be considered when determining the appropriate contribution rate for a buffer pool?

As stated above, in response to question 13, the most accurate and effective way to set the equivalence ratios would be on the basis of climate impact, conceived holistically. This would include expected durability, both in terms of likely duration and likely stability, but also other factors such as the LCA carbon inputs. Carbon ratings should be used to inform this approach, as it would allow for the most accurate, up-to-date carbon accounting and risk measurement possible, resulting in maximum integrity of the system.

22. Should buffer pool contribution rates remain fixed over time or could they vary? If

they vary how should this be assessed? For example, the Authority could require projects to contribute depending on an assessment of risk at each verification period, and this could change overtime.

These contribution rates should be regularly reviewed, and ideally revised in real time according to the facts on the ground and our evolving and ever-improving understanding of project-specific risks. This would ensure maximal integrity of the system, whilst still being practicable, given the substantial advances in the relevant technologies in recent years.

23. How could the Authority design equivalence ratios?

As stated above, in response to question 13, the most accurate and effective way to set the equivalence ratios would be on the basis of climate impact, conceived holistically. This would include expected durability, both in terms of likely duration and likely stability, but also other factors such as the LCA carbon inputs. Carbon ratings should be used to inform this approach, as it would allow for the most accurate, up-to-date carbon accounting and risk measurement possible, resulting in maximum integrity of the system.

We would be happy to share our insights on this important topic. For example, we recently published a paper in *Nature*: Communication demonstrating the traditional approaches to estimating natural carbon stocks suffer from huge uncertainties. This work, partly funded by Innovate UK and undertaken in partnership with the World Bank, showed that in a particular forest type the amount of carbon stored was roughly double what the national inventory and (to that point) most authoritative science suggested. This enormous discrepancy highlights the extent of the remaining uncertainties regarding carbon storage, which the latest cutting edge science and technology is only now able to address.

24. Which inputs should be used in determining the appropriate equivalence ratios?

As stated above, in response to questions 13 and 23, the most accurate and effective way to set the equivalence ratios would be on the basis of climate impact, conceived holistically. This would include expected durability, both in terms of likely duration and likely stability, but also other factors such as the LCA carbon inputs. Carbon ratings should be used to inform this approach, as it would allow for the most accurate, up-to-date carbon accounting and risk measurement possible, resulting in maximum integrity of the system.

25. Should these equivalence ratios be fixed over time or regularly reviewed and amended?

These equivalence ratios should be regularly reviewed, and ideally revised in real time according to the facts on the ground and our evolving and ever-improving understanding of project-specific risks. This would ensure maximal integrity of the system, whilst still being practicable, given the substantial advances in the relevant technologies in recent years.

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.

We support including WCC GGRs, as woodland is a critical emissions sink which needs funding, and also brings considerable co-benefits relating to nature. However as with all other types of GGR, only high quality WCC GGRs should be included in the UK ETS, and this can only be reliably assessed on a project-by-project basis.

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

No. We strongly believe that there is a false dichotomy between emission removals and emission reduction activities and that high quality, much needed projects can be identified within each category as much as low quality projects can (as set out here). As such we support including high quality peatland GGRs, not least as this is a critical emissions sink which needs funding, and also brings considerable co-benefits relating to nature. For the same reason we are supportive of including high quality WCC and other nature-based project types.

We would also strongly discourage anyone from conflating "offsets" and "carbon credits", as the consultation does on page 42. Offsetting is a type of claim that a business can make relating to how it has used carbon credits, irrespective of the project type those credits were generated from. It is not the only type of claim or use of carbon credits, though, and we are seeing more and more interest in "contribution" claims in order to focus on the climate impact and not the semantics of the claim.

Section 5: Pathway to integration

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 would encourage the Authority to be as bold and ambitious as possible. This integration will send a hugely needed demand signal and therefore cannot come soon enough from a climate perspective.