

**puro •
earth**

General Rules D.4.0 Update

**Public Consultation Feedback Summary
and detailed comments**

16 Jan 2024, updated 26 Jan 2024

Public Consultation: Updates to the General Rules D.4.o

Context

Puro.earth held a public consultation on its proposed General Rules draft D.4.o. This revision aims to update current procedures and definitions in alignment with Integrity Council for the Voluntary Carbon Market (ICVCM), CORSIA Emission Unit Criteria, and the Article 6 of the Paris Agreement.

This initial public consultation was announced on Puro's homepage on the 11th of December 2023 and in Puro Newsletter on the same day. The time frame for the consultation spanned from the 11th of December 2023 until the 8th of January 2024; this period was extended until the 10th of January by request of interested stakeholders.

The proposed draft with the title "General Rules D.4.o" included seven (7) chapters and two (2) appendices. This document was written to replace the Puro General Rules v.3.1 issued in June 2023.

The feedback received includes over 200 comments from more than 30 organizations. This document summarises the feedback received during the public consultation, responses, and the revisions included by Puro.earth because of the comments.

We want to thank all participants for your time and contributions to helping us improve the Puro General Rules to better serve this growing ecosystem.

General Observations

1. The Public Consultation showed a **significant engagement** in the number of participants (31) and their comments (202).
2. Many **positive comments** support our thinking on what is a "high-quality carbon removal" and the level of transparency necessary for achieving it.
3. Misunderstanding on the level of detail that should be included in the General Rules:
 - a. Tension between **normative versus operational**.
4. Comments focused on "how to implement this."
 - a. Positive reception: participants are thinking forward about how to work with the new requirements.
 - b. Challenge ahead: participants are concerned about the additional administrative burden and costs.
5. Comments focused on "article 6" showed that many participants were confused by our text in the voluntary nature of this alignment and are concerned on how it could impact the tradability of CORCs.
6. Puro is committed to driving a race to the top in integrity and quality. Our focus was on defining our aspirational high-bar and finding alignment with other stakeholders in the CO₂ removal space. As we incorporate the comments from the consultation, we are striking a balance with the ideal normative rules and the operational demands that these new rules impose on CO₂ Removal Suppliers. We strongly believe in creating rules that are implementable. Our work will not stop at the normative level as we will continue developing tools, improving processes, partnering with others in the ecosystem to operationalize the creation of high-quality CO₂ Removals.

Number of Comments per Chapter

| Chapter 1 | Chapter 2 | Chapter 3 | Chapter 4 | Chapter 5 | Chapter 6 | Chapter 7 | App A | App B | N/A | Total |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|-------|-----|-------|
| 11 | 15 | 26 | 4 | 6 | 0 | 80 | 25 | 14 | 21 | 202 |

Note: N/A stands for comments that do not fit a single chapter.

Overview of proposed Changes from General Rules v.3.1 to D.4.0

| | Chapter | Changes included |
|---|---|--|
| 1 | Purpose and Governance | Enabling certification with external methodologies |
| 2 | Certification Process Description | Aligning with ISO/CCP terminology for design validation and performance verification. |
| 3 | Registry transactions | Additional procedures to avoid double counting. |
| 4 | Certificate Trading | Aligning trading of CORCs to comply under Article 6 of the Paris Agreement and CORSIA. |
| 5 | Reports from Registry | Amending Puro Registry requirements to include carbon removal year of production (vintage). |
| 6 | Other Provisions | Clarifying use of the Platform Agreement. |
| 7 | Requirements for CO2 Removal Suppliers | Enhancing additionality and leakage requirements. Rules for reversal events and uncertainty assessment. Additional requirements for social safeguards: human rights, Indigenous People, labor rights, gender. Requirements for positive Sustainable Development Goals (SDGs) impacts description. |
| A | Appendix A | Article 6 procedures for use of CORCs towards Nationally Determined Contributions (NDCs), international mitigation purposes (CORSIA), and/or other purposes. |
| B | Appendix B | Ongoing Issuance and Digital Monitoring, Reporting, and Verification. |

Keys Comments & Puro Responses

Chapter 1: Purpose and Governance

- The incorporation of external methodologies into the Puro Standard was received positively by the commenters.
- Several questions were raised around the operationalization of incorporating external Methodologies and how to define their equivalency with Puro's existing Methodologies.
- A few requests to review and expand the definitions led to turn Section 1.5 into a separate Chapter.

Chapter 2: Certification Process Description

- The alignment in terminology and process between Puro and ISO/ICVCM was well received.
- While the certification process is clear, several requests for more detail and/or clarification on the certification steps were presented. Also, there were information requests on its impact on existing Methodologies (i.e., biochar), expected timelines for each step, and a proposal for enhancing the certification approach to include aggregated groups of production facilities (see Chapter 3).

Chapter 3: Registry Transactions

- The procedures to avoid double counting in various forms were welcomed. Yet, "it's not quite clear what the required proof documents/processes are".
- Concerns with avoiding double registration were mentioned as it could limit registration with other complementary non-CO₂ removals crediting programs.
- New procedures on CORC retirement and withdrawal required clarification. Also, concerns with Reversals and their impact on accounts were expressed.

Chapter 4: Certificate Trading

- Clause 4.2 original language hinted on restricting the trading of CORCs only for authorized uses as defined by Article 6 of the Paris Agreement. This caused confusion/concerns on the tradability of CORCs. The text was amended to clarify the voluntary nature and confusing restriction clause was eliminated from the final version of the document.

Chapter 5: Reports from Registry

- Request for clarifications on the definition and scope of the Reports available from the Registry.

Chapter 6: Other Provisions

- No comments. However, we decided to move the clauses contained herein to other Chapters to improve the readability of the document.

Chapter 7: Requirements for CO₂ Removal Suppliers

- Leakage: commenters questions how positive and negative leakages are addressed. Amendment were made to clarify the netting of positive and negative leakages.
- Uncertainty: concern about the implementability of the rules. Language amended to put focus on material uncertainty sources impacting the amount of CORCs and moved from detailed quantification to disclosure of uncertainty ranges defined in the methodologies.

- Social safeguards + Positive SDG impacts: concerns about extra work and costs for projects. We will provide more clarity and support with tools/templates to make it implementable for projects and keep the general rules on high level.
- Reversals: comments about who is liable for the reversals and when. Language amended to clarify that the CO₂ Removal Supplier is liable for the reversals if it has not fulfilled the obligations for monitoring and preventing reversals risks. Reversal is defined as event after issuance of CORCs and not natural degradation or loss accounted for in the methodology before issuance.

Appendix A: Article 6 Procedures

- Concerns on the impact of tradability of CORCs if Puro were to limit to only work through the authorization of uses framework stipulated under Article 6 of the Paris Agreement.
- The Procedures were amended and moved to a separate document to better reflect the voluntary nature of these procedures.

Appendix B: Ongoing Issuance

- Positive reception of the proposal for ongoing issuance. However, there were requests for clarification on how the balance was calculated and the process managed.
- Also, there were requests for more details on how the digital MRV could be carried out, including supporting documentation and processes.

Detailed Comments and Responses

In the following tables, we will share the comments received and the responses provided by the Puro.earth Team. Comments are shared anonymously. The comments are grouped per chapter in the consulted version D.4.o of the Puro Standard general Rules.

