

Internal Review of Kulshan Carbon Trust Biochar Carbon Credit Class

Date: May 2, 2023

Reviewers: Sam Bennetts, Tica Lubin, Ned Horning

Summary of Internal Review Process

The intent of the Credit Class Review is to ensure the draft submitted to the Regen Registry meets the integrity expected by our community and, if desired, ensure the document is sufficient to warrant review by Expert Peer Reviewers. The task of an Internal Reviewer is to act as an ally to Credit Class developers by providing critical feedback to help facilitate an understanding of how to improve the Credit Class to best serve Earth Stewards while maintaining scientific and community integrity.

The Regen Network Science Team has reviewed the <u>Biochar Carbon Credit Class.</u>. Our feedback has been provided in two ways:

- 1) Direct Comments: To provide targeted constructive feedback to specific sections of your Credit Class, our team commented directly in your document on what we found confusing, thought needed more definition, or what we thought was out of scope for this methodology. The comments can be found in <u>this document</u>:
- 2) Overall Reflections: To provide more generalized feedback to your Credit Class as a whole, our team provided the additional reflections in this document. Reflections were categorized by reviewers. A final combined summary of comments, feedback and suggestions is found in the Combined Summary section.

Internal Review

Reviewer 1 - Ned Horning:

I added a few minor comments in the document. On issue that I don't think was resolved was how are buffer pools managed. At the project, credit class, credit issuance, methodology or other level? If fungibility is at credit issuance managing buffer pools will require some planning.



Final Decision: - Pass or Suggested for another round of Internal Review

After they have a chance to assess and address issues this will be ready for expert review.

Reviewer 2 - Tica Lubin:

Project Eligibility

Add in: Conditions for Applicability

Conditions which make a piece of land eligible for enrollment in this program. Outline specifics requirements for how projects should prove applicable conditions and what needs to be reported during registration as part of the project plan. This could include geographic restrictions.

Outline the eligibility requirements for land which would be eligible for enrollment in this program. For instance projects which previously were wetlands or native forest which got removed recently should be excluded as it indicates that land stewards could have potentially removed native ecosystems to make money via the carbon market.

Add in: Regulatory Compliance

Specify any checks projects must go through to ensure that their implementation and ability to make carbon claims adhere to any local laws, regulations, and other legally binding mandates directly related to project activites and participation in voluntary carbon markets.

You can either be specific with what these requirements are, or just state that the, "The Project Area has to adhere and provide attestation of compliance to the local laws,regulations, and other legally binding mandates directly related to project activities as presented in the approved and applied methodology."

Add in: Crediting Term: A credit class must define the number of years in a renewal time period. There is no limit to the number of renewals on Regen Registry.

Under Project Rules and Regulations:

Add in: Approved Methodologies: The credit class admin will update this list as new methodologies are added.



Address Specific on Buffer Pool Per:

Permanence and Buffer Pools

- Buffer Certificates
- Permanence Reversal Buffer
- Permanence Period (time period)
- Permanence Reversal Buffer % allocation and type of buffer (see below)

Structure Options:

Credit Class Buffer - A single buffer pool for the credit class that all
projects contribute to. As the project developer it allows for aggregating
risk across projects as the structure is a larger pool to pull from if a single
project experiences significant loss.

Update Verification:

In this section you should specify exactly what the requirements verifiers must follow to audit a monitoring report.

- 1. Define if ISO certification is required
- 2. What type of audit the verifier should conduct (desk audit, field audit, or combination) and a list of specific things they should be checking for

A credit class must define requirements, if any, for 3rd party, independent verification of outcomes.

A credit class may define adaptations for specific locales in the Supplement/Appendix section.

Update Leakage:

Carbon sequestration to land reservoirs can be associated with reductions in GHG emissions both within and outside of project boundaries. A credit class must define the relevant carbon pools for approved project activities.

Project Proponents that expect leakage above de minimis shall account for that in the Project Plan.



Final Decision: - Address suggested updates and resubmit for check off on updates

Reviewer 3 - Sam Bennetts:

General Comments:

Overall, I think you guys did a great job. My high level reflections were that this credit class could benefit from more specificity on the rules and requirements which must be met during the project registration process, as well as any rules and requirements needed during the monitoring, reporting, and verification process.

Comments by Section:

Section 2 - Credit Class Overview

In this section you say that the, "credit focuses on carbon sequestration and emission reductions resulting from the production and application of biochar to soils". This felt a little ambiguous to me as it implies that the credit is produced from both carbon captured during pyrolysis and application. Based on my understanding, the methodology only measures carbon emitted back into the atmosphere on application, not the additional carbon sequestered. With this in mind it might be nice to make this section a bit more clear about the so-called sources and sinks underpinning the credit.