All comment were addressed, and changes incorporated to the final draft. We want to thank all participants warmly for improving the rules and the integrity of Voluntary Carbon Markets (VCM) in general.

| Chapter 1: Purpose and Governance | | |
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| Text Location | Comment | Response |
| s.1 | We have reviewed the new proposed draft of the General Rules and, while there are no specific questions posed in the consultation, or specific areas/forms of feedback requested, we wanted to provide our thoughts based on our review of the General Rules as we have some concerns over how the lack of detail provided in what is needed to meet these updated Rules. | We are striving for implementable General Rules. However, some level of detail will always be absent from the General Rules, and available through platforms for each project as they advance in the certification process and in the methodology specific templates and requirements for validation and verification. |

| Chapter 1: Purpose and Governance | | |
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| Text Location | Comment | Response |
| s.1 | With regard to Chapter I, the addition of external methodologies. I support this update because more methodology means more carbon removal, and I am sure the Advisory Board will review the external methodology very carefully. In any case, my view is that we must strictly control the high quality of carbon removal methodologies, adhere to the principle of scarcity, maintain the original intention, and should not introduce more methodologies in order to increase the scale of emission reduction. | Puro Standard is highly committed to maintaining the integrity of carbon removal credits in general for the whole CDR industry. We are not targeting to introduce more methodologies, only when the sequestration phenomenon is substantially different from the existing methodologies. |
| s.1.3.5 | Methodology Principles The principle in Section 1.3.5 (ii) would benefit from tighter definition. This is meant to represent a core principle but it is not clear if the principle is safety, or environmental and social safeguards, or “do no harm”? These are not equivalent. While each is individually admirable, the conflation is unhelpful if the ambition in Section 1 is for a unifying principle that will inform other parts of the Rules that follow (such as Section 7.4). [The commenter] favors a more declarative statement, e.g., “has a net positive impact on environmental and societal parameters.” | Thank you for your suggestion. We recognize the value of your suggestion and will consider expanding the requirements in a future version of the General Rules. |
| s.1.3.6 | Certification with external methodologies process. <ul style="list-style-type: none"> This is a great update (e.g., for Cascade/CCS+ integrations). Are there any costs associated with submitting methodologies to the Advisory Board for approval? 1.3.6: We suggest amending “Monitoring Practices” in the list of key methodology components to “Monitoring Practices, Roles & Responsibilities” | The process for external methodologies was precisely developed for industry best practices like Cascade or regional standards like EU CRCF carbon removals directive. Any additional costs with the assessment of external methodologies will be described in our service fees schedule. In regard to your suggestion for amending the “monitoring practices”, we will include it in our text. |

| Chapter 1: Purpose and Governance | | |
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| s.1.3.6 | Certification of external methodologies which align with the Puro Standard enables methodologies tailored to specific removal processes. These tailored methodologies will enable robust methodologies without overly onerous requirements that are not applicable to the specific removal process. | We will continue to pay attention to this. It is a delicate balance to globally harmonize the requirements across different variants of the same CDR pathway. So far, we think Puro Standard has been successful in "commoditizing" removal credits i.e. requiring same quality from same type of projects and avoid being country or project specific. |
| s.1.3.6 | For the specific added section of "1.3.6 External methodologies can be submitted for Advisory Board approval", we see this as an overall positive facilitation to bring the carbon removal industry closer into alignment. The change may potentially bring up conflict if methodologies are not equivalent to Puro's existing methodologies, however we see that there would be extensive scientific review and public consultation to ensure appropriate and fair addition of the external methodologies. | We are also supporting the consolidation of requirements so that globally all projects of the same type would meet the same requirements. We will consider each case separately and aim to avoid a situation where one project type has multiple Methodologies to choose from. That would add confusion in the market. |
| s.1.3.6 | <p>Enabling certification with external methodologies.</p> <p>We express our support for the integration of external methodologies into the certification process of the Puro.earth carbon removal registry. However, it is imperative that these methodologies adhere to a stringent and transparent process to maintain the integrity and effectiveness of the carbon removal efforts.</p> <p>The outlined process for incorporating external methodologies, which involves scientific rigour, public consultation, and adherence to environmental and social safeguards, aligns well with our principles of ensuring scientifically sound and safe climate impact quantification.</p> <p>We particularly emphasise the importance of thorough public consultation and the transparent addressing of public queries or comments. This open engagement ensures broader acceptance and credibility of the methodologies.</p> <p>Furthermore, the involvement of the Advisory Board, supplemented by external scientific experts when needed, in the approval and ongoing review of these methodologies is a vital step. This ensures that the</p> | We appreciate your comments. We will do our best to define in greater detail the criteria and assessment of external methodologies for inclusion into the approved methodologies by the Puro Standard. |

| Chapter 1: Purpose and Governance | | |
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| | <p>methodologies are continually evaluated for their effectiveness and accuracy in representing greenhouse gas emission removals and additionality.</p> <p>In conclusion, while we endorse the inclusion of external methodologies, it is essential that this process is governed by rigorous standards and transparent practices to uphold the quality and trustworthiness of the carbon removal certifications issued by Puro.earth.</p> | |
| s.1.4.4 | <p>I believe it gives Puro.earth too much power and on an issue outside the origination certification framework. I would delete this clause unless there is a reason I am not seeing.</p> | <p>Agree. This clause is outdated. It was in place in 2019 when we started, but now there are other rule-setters (like SBTi and VCMI) to regulate the voluntary carbon claims made by the corporate buyers and beneficiaries. Clause 1.4.4 is removed.</p> |
| s.1.5 | <p>Definitions: Long-term Duration</p> <p>There are multiple, viable carbon dioxide removal pathways with storage durations that exceed 10,000 years. As such, defining "long term duration" as 100 years misses the opportunity to usefully segment those pathways that are shorter term from those pathways that represent functionally permanent storage.</p> <p>[Commenter] favors "at least 1,000 years" as the definition of "long-term". To the extent that pathways with duration between 100 and 1,000 years are important for some buyers and suppliers, then [commenter] favors a simple approach of labeling those "medium-term", thereby reserving the category of "long-term" for truly long-term removal.</p> | <p>Thank you for your suggestion. We recognize the value of your suggestion and will consider expanding the requirements in a future version of the General Rules.</p> |
| s.1.5 | <p>CORC100+, CORC1000+ - There is still active scientific debate about the durability of biochar in particular so how will Puro determine which label should apply? Will it be Production Facility specific or methodology specific?</p> | <p>These labels are descriptive, not scientific as stating the exact durability of the stored carbon. Puro.earth is following the scientific discussion on biochar durability and will consider the latest science in the next revision of the Biochar methodology.</p> |

| Chapter 1: Purpose and Governance | | |
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| s.1.5 | Aligning with ISO/CCP terminology for design validation and performance verification. o Good choice. Regarding "design validation", the Puro Standard still adheres to the term facilities, however from the definition, it is not completely clear what a facility is for a complex removal activity. In a complex chain of several agricultural/industrial production sites from fixing C from the air until its durable sequestration (e.g. for secondary biomass -> biochar -> construction materials) which one are you considering as CDR production facility to be named and located as CORC attribute? We suggest to add some clarification to the definition of "Production Facility" in 1.5 | Thank you for your feedback. Production Facility varies per engineered CDR Methodology and can indeed be a single industrial site or supply chain with multiple parties. Each Methodology describes the specifics. |

| Chapter 2: Certification Process Description | | |
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| Text Location | Comment | Response |
| s.2.3.2.vii | Credit quantification the breakdown in CORC quantification could be disclosed. Currently solely the number of CORCs issued would be disclosed, and not the breakdown of variables within this calculation. For example, disclose gross removals against project emissions or transportation emissions and how this aligns to CORCs issued (variables being dependent on each methodology). | In clause 2.3.2 what you refer to as "CORC quantification" is written as VIII. Verified Output quantification. It is correct that the project emission variables depend on the methodology (carbon removal type). The intention of this clause is to disclose the quantification with the "breakdown of variables" as defined in each methodology. We added language " as defined in CORC quantification of applicable Methodology ". |
| s.2.3.3 | A monitoring and reporting plan is required for the Production Facility audit, yet there is no information provided about what is required within this – will Puro be releasing additional guidance on this for each methodology? Furthermore, it is not clear how this monitoring and reporting plan is implemented/tracked where an Output Audit and Production Facility audit are completed simultaneously as per 2.3.3 of the Draft General Rules | Each methodology contains the requirements for the projects and what evidence, or data recording is needed to meet those requirements. We will revise the methodologies if the language is not clear for projects to form a monitoring and reporting plan based on that. In a combined Audit, the auditor will first validate its design and implementation through the Production Facility Audit. Then, the auditor will verify the production facility's performance through the Output Audit. |

| Chapter 2: Certification Process Description | | |
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| s.2 | As for Chapter 2, the approval shall be completed within 3 years after the project start date. I understand this change, because generally speaking, if the project has not applied for emission reduction for many years after the start of the project, then it is likely to have good profitability. But in practice there may be complications. For example, the biochar market has not been very good for a long time. However, I know of a company whose factory is a demonstration project (state leaders have visited it), so even though the internal rate of return is very low, it still relies on the income of other projects to operate with difficulty, and even temporarily shut down recently. Therefore, I believe that as long as there are sufficient reasons to satisfy the argument of additionality, then the successful registration of the project should be encouraged, and there may be no need to set the requirement of the start time. | We understand that there are different circumstances, and this time limit may be too restrictive for some industrial CDR projects, especially when the carbon removal technologies are young. We will consult with relevant stakeholders to understand how best to incorporate the requirement of different time limits into the next iteration of the General Rules. |
| s.2.2 | Design Validation – It would be helpful to indicate the event that marks the date of design validation, preferably one within a certain degree of control of the supplier (e.g. date of submission of documentation to the issuing body or n days later). This would allow some predictability when planning project timelines, since it is not clear how many rounds of review may take place during facility review (see comment relating to section 2.2.2). | The Design Validation shall be completed within three (3) years after the Commitment Date (see definitions). Design Validation begins with the submission of complete documentation set for the Production Facility Audit (2.2.1). |
| s.2.2.2 | 2.2.2 What is the expected timeline for Facility Review? Would this period be included in the 3-year limit to complete Design validation? Also, it is not clear what happens after an unsuccessful review or more non-conformity issues are identified. Are additional rounds of review anticipated? Same comment applies to the Output Review process. | A successful Production Facility Review is a pre-requisite for completion of the Design Validation stage and for the Production Facilitation certification. So, it should be completed within the 3-year period after the Commitment Date. The CO ₂ Removal Supplier will have a reasonable opportunity to address the non-conformities within 30 days after receiving notification of the unsuccessful result. This is described under 2.2.5.3. |

| Chapter 2: Certification Process Description | | |
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| Text Location | Comment | Response |
| s.2.3.2 | <p>2.3.2 The text implies that Production Facility documentation will be made public only after Output Review. If this is correct, what is the reason for not making it public after Facility Review?</p> <p>Additionally, the ICVCM recommends that the carbon standard make available a "mitigation activity design document" (Assessment Framework Criterion 3.1). There is no mention of such document in the General Rules.</p> | <p>The Production Facility Audit Report and Statement and project description shall be published in the Registry after a successful Production Facility Review (2.2.5.5). Project description is the name for the design document.</p> |
| s.2.4 | <p>2.4 Crediting period - Up to how many times can the 5-year crediting period be renewed? - It would be important to have a queue of projects undergoing any internal review by puro. Project developers should be able to understand, even if in general terms, how long would a given process, that require puro internal review, would take.</p> | <p>The Crediting Period can be renewed twice by successfully undergoing a new Production Facility Audit. (2.4.1)</p> |
| s.2 | <p>While the previous process description had more resolution, we see the new version [of the certification process] as more linear and simpler to understand. We have no issue with the proposed change.</p> | <p>Thank you for your feedback.</p> |
| s.2.3 | <p>Ch 2.3 on Output Report: what data exactly is required to be included in the Output Report? Is this dependent on the removal methodology? If so, please specify/clarify.</p> | <p>The Output Report is dependent on the Methodology, must include the data collected in the monitoring plan.</p> |
| s.2.1 | <p>...In the case where a mitigation activity does not involve expenditure, it refers to the date when the first physical actions were taken to implement the mitigation activity (e.g., the discontinuation of the cultivation of land so that natural revegetation or succession may occur).'</p> <p>Puro does not issue CORCs based on land use change, afforestation, or reforestation, as far as I know. The relevance of the text above, as written, appears to be therefore too low for this document. Removing the (e.g, the discontinuation....) text would fix this.</p> | <p>Noted and text removed.</p> |
| s.2.3.3 | <p>On what basis does the Issuing Body decide to combine design validation and performance</p> | <p>The Issuing Body will consider combining a Production Facility Audit and Output Audit on a case by case.</p> |

| Chapter 2: Certification Process Description | | |
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| | verification? If supplier requests this, please explain. | |
| s.2 | <p>Aligning with ISO/CCP terminology for design validation and performance verification.</p> <p>Response</p> <p>We support aligning the language and terminology used by Puro with ISO/CCP. We note that we have encountered some confusion when discussing Puro's process with potential off takers. Standardisation would be preferable with regards to 'design validation' and 'production/performance verification'. Our recommendation is that Puro adopts validation for registration of a project based on project design documents and then third-party verification for issuance. The validation for registration process unlocks finance and reduces registry and methodology risk, which are important risks to mitigate in the pathway to accessing project financing. Then the financier and projects are taking commissioning and production risk, rather than being exposed to registry and methodology risks. Currently Puro is guiding suppliers to reach steady state before conducting the facility and production audit simultaneously, which is not favourable if seeking finance for a project or seeking to meet project milestones.</p> | <p>We understand your point of view. We can see benefit in both options: combining the two audits as well as keeping them separate. The General Rules allows for both.</p> |
| s.2.4 | <p><u>2.4: The Crediting Period can be renewed by successfully undergoing a new Production Facility Audit</u></p> <p>Clarity is needed if financial additionality needs to be assessed again (ref 2.2.1 (iv) requirements of a Production Facility Audit).</p> | <p>The Crediting Period can be renewed twice by successfully undergoing a new Production Facility Audit (2.4.1).</p> <p>A Production Facility Audit includes an Additionality Assessment Report. So, financial additionality needs to be assessed for the new crediting period.</p> |
| s.2 | <p>Comment 1: Enhanced Certification Approach for Aggregated Production Units</p> <p>Current Process Review: The existing Puro Standard methodology treats each carbon removal project as a distinct entity, involving a single production unit and site. This requirement presents a significant hurdle for smaller-scale biochar producers, such as those operating multiple mobile or smaller units</p> | <p>We recognize the value of your suggestion and will consider expanding the requirements in a future version of the General Rules. Meanwhile, we will engage stakeholders in finding ways to enhance the certification approach for aggregated production units.</p> |

| Chapter 2: Certification Process Description | | |
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| | <p>[project names] due to the necessity of individual audits and certifications for each operational site.</p> <p>Anticipated Benefits:</p> <p>Encourages participation of a broader range of biochar producers in the carbon credit market.</p> <p>Reduces economic and logistical barriers, making carbon credit certification more accessible.</p> <p>Maintains the high standards of the Puro certification process, ensuring data accuracy and environmental integrity.</p> <p>Proposed Modification and Rationale: To foster greater inclusion and economic viability for these smaller-scale producers, I propose a more flexible approach for the certification of aggregated production units under a single supplier. This change would be particularly impactful for mobile or smaller pyrolysis units, which are critical for the decentralization and scalability of biochar production.</p> <p>Detailed Implementation:</p> <p>Facility Audit Adjustments: While maintaining separate facility audit documentation for each site to ensure thoroughness and specificity, the actual onsite audits could be streamlined. Conducting a representative on-site audit at one facility, when other units at different sites are substantially similar, should suffice. This approach will significantly reduce auditing costs and logistical complexities.</p> <p>Report Consolidation with Specificity: Output reports for these aggregated units could be consolidated for efficiency. However, it is imperative that each component of these reports remains distinctly attributed to the respective unit and feedstock, preserving the accuracy and relevance of the data.</p> <p>Special Provisions for Mobile Units: Recognizing the unique nature of mobile units, additional documentation and emission assessments should be required whenever these units are relocated. This measure will ensure that the environmental impact of these movements is adequately captured and accounted for in the overall assessment.</p> | |