Section 2.1 - Ecosystem Service Classification

You could probably just remove this as you mentioned it in the paragraph above.

Section 3.2 - Project Activity

I think this section needs a bit more specificity on the activity-based eligibility criteria prospective projects must meet prior to project registration. In other words, if I had a biochar project I wanted to run using this credit class, what do I need to submit as proof that I am already following or intend to follow the approved practices defined in the methodology.

For example, Section 4 of the Approved Methodology states that:

"Biochar producers must have a health and safety program to protect workers from



airborne pollutants and other hazards. Biochar production facilities must comply with all air quality and environmental laws and regulations that may apply in the national or subnational jurisdiction in which it is produced. (pg. 8)"

In this example, when does this proof of a safe work environment need to be completed? Does this need to be completed prior to project registration? Or can it be completed during a monitoring round at a later date? Also what happens if a developer fails to comply with this activity? Is the project put on hold?

Some of these answers might lie in Section 9.3 of the Approved Methodology, but not all. So, the more specificity you can provide in the credit class the better as it will help instill buy-side confidence that you've done your due diligence in its fullest form. Plus it will be super helpful if/when you are ready to scale.

Section 3.2 - Land Ownership Type

I think this is ok, but you should include a little bit about what needs to be provided during registration to prove land ownership and rights to use the land, or (if applicable) the materials? Generally, you can just say something along the lines of, "This credit class accepts land ownership types of [x], provided the Project Proponent demonstrates adequate documentation for proof of ownership and/or approval of land owners.

Since you're also distributing biochar, I'm assuming that you need permission from the land owner, or tennant, to apply the material on. If that's the case you will also need to document permission.

Logistically, our team won't be checking land tenureship databases to verify that what you provide is indeed accurate (i.e. that someone owns the land or they have permission to use it), but we will check for completeness according to what's outlined in the Credit Class.

Section 3.4 - Adoption Date

I think this section is good - it would be nice just to specify when and how the information about lookback registration should be reported. I'm assuming it should be reported as a part of the baseline report submitted in project registration? If so, just specify that. If otherwise, please specify.

Also is there anything else which needs to be reported? If not that's fine, just making sure:)



Section 3.5 - Crediting Term

Glad to see you landed on something! In terms of how this relates to project registration - my question is how you intend to handle project renewal with such a short crediting term.

The <u>Registry Program Guide</u> defines the crediting term as, "Crediting Term is the finite length of time for which a Project Plan is valid, and during which a project can generate credits" (Section 6.4). At the end of the crediting term, projects (typically) perform a final verification round (different from the one performed at the end of the permanence period). With that in mind, I would pose the following questions:

- What, if any, activities must project developers complete at the end of their crediting term? I'm assuming that in this scenario they really only need to submit the monitoring report. Is this correct?
- What process do projects need to follow in order to renew a project? Do they need to
 resubmit all the documentation? Or can we build a system/program in which most of the
 base information stays the same and they only need to submit a subset of the
 documentation (such as the monitoring reports)?

Also as an aside, I would probably move this entire section to *Section 4. Project Rules and Regulations* and just include a section on project renewal if you do decide to include it and it makes sense to go in the eligibility section (a little fuzzy on my thoughts here without seeing it, but thinking it might make sense to have a section on "Eligibility Requirements for Renewal Projects" or something along those lines, but maybe we just include it in the renewal section below).

Section 3.?. - Regulatory Compliance

This is a section which doesn't currently exist, but should.

This section should specify any checks projects must go through to ensure that their implementation and ability to make carbon claims adhere to any local laws, regulations, and other legally binding mandates directly related to Project Activities and participation in voluntary carbon markets.

You can either be specific with what these requirements are, or just state that the, "The Project Area has to adhere and provide attestation of compliance to the local laws,regulations, and other legally binding mandates directly related to Project Activities as presented in the Methodology."



This is important to include, I think, as it shows buyers and other stakeholders that you are evaluating project risk within the context of the political climate in the countries these projects are run.

Section 3.?. - Geographic Applicability

This is a section which doesn't currently exist, and might not be needed, but is worth considering. "Geographic Applicability" indicates where in the world this credit class can be applied. My questions within the context of this Credit Class:

- Are there bioregions / countries where this credit class cannot be applied?
- Is this specific to certain ecosystems? If so I would specify where this credit class can be used.

Section 4.1 - Approved Methodology

This looks good, though it might be nice to specify that the Appendix should be used in conjunction with the main method if project developers intend to apply biochar as litter in forests (i.e. you will always need to use the Verra method, but in some cases can also use the Appendix).