| Chapter 2: Certification Process Description | | |
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| s.2 | <p>Comment 2: Streamlining Certification for End Use of Biochar</p> <p>Review of Current Methodology: The current requirement for the submission of sales invoices as proof of biochar utilization poses significant challenges, particularly for smaller-scale and distributed biochar producers. This requirement can be especially burdensome in regions where the biochar market is not yet mature, and sales transactions are not formalized or even non-existent.</p> <p>Suggested Modification and Purpose: In order to alleviate these challenges while still ensuring that the biochar is not combusted, I propose two alternative approaches for the certification of end use:</p> <ol style="list-style-type: none"> 1. Ideal Approach - Agreement-Based Certification: This approach involves the generation of carbon credits as soon as the biochar exits the production machine, contingent upon the producer and end users signing binding agreements stipulating that the biochar will never be burnt. This method places trust and responsibility on the producers and users, supported by legal agreements to ensure compliance. Final end use will still be tracked in the LCAs to ensure accurate supply chain emissions. 2. Alternative Approach - Biochar Mixture Certification: As a less ideal but practical solution, carbon credits could be generated when the biochar is physically mixed with another substance (like compost), which serves as evidence that the biochar is intended for use rather than combustion. The point of mixing becomes the point of credit generation, with ongoing LCAs tracking the biochar to its final use to ensure proper emission accounting. <p>Expected Advantages: Significantly simplifies the certification process for biochar producers, particularly those operating on smaller scales or in less developed markets. Offers a pragmatic solution to the seasonal nature of biochar application, enabling a more consistent and year-round generation of carbon credits.</p> | <p>Thank you for your suggestion. The focus of this consultation are the general normative requirements in Puro Standard General Rules. We will consider your feedback in the review of our methodologies.</p> |

| Chapter 2: Certification Process Description | | |
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| | Ensures that the fundamental goal of the Puro Standard – to prevent the combustion of biochar and thereby secure its carbon sequestration benefits – is upheld. | |

| Chapter 3: Registry Transactions | | |
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| Text Location | Comment | Response |
| s.3.1 | Production Facility – Is it possible to register a group of facilities at once as one production facility? e.g., Several pyrolyzers in the same region or many farms spreading the same material for ERW? Additionally, is it possible to add facilities to a registered project in a programmatic manner? | We recognize the value of your suggestion and will consider expanding the requirements in a future version of the General Rules. We did not consider the programmatic registration of multiple projects for this update. |
| s.3.1.2 | 3.1.2 The wording here could be more specific. What sort of changes must be reported (i.e. threshold for materiality?) What is the acceptable period in which such changes may be reported (e.g. 3 months? 6 months? 1 year?) | We will add details to the supporting document keeping the General Rules on a high level. The intention is to focus on significant changes that could impact the CORC quantification or the safety of operations. |
| s.3.1.2 | There is an extraneous period in sentence 'The Issuing Body may suspend the Production Facility...' after 'Production Facility'. | Thank you. Text amended. |
| s.3.3.4 | 3.3.4 - Is there a list of possible reasons why the retirement request may be rejected or is it entirely up to the Issuing Body? Are there certain Use purposes that might see the retirement request rejected e.g. offsetting new fossil fuel production. | The text has been clarified. Puro (Issuing Body) does not have a right to suspend transfer or retirement, only rectify errors afterwards if needed. |
| s.3.3.4 | 3.3.4 – Retirement Request: puro has the right to reject a retirement request - need to provide indicative list of reasons for rejection; as it stands it is a barrier to selling CORCS if a customer can be arbitrarily denied retirement. | The text has been clarified. Puro (Issuing Body) does not have a right to suspend transfer or retirement, only rectify errors afterwards if needed. |
| s.3.3.4 | Reporting under CORSIA occurs between the airline, their state-level aviation governing authority, and ICAO via the CORSIA Central Registry (CCR). In the case of airlines retiring CORSIA-eligible CORCs to meet their obligation, the airline would be responsible to communicate that retirement to their state. It would be unnecessary for Puro to report | Thank you. Text amended. |

| Chapter 3: Registry Transactions | | |
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| Text Location | Comment | Response |
| | retirements directly to ICAO. We recommend removing that reference as an example. | |
| s.3.3.4 | <p>Puro has discretion to suspend issuance, transfer, retirement and withdrawal. We would be grateful for example circumstances where this could be exercised (ref 3.1.3, 3.3.4 & 3.4.1).</p> <p>We recommend including a reference to any appeals process that Puro.Earth has for project developers who disagree with decisions such as this.</p> | <p>Puro.earth has a Grievance Policy in place to serve a project developer that wants to make an appeal of a decision (https://puro.earth/disputes-and-grievances/). The text has been clarified. Puro (Issuing Body) does not have a right to suspend transfer or retirement, only rectify errors afterwards if needed. The issuance to a Production Facility can be suspended in circumstances like delay or failure to report, material changes in the Production Facility, or events of detected reversals or over-issuance. The text on these circumstances has been improved in clauses 3.1.3.1, A.5.5 and A.6.3.1.</p> |
| s.3.4 | "Puro to confirm that where the CORCs have been sold, then they won't withdraw CORCs from the purchaser's account | <p>Confirmed. The General Rules define two situations where withdrawal will be used:</p> <ul style="list-style-type: none"> unexpected reversal (clause 6.7.6, numbering changed) or, over-issuance (clause A.6.3, numbering changed). <p>The liable party for those cases is the originator, the CO₂ Removal Supplier. The withdrawal (compensation) will only apply to the CORCs held by the CO₂ Removal Supplier. (Numbering changed, now 6.7.4 - 6.7.7.).</p> |
| s.3.4 | when Puro remove a corresponding amount of CORCs of similar financial value, what would this mean in practice? What if such CORCs aren't available?" | <p>The General Rules define two situations where withdrawal will be used:</p> <ul style="list-style-type: none"> unexpected reversal (clause 6.7.6, numbering changed) over-issuance (clause A.6.3, numbering changed). <p>The liable party for those cases is the originator, the CO₂ Removal Supplier. There are a few options how the CORC-for-CORC compensation can be made (clause A.6.3), one of those is that the liable party purchases CORCs from the market, which are then withdrawn.</p> |

| Chapter 3: Registry Transactions | | |
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| Text Location | Comment | Response |
| s.3.4 | General Rules 3.4 – Certificate Withdrawal: How and when will the account holder be notified of any such withdrawal from their account? | <p>The General Rules define two situations where withdrawal will be used:</p> <ul style="list-style-type: none"> unexpected reversal (clause 6.7.6, numbering changed). over-issuance (clause A.6.3, numbering changed). <p>The liable party for those cases is the originator, and the withdrawal will remove CORCs from the CORC Account of CO₂ Removal Supplier (the originator). The Withdrawal transaction is always preceded by a procedure to assess and document the case, and the Account Holder will be notified before the withdrawal. Once the withdrawal transaction then takes place, it will be instantly visible in the MyPuro user interface for the Account Holder that is signed in.</p> |
| s.3.4 | I think it should be clarified that a withdrawal of CORCs to “balance the accounts in case of CO ₂ Removal reversals” will only apply to CORCs held by the CO ₂ Removal Supplier (i.e. not those sold and transferred to buyers). I think this is the intention but would suggest to tighten the wording of 3.4 to align with 7.7.8 which covers this topic. | Agreed. The Reversal clauses and the liability for compensation of Reversal of an issued CORC are clarified. Text changes in Reversals section to clarify that the originator, the CO ₂ Removal Supplier, is liable when faulted, and that the compensation will only apply to the CORCs held by the CO ₂ Removal Supplier.. (Numbering changed, now 6.7.4 - 6.7.7.) |
| s.3.4.1 | The word ‘maintaining’ should be ‘maintain’. | Thank you. Text amended. |
| s.3.5 | We welcome the general efforts to prevent double counting of CORCs as this strengthens the validity of Puro and Puro certified suppliers within the compliance carbon removal market. | Thank you. |
| s.3.5 | Additional procedures to avoid double counting. Important improvement to include the word “double” and describe procedures on a high level that prevent double registration /issuance /retirement /use /counting /claiming, however, it’s not quite clear what the required proof documents/processes are; refer to additional guidance? | Thank you for your suggestion. We will clearly communicate the steps to implement this process efficiently. |
| s.3.5 | While we are in full agreement with the necessity and importance of [additional procedures to avoid double counting], we also emphasise the need for their efficient implementation. It is essential that these procedures do not introduce excessive administrative burdens that could hinder | Thank you for your suggestion. We will clearly communicate the steps to implement this process efficiently. |

| Chapter 3: Registry Transactions | | |
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| | <p>participation in the registry or slow down the overall process of CO₂ removal certification. An effective balance must be struck between thoroughness in preventing double counting and operational efficiency.</p> <p>We encourage continuous review and optimization of these procedures to ensure they remain effective and practical in a rapidly evolving carbon market landscape. Furthermore, clear communication and guidance for participants regarding these new procedures will be key in facilitating their smooth integration into existing operations.</p> | |
| s.3.5.1 | <p>3.5.1 refers to the Platform Agreement, but the current Platform Agreement does not contain the word "double" -> will an updated version of the Platform Agreement include more guidance, if so, which?</p> | <p>We have clarified the language in 3.5.2.1 - 3.5.2.3 (3.5.1 numbering changes to 3.5.2). We don't see a need for an update to the Platform Agreement. The logic is that all Account Holders (AH) are registered (have Platform Agreement) and the Registry can check if two AHs are trying to register the same project in same location and for the same period.</p> |
| s.3.5.2 | <p>3.5.2 other crediting programs: with BCR a user of biochar may opt for an additional crediting program like biodiversity or water safeguards. This is out of the hands of the supplier for the CDR and can not be mandatory to report. It should state that the requirement only applies for programs that the supplier additionally signs up for.</p> | <p>Agreed. The clause 3.5.3.6 changed to indicate applicability.</p> |

| Chapter 3: Registry Transactions | | |
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| s.3.5.2 | <p>“The Puro Registry requires disclosure of prior registrations of the same CO₂ Removal activity with other crediting programs.”: The term “CO₂ removal activity” has not been clearly defined. Are there any Puro specified activity boundaries that serve as unique discriminators for “CO₂ removal activity”, e.g. one facility/site/legal entity/removal type, is each facility its own activity? E.g. for Enhanced weathering or BECCS, what’s the CDR production facility that gets the unique ID, the site where stones are crushed, or CO₂ is concentrated in an exhaust? Also, is it double registration, if a supplier who has two biochar production lines at the same site registers one under Puro and one under CAR? Regarding the definition of Production Facilities, some C sinks are obviously hard to localize between fixing from the air and sequestering durably. Is the site where the most human-involved and industrialized carbon removal activities take place considered the location of the Production Facility? We suggest deferring to the Methodology for a definition of the specific Production Facility of relevance.</p> | <p>The Methodologies include the activity boundaries and the Production facility definitions. In the case of Enhanced Weathering, the production facility is the region where the rock is being spread, but the project description and MRV documents must also include data about the rock sourcing and transport. The "auditability" must be kept in view when defining a Production Facility, for example if a site has two machines but they share electricity and other utilities, it is not possible for the auditor to verify the carbon accounting with reasonable assurance. The attributability to one site or facility must be unambiguous and clear.</p> |
| s.3.5.2 | <p>To what time is the mentioned “period” referring to? Does it span from fixing C from the air until the permanent c sink has been established or a shorter period? We suggest specifying or deferring to each Methodologies for specific definition.</p> | <p>The period is the Crediting Period. The CO₂ Removal activity in Puro Standard is always end-to-end including all parties and their activities from "air until storage". One Account Holder is the CO₂ Removal Supplier representing the whole activity end to end.</p> |
| s.3.5.2 | <p>„The Puro Registry does not allow the transfer of CORCs outside of the Puro Registry” seems to clash with 4.1. “The Account Holder may trade CORCs in any venue”? If I buy a CORC via Cloverly, what do I receive? Not a CORC as in an “electronic document, which records the Attributes of CO₂ Removal issued to certified Production Facilities”? Clarification appreciated</p> | <p>Cloverly is a distribution channel for CORCs. The original CORC will always be in the Puro Registry in that case, but a reference and link are made to it for trading purposes. The buyers receive a CORC, and it is tracked in the Puro Registry as a retirement or as a Transfer of ownership.</p> |
| s.3.5.2 | <p>Does the Puro Registry allow simultaneous registration of CH₄ reduction credits and CO₂ removals with other crediting programs?</p> | <p>We would need to look at that case by case.</p> |

| Chapter 3: Registry Transactions | | |
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| s.3.5.2 | Double-counting Section 3.5.2 has outlined new improvements or clarifications in Puro's methods to limit double-counting when a project issues with another standard body as well as Puro. Additionally, breakdown of these steps per project could be disclosed in documents. | We are very much in favor of transparency. We are willing to disclose publicly documents that can be published. The key disclosable matter is the registering period with each standard body. For Puro, the registering period is disclosed in the Puro Registry for each project. Clause 3.5.2 allows simultaneous registering for renewable energy credits when the same project is producing carbon removals and clean energy. We are encountering the first such cases now. Public disclosures will be discussed with the stakeholders and done in cooperation with the other programs and crediting schemes as well as the project in question. |
| s.3.5.3 | refers to a "section b) above" that I cannot find. Is 3.5.2 meant? | Thank you. Text amended. |
| s.3.5.5 | Regarding "double use within the supply chain" it would make sense to me to add: "Where a physical product or material is stored (-> generated) that removes CO ₂ from or prevents its re-emission to the atmosphere, it shall not be associated with any claims of CO ₂ Removal nor other Attributes represented by the CORC unless the corresponding CORCs have been retired on behalf of this physical material/product." (as it is also referred to in Fig 1, CORCs can be used on behalf of products | Agree. The text amended with "unless the corresponding CORCs have been retired on behalf of this physical material/product." (clause 3.5.6.1, numbering changed) |
| s.3.5.6 | 3.5.6 – Double counting: 'CORCS used in the context of article 6...shall meet requirements relating to double counting and corresponding adjustments' suggest adding "the relevant requirements relating to double..." as it means the requirements which flows from the programmes not elsewhere i.e. it is not puro dictating these rules | Agree. To provide more context and clarity in this text, we decided to create the "Procedures for the use of CORCs for Nationally Determined Contributions (NDCs) and other international mitigation purposes under Article 6 of the Paris Agreement." |
| s.3.5.6 | CORSIA includes eligibility criteria to guarantee that emissions units deliver the desired greenhouse gas emissions reductions and avoid double-counting. In addition, the emissions unit eligibility criteria requires that emissions unit programs have measures in place to avoid double-counting. Subjecting CORSIA-eligible CORCs to additional or different measures could undermine the scheme and introduce confusion. We | Thank you. Text amended. |

| Chapter 3: Registry Transactions | | |
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| | recommend that the following sentence is clarified in order avoid communicating that Puro is introducing additional criteria, "CORCs used in the context of the Article 6 mechanism and other international frameworks such as the Carbon Offsetting Scheme for International Aviation (CORSIA) shall meet their respective requirements relating to double counting and corresponding adjustments." | |

| Chapter 4: Certificate Trading and Transfer of Ownership | | |
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| s.4 | We acknowledge the proposed alignment to Article 6 of the Paris Agreement and CORSIA and generally do not have issue with the proposed certificate trading, however we request further clarification on which section(s) in Appendix A is applicable or request that section 4.2 itself include the further details or descriptions. | The participation by CO ₂ Removal Suppliers in Article 6 of the Paris Agreement is voluntary. It is understanding that only if CO ₂ Removal Suppliers wish to supply CORCs for NDC or other international mitigation purposes like CORSIA, the supplier will need to request the authorization of use to the designated national authorities according to the procedures specified by UNFCCC. We have amended the text to clarify this. Thank you from sharing your concerns. |
| s.4.2 | The text implies that all CORCs must be authorized for Article 6 uses. If this is correct, [the commenter] understands that this requirement may bring substantial risk to registering projects under Puro, given the large amount of uncertainty related to national rules for authorization. We invite Puro to consider an alternative approach in which developers may optionally align with Article 6. | |
| s.4.2 | 'the trading of CORCS shall be circumscribed to the authorised uses under Article 6 of the Paris agreement for the purpose of NDC, international mitigation (CORSIA), and/or other purposes'. as drafted this is problematic, and would be surprised if it's Puro's intention to only deal in authorised units. We want there to be explicit mention to CORCs that haven't received national authorisation e.g. those which contribute to host country NDC or just simple voluntary production/use. Suggestion for text is to | |