Section 4.2 - Aggregate Projects

I think this is great! In the aggregate project scenario, is the intent to have many project developers register as a single project? If so, does it make sense to outline how rewards are split? Also does this affect at all the legal framing of land ownership/tenure or regulatory compliance? Also is the reporting process the same? Other questions to think about (which may or may not be applicable, but putting them here...):

- What are the applicability conditions do projects need to meet to become eligible for aggregate project registration? For instance, do properties need to be geographically located in the same bioregion
- Are there specific requirements for how aggregate projects should prove applicability conditions and what needs to be reported during registration as part of the project plan?
 Also should participants make an additional agreement internally with one another about how they intend to work together, split rewards, etc...?
- Do aggregate projects merit a different MRV process? If so, what?

Section 4.3 - Project Plan

I think that this could actually be updated to specify the project plan we intend to use. Right now the registry has a <u>project plan template</u> we share, which if you would like to use you can! However, it's just a template and there are parts which might not make sense for you to use, or



sections you would like to update. If that's the case, I would encourage you to update those sections and create your own updated version and link it here. I think it's especially relevant to think about that in the context of how you intend to renew projects (as mentioned above).

Section 4.? - Project Renewal

You don't currently have this section, but should. As I mentioned in my comments earlier, the short crediting term implies that projects will have to reapply as a new project annually unless otherwise specified. Right now the Regen Registry Program Guide provides very general guidance on what renewal would look like, however it does not specify the process projects must follow on what to report or what approval for project renewal looks like. With that in mind, it would be great if you could specify what that looks like per my comments in the crediting term section above.

GHG Removal and Emission Reduction Requirements

Section 5.2 - Leakage

This section looks good, but I would make a small tweak to provide a summary of the importance of leakage plays in this program such that readers (buyers, auditors, verifiers, etc...) can generally understand how it's addressed without digging into the method directly. Something like,

"Leakage refers to the unintended or indirect consequences of a carbon offset project that lead to an increase in greenhouse gas (GHG) emissions outside of the project boundary. Leakage occurs when the implementation of a carbon offset project causes a reduction in emissions in one location, but leads to an increase in emissions in another location, either within or outside the project boundary.

Leakage is required to be accounted for in this credit class. Within the context of biochar production and application, leakage can occur when:

• [insert where leakage might occur as a result farmers adopting your program]

The approved methodology outlines the process to estimate leakage emissions caused by projects registered under this credit class. To provide a conservative crediting estimate, leakage emissions are subtracted from the sequestration estimates."



Section 5.4 - Permanence Approach

I think this section looks great! Though, I am curious how permanence is accounted for in the methodology and if it merits using a permanence pool? Reading through it, I noticed they use a permanence adjustment factor due to decay of biochar per end-use application. Does that mean they are calculating it so you don't need a permanence pool? If so then we probably would shift this section to speak more to the justification for why you don't need a pool. Otherwise, how is permanence determined at the end of the permanence period?

In researching this, I would also recommend looking at what Puro does.

Section 5.5 - Buffer Pool

Great job on this section! I would just specify that for now, "...the credit issuer will apply a contribution of 10% of each credit issuance to the Credit Class Buffer Pool." (p2, first sentence).

You could also set up project specific buffers (i.e. the credits issued to that pool can only be used to cover losses by a specific project as opposed to having a pool which aggregates risk across projects).

Section 5.5 - Verification Requirements

In this section you should specify the requirements verifiers must follow to audit a monitoring report. I think this should contain two main elements:

- Verifier Requirements: Please specify the credentials verifiers must have. Do they need to have an ISO-14064 certification? If not, what credentials should they have? We specify in our Program Guide that they can have a range of certifications so just providing the specificity on what those requirements are in your context would be nice to share. During our previous conversations it sounded like you were leaning towards not requiring ISO accredited VVBs to audit the project due to cost, so maybe specify what the minimum viable credentials are.
- Verifier Responsibilities: In this section you want to specify what type of audit the verifier should conduct (desk audit, field audit, or combination) and a list of specific things they should be checking for. We include a lot of this in the Regen Registry Program Guide which you can reference (no need to copy/paste it all), but anything specific to your method/credit class should be specified. Note that the more specific you are, the easier it is for a verifier to understand their responsibilities which helps reduce cost (if they're changing hourly).



Section 5.7 - Fungibility

I would probably just add this paragraph to the buffer pool section, but just a suggestion. If it makes more sense to you to include it as its own section, do that!

Final Decision: - I'd recommend passing it back to us to make sure comments are addressed, otherwise great job!