| Chapter 4: Certificate Trading and Transfer of Ownership | | |
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| Text Location | Comment | Response |
| | tweak to: "CORCs may be traded under the authorised uses under..." | |
| s.4.3 | Trade Value: when transferring CORCS between account holders not for retirement, value of the transaction must be disclosed. This is commercially sensitive information, and disclosing it may impede liquidity in CORCS | Trade value is not disclosed publicly. It is submitted confidentially to the Registry through a digital platform. Trade values will inform the CORC Index but cannot be traced back to individual transactions. Wording clarified. |

| Chapter 5: Reports from the Registry | | |
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| s.5 | Reports from Registry Section 5 outlines reports that will be published by Puro. This includes audit reports and statements, but does not clarify what specifically will be included in these documents. The points mentioned in Section 2.3.2 and 3.5.2 of VD4.0 could be disclosed. | Correct. The disclosed Audit reports will include the topics listed in clause 2.3.2. For clause 3.5.2, see the response on that clause. |
| s.5 | Methodology Outside the remit of this feedback, methodology specific disclosure could be improved. For example, with biochar projects feedstock type and sourcing location could be disclosed. | Thank you for the feedback. We have received similar feedback from others as well. Since this is somewhat methodology specific and a project specific matter, we will have to carefully consider what is required in General Rules and general software implementation. We will consult with relevant stakeholders to understand their needs and how best to incorporate the needs in our implementation. |
| s.5 | We see no issue with the addition of carbon removal vintage to the Standard General Rules. | Noted. |
| s.5.1 | 5.1 to what detail level do those reports (Audit Reports) must be publicly available? The rule seems rather weak, and we would opt to not have our biochar production publicly available. | The CORC quantification must be publicly available (see IC-VCM Table 3.1). According to the Biochar Methodology the CORC quantification is based on dry mass of biochar the key parameter in determining the carbon storage volume and the project emissions, and therefore cannot be redacted from the Audit Report. |
| s.5.1.b | General Rules 5.1(b) Retirement Report: At what time are the daily retirement reports published to the Registry link on Puro website? | In the current implementation the Puro Registry is updated twice a day at 12 am UTC and 12 pm UTC. |

| Chapter 5: Reports from the Registry | | |
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| s.5.2 | What's meant by "Account Statement"? Please explain. | Account statement is a document for the Account Holder detailing their holdings. The statement can be requested if the Account Holder is unable retrieve the account details through the digital platform provided by the Registry Operator. |

| Chapter 6: Other Provisions | | |
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| s.6 | No issues were found in Chapter 6. | The two clauses were moved to other Chapters for better readability of the document. |

| Chapter 7: Requirements for CO ₂ Removal Suppliers | | |
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| s.7 | While, broadly speaking, we welcome the proposed changes to align to the IC-VCM, there are a raft of changes without additional detail on how these new requirements are to be met, what documentation is required to demonstrate this. This is particularly relevant for the new Section 7 of the General Rules. | First the new General Rules must be finalized and approved. We will do our best to provide templates and guidance to the suppliers to make the requirements implementable and auditable. |
| s.7.2 & s.7.5 | Enhance additionality and leakage requirements. Is it correct that additionality requirements are defined on the standard level whereas leakage requirements are defined on the methodology level? If not, please clarify (as they are handled quite differently here). To us, it would make more sense to also define additionality requirements including assessment procedures and required documentation in detail on methodology level, or at least to specify requirements in the methodologies as | It is correct that the additionality requirements are defined on Standard level in the General Rules, and the leakage requirements have more detailed requirements in the Methodologies. We agree that the projects have very different cost and revenue structures, but such differences are present also between project of the same Methodology. Therefore, in this update, we will keep the financial additionality requirements on the Standard level. It should however be noted that determination of baselines (which affects both leakage and |

| Chapter 7: Requirements for CO ₂ Removal Suppliers | | |
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| Text Location | Comment | Response |
| | well, as const/revenue structures of projects can be very different. | additionality) is more explicit in each Methodology. |
| s.7.2 | We welcome clarification at the methodology level regarding likely sources of carbon leakage for biochar projects and can provide input to any future biochar methodology update with a view to finding solutions that are workable but offer high integrity. Requirements should be introduced at the methodology level. | When the General Rules are finalized and approved, the leakage language in the Methodologies will be updated accordingly. |
| s.7.2 | Leakage, which has significant references to the methodologies however there are no references to draft methodology updates or additional information on the treatment of leakage. Will certain methods have leakage set to zero (e.g. such as some of the VCS methods that are not land sector based)? | When the General Rules are finalized and approved, the Methodologies will be updated accordingly. ICVCM defines four types of leakage. Those three are already mainly addressed in the methodologies, even though some adjustments will be needed. ICVCM has also included a new type of leakage: Ecological leakage, which has not been part of the Methodologies earlier. There are also other sources of leakage (e.g. market leakage, activity shifting) than land use, for example energy. According to these rules the identification of leakage sources shall be done in all cases. If no leakage sources are identified, the leakage assessment can lead to leakage being set to zero. |
| s.7.2 | Introduction of the following new categories of leakage: i) ecological leakage, ii) market leakage, iii) activity-shifting leakage, and iv) upstream/downstream emissions; is very weak and abstract and does not tell anything about the practical obligations of the supplier. How shall the supplier identify or calculate the following leakage categories without more specific instructions? In case exact instructions are given, we'd be concerned about the cost and capability of the supplier to identify these leakages. | <p>The upstream/downstream emissions as defined by ICVCM are already included in each Methodology under Supply Chain emissions (LCA, project-emissions). Economic leakage (market leakage/activity-shifting) is also already included in the Methodologies, although those sections will be reviewed and updated if needed. The new leakage category "ecological leakage" will be added to Methodologies but is not applicable to most engineered carbon removal projects. The example, that ICVCM states is e.g. due to drainage of wetlands.</p> <p>For the reasons above, we do not expect the leakage assessment to introduce a high cost to the suppliers. We will also invite suppliers to participate in the update process of the relevant Methodologies. Regarding the need for more specific instructions: Those are in the Methodologies and the Methodologies will be updated accordingly, providing the necessary guidance to implement the revised leakage rules. As such, suppliers must follow the first</p> |

| Chapter 7: Requirements for CO ₂ Removal Suppliers | | |
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| Text Location | Comment | Response |
| | | requirement of section 7.2, namely "The CO ₂ Removal Supplier must evaluate leakage following <u>the requirements defined in the applicable Methodology</u> ". |
| s.7.2 | <p>a) Leakage is a difficult factor to integrate into LCAs (Life-cycle Assessment of project emissions). We have already contracted our LCA consultant, and so will we be required to revise our LCA with leakage estimations? If so, we will have additional work and costs at an unknown time to our existing LCA. b) Will suppliers need to report on positive carbon benefits and negative leakages in LCAs, as that would be more comprehensive and fair. c) For example, many of the potential leakage factors are literally out of supplier's purview, and not under the control of carbon removal suppliers. d) How might this estimation of leakage be reflected in our CORC calculation?</p> | <p>a) We do not expect the leakage assessment to introduce a high cost to the suppliers in general, but we understand that it may be a complication and add cost to already contract LCA work.</p> <p>b) Language clarified: Net leakage to be quantified. Net leakage meaning the case when there are both positive and negative effects to emissions outside of the project boundary and those are looked at together.</p> <p>c) We agree that many leakage types are outside of the control (or knowledge) of the project. We will do our best to make sure that the rules developed for each methodology (e.g. biochar) are implementable and focus on the relevant and material leakage sources where the project has impact.</p> <p>d) Language clarified: If leakage sources are identified, and not mitigated as per the rules in the applicable methodology, the emissions due to those must be quantified for each Monitoring Period and disclosed together with in the CORC calculation (reported Output) for that period.</p> |
| s.7.2 | Please clarify on how to calculate Leakage rates. Calculating Leakage rates from market, ecological and activity-shifting is littered with uncertainties. Will you be providing standardized numbers on leakage per Carbon Removal method? Or will every new activity require new leakage calculations? | <p>We will do our best to make sure that the leakage rules for each methodology (e.g. biochar) are revised so that they are implementable and focus on the relevant and material leakage sources for that specific carbon removal pathway.</p> <p>We will do our best to provide templates and guidance to the suppliers to make the requirements implementable and auditable, for each removal pathway understanding that there can be country/location/context specificities as well.</p> |

| Chapter 7: Requirements for CO ₂ Removal Suppliers | | |
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| Text Location | Comment | Response |
| 5.7.2 | <p>Leakage Evaluation: Biochar projects typically undergo comprehensive Life Cycle Assessments (LCAs), which evaluate environmental impacts across all stages of the product's life. These assessments effectively capture any potential indirect consequences (leakage) associated with biochar production and usage. The LCAs ensure that such impacts are thoroughly accounted for and minimised. Enhancing the additionality and leakage requirements may not yield significant additional benefits for biochar engineered removal projects. In fact, it could introduce unnecessary administrative complexities and additional costs, which might not be justified by proportional environmental or operational advantages. The current frameworks for biochar projects already provide a robust mechanism to ensure real and substantial environmental benefits.</p> <p>We suggest that the Puro Standard consider the unique attributes and existing rigorous evaluation frameworks of biochar projects when implementing these enhanced requirements. It is crucial to balance the need for stringent standards with the practicality and efficiency of the processes, ensuring that we do not inadvertently hinder innovation and progress in carbon removal technologies. In conclusion, while we support the overall goal of enhancing the integrity of carbon removal certification, we believe a more nuanced approach that considers the specific characteristics of different carbon removal methodologies, like biochar, is essential.</p> | <p>When the General Rules are finalized and approved, the Biochar methodology will also be revisited and updated. ICVCM defines four types of leakage. Of those three are already mainly addressed in the Biochar methodologies, even though some adjustments will be needed. The biochar specific aspect related to leakage will be captured in the biochar methodology. We will do our best to provide templates and guidance to the suppliers to make the requirements implementable and auditable, for each removal pathway understanding that there can be country/location/context specificities as well.</p> |
| 5.7.3 | <p>Uncertainty calculations are required, yet there is zero information provided on how this should be done nor are there any references to statistical guidelines or the like that typically govern calculations of uncertainty from a mathematical perspective. The method does not make it clear how uncertainty is treated where conservative assumptions are applied i.e. what happens if you use highly conservative values to mitigate potential uncertainties.</p> | <p>In the revised text, we clarified the relevant sources of uncertainty (6.3., numbering changed) that shall be considered by the Methodologies. Guidelines on the assessment of uncertainty shall be included in the Methodologies according to the specific conditions of the CO₂ Removal pathway.</p> |

Chapter 7: Requirements for CO₂ Removal Suppliers

| Text Location | Comment | Response |
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| s.7.3 | <p>Uncertainty and conservativeness. A serious concern applies to the obligation of uncertainty. The calculation principles and parameters for the external third party to conduct LCA comes from Puro methodology. What we understand from the new obligations, we as supplier / third party consultant should be able to assess all of the following uncertainty categories of the calculation, which stems from the Puro methodology:</p> <p>Assumptions (e.g., baseline scenario), Estimation equations or models, Parameters (e.g., representativeness of default values), Measurements (e.g., the accuracy of measurement methods), Any additional factors mentioned in the applicable Methodology, Any other factors which may have a material effect on the CO₂ Removal quantification.</p> <p>Furthermore, the New Rules suggest that "The uncertainty estimation shall be quantitative, and the overall uncertainty estimation shall be given in percentage of the Output volume." and: "The uncertainty estimation must be scientifically justifiable". These obligations are extremely strict and difficult to fulfill even for a professional consultant. As Puro is the leading expert in this field, the estimation outlines and responsibility of such outlines should come from Puro rather than from individual companies – otherwise this may cause unjust competition.</p> | <p>Thank you for your suggestion. In the revised text of 6.3 Uncertainty (numbering changed) we specified that the sources of uncertainties, and the requirements and guidelines for their quantification will be covered at the Methodology level. This should create a "level playing field" addressing the specific context of each CO₂ Removal pathway.</p> |
| s.7.3 | <p>7.3 Uncertainty and conservativeness This topic has seemingly been covered by Puro with their hold back of 10% of CORCs to ensure that accounting errors are covered. It hasn't been communicated if the 10% is still in effect, or will suppliers now be responsible for reporting a different number or establishing their own buffer pool? This quote from the proposed Standard General Rules, "the estimation must include a description of the methods used to calculate the individual uncertainty values", has much uncertainty for what suppliers must research and perform, thus we kindly request clarification on this added requirement and how it will impact our CORC delivery. We</p> | <p>There is no universal "10% holdback" in the General Rules. That has been removed in v3.0 of General Rules. We agree that uncertainty has some common elements across projects of the same type, and those are identified in the Methodology level. Uncertainty has also a project-specific element and therefore each project is asked to assess its own situation again the generally identified sources of uncertainty in the Methodology.</p> |

| Chapter 7: Requirements for CO ₂ Removal Suppliers | | |
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| Text Location | Comment | Response |
| | would also prefer Puro to continue the calculation of uncertainty and conservativeness as that would bring conformity and stability in the supplier's biochar carbon removal offering. | |
| 5.7.3 | on Uncertainty: How exactly will the uncertainty have an effect on the Output? | The language was clarified. 6.3 now states that uncertainty sources are identified and assessed according to the rules in applicable methodology. The assessment is disclosed together with the audit documents for verification. |
| 5.7.3 | In conclusion, while we support the objective of these rules to enhance the integrity and reliability of CO ₂ Removal certifications, we recommend a careful balance between comprehensiveness and practicality. It is essential that the procedures for assessing and managing reversal risks are efficient, user-friendly, and do not impose undue administrative burdens, particularly on smaller CO ₂ Removal Suppliers. We suggest continuous evaluation and potential simplification of these rules to ensure they remain effective and adaptable to the evolving carbon market. | We agree. We will continue to improve these requirements and procedures in the next iterations of the General Rules, with focus on implementability and support for CO ₂ Removal Suppliers. |
| 5.7.3 | [The commenter] has previously accounted for uncertainty via additional safety margins on key parameters with the LCA/CORC calculations. Assessing uncertainty on all parameters of a project is a significant burden that can become prohibitive for smaller projects. [The commenter] welcomes clarification at the methodology level regarding likely sources of uncertainty for Biochar Projects and can provide input to any future Biochar methodology update. | We agree. The text has been changed to point out that Methodologies in the Puro Standard shall identify common material sources of uncertainty relevant for the CO ₂ Removal pathways |
| 5.7.3.3 + 7.3.4 | 7.3.3 – Uncertainty: total combined effect of non-material sources of uncertainty may not exceed 10% of output volume. Unclear what are the implications of going beyond this threshold. 7.3.4 – Supplier shall conservatively consider the estimated uncertainty in the quantified removal volume. Does this imply a reduction of issuance volume if uncertainty above the threshold? | Text was amended so that CO ₂ Removal suppliers are guided to focus on material sources of uncertainty impacting the amount of CORCs to be issued and submit is together with CORC quantification. The methodologies are required to common sources of uncertainty to support projects in making the assessments. (6.3 and 2.2.4.2, numbering changed) |
| 5.7.3.3 | section [7.3.3] discusses the treatment of uncertainty, but in the following paragraph, the word 'uncertainty' appears to be substituted with 'error'. Is this intentional, or | Conflating "uncertainty" with "error" was a mistake. We have amended the text. Thank you for pointing this out. |

| Chapter 7: Requirements for CO ₂ Removal Suppliers | | |
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| Text Location | Comment | Response |
| | should the word 'error' be instead 'uncertainty'? | |
| s.7.4 | <p>No supplementary documentation has been provided on the demonstration of no net harm, and particularly what is the Supplier is required to provide to in order to comply with these requirements.</p> <p>No guidance or references to relevant Standards/Frameworks in relation to free, prior and informed consent are provided in order guide on how to meet these requirements.</p> | <p>Link to FAO manual on FPIC now included.</p> <p>Overall, we understand the need for more detailed documentation. The requirements to suppliers will be proportional to the scale and risks of the operations.</p> |
| s.7.4 | <p>Finnwatch expresses gratitude for the opportunity to provide input on the Puro Standard General Rules. We would like to focus our attention on section 7.4 (Environmental and Social Safeguards) in chapter 7 (Requirements for CO₂ Removal Suppliers) and especially on requirement II:</p> <p>“Respect for human rights and avoiding discrimination; abiding by the International Bill of Human Rights and universal instruments ratified by the host country.”</p> <p>While this may be in line with the criterion 7.7 of the CCPs by the ICVCM, the wording is inadequate and misleading. The responsibility to respect human rights applies whether or not the host country has ratified the relevant instruments.</p> <p>The global authoritative standard on business and human rights is the UN Guiding Principles on Business and Human Rights (UNGPs) and it should be mentioned here in addition to the International Bill of Human Rights. The UNGPs are widely recognized, and they are being referred inter alia in the “Guide to good practices for voluntary carbon markets” from the Finnish Government (2023, p. 18) and in the “Nordic Code of Best Practice for the Voluntary Use of Carbon Credits” by the Nordic Dialogue (2022, p. 53).</p> <p>Requiring alignment with the UNGPs would strengthen the effect of other requirements under section 7.4 by providing an established and widely recognized way of addressing such issues. Requiring compliance with the UNGPs</p> | <p>Thank you for your suggestion. We recognize the value of your suggestion and will consider expanding the requirements in a future version of the General Rules. We have now limited the amendments to the ICVCM Criteria in this update. We will follow the approval of corporate sustainability due diligence directive, its implementation into law and the implications to our ecosystem.</p> |

| Chapter 7: Requirements for CO2 Removal Suppliers | | |
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| Text Location | Comment | Response |
| | <p>is also compatible with the requirements of the upcoming corporate sustainability due diligence directive and with the minimum safeguard requirements of the taxonomy regulation.</p> <p>Based on these views we propose including the UN Guiding Principles on Business and Human Rights along with the International Bill of Human Rights in the requirement II. We would also like to point out that “avoiding discrimination” is usually understood to be included in the respect for human rights (principle of non-discrimination).</p> <p>Summary of proposed changes: “Respect for human rights and avoiding discrimination; abiding by in line with the International Bill of Human Rights and the UN Guiding Principles on Business and Human Rights universal instruments ratified by the host country.”</p> <p>Also, we would like to point out that the requirement for a grievance mechanism (included in the criterion 1.2 of CCPs by the ICVCM) is entirely missing from the General Rules and should be included.</p> | |
| s.7.4 | <p>Environmental and social safeguards. Most of these might be straightforward to demonstrate. However, the requirement “the CO2 Removal Supplier shall provide documentation, that shall robustly address all material environmental and social impacts.” introduces again potentially a massive documentation work. Some points might be very difficult to demonstrate, like “Abide by national and local laws, objectives, programs and regulations and, where relevant, international conventions and agreements.” or questionable like “Providing for equal opportunities in the context of gender; providing equal pay for equal work”.</p> | <p>We will do our best to provide templates and guidance to the suppliers to make the requirements possible to comply with and audit.</p> |

| Chapter 7: Requirements for CO ₂ Removal Suppliers | | |
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| Text Location | Comment | Response |
| s.7.4 | 7.4.5 this has been rather painful in the past with stakeholder process documentation already for projects in industrial countries, as most is covered by the regulation and permits directly. Please revise or provide more guidelines | We will do our best to provide templates and guidance to the suppliers to make the requirements implementable and auditable. If the matter is already covered by the local jurisdiction, a summary and reference to local procedures and documentation will be sufficient. But we do think that it is important to engage stakeholders, even if the facility falls below the capacity requirements for the industrial country's local stakeholder engagement. |
| s.7.4 | 7.4 Environmental and social safeguards Broadly speaking this requirement is straightforward, however the need to demonstrate some of the factors is less clear. Some points such as I - X can be stated with what is performed on site, for example "Abide by national and local laws, objectives, programs and regulations and, where relevant, international conventions and agreements", and we can show data for physical driven regulations such as air emissions, but numbers III and IX are subjective and subject to Canadian indigenous cultural sensitivities and requirements for consultation. These environmental and social safeguard requirements, along with the 9 other points, could be as short as a single sentence, or [if] the need to initiate a fully researched document or policy of actions. For number V 'equal opportunity and rights', thankfully, at least for this point, project already has a multi-page document regarding diversity and inclusion, however, as indicated, its development and production was a lengthy process. | We will do our best to provide templates and guidance to the suppliers to make the requirements implementable and auditable. The effort required by the supplier will be proportional to the scale and risk of negative impacts. |
| s.7.4 | Please add the social safeguards assessment to the project developer training / provide training material, schedule an extra session for us. | Support for implementation of these rules will be provided. |
| s.7.4 | Additional requirements for social safeguards: human rights, Indigenous People, labour rights, gender. Response We have reviewed the proposed amendments to the rules regarding environmental and social safeguards for CO ₂ Removal activities. While we understand the importance of these safeguards in ensuring responsible and | In jurisdictions with strict requirements and strong rule of law, we expect that the additional workload to demonstrate compliance with the requirements to be modest if the scope and risks of negative impacts are small. |

Chapter 7: Requirements for CO₂ Removal Suppliers

| Text Location | Comment | Response |
|---------------|--|----------|
| | <p>sustainable operations, we must express our reservations about the requirement for CO₂ Removal Suppliers to demonstrate compliance with these additional safeguards.</p> <p>Duplication of Legal Compliance: In many jurisdictions, adherence to environmental and social safeguards, including respect for human rights, labor rights, and protection of indigenous communities, is already mandated by national laws and regulations. The requirement for CO₂ Removal Suppliers to provide additional demonstration of compliance with these safeguards may result in duplicative efforts, as these aspects are typically covered under existing legal and regulatory frameworks.</p> <p>Administrative Burden: The comprehensive nature of the proposed safeguards, covering a wide range of aspects from human rights to biodiversity conservation, can impose a significant administrative burden on CO₂ Removal Suppliers. This is particularly challenging for smaller suppliers or those operating in multiple jurisdictions, as it necessitates extensive documentation and continuous monitoring to demonstrate compliance.</p> <p>Potential Impact on Project Viability: The additional requirements for demonstrating compliance with social safeguards could potentially increase the operational costs and complexity of CO₂ Removal projects. This may affect the overall viability and attractiveness of such projects, particularly in regions where compliance with these safeguards is already ensured through stringent national regulations.</p> <p>Recommendation: We recommend that the Puro Standard considers streamlining the requirements for demonstrating compliance with environmental and social safeguards, possibly by recognizing and aligning with existing legal and regulatory frameworks. This approach could reduce redundancy and administrative burden while still ensuring that CO₂ Removal activities adhere to high ethical, environmental, and social standards.</p> <p>In summary, while we fully support the underlying intent of these rules to promote responsible and sustainable CO₂ Removal</p> | |

| Chapter 7: Requirements for CO ₂ Removal Suppliers | | |
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| Text Location | Comment | Response |
| | activities, we believe that a more balanced approach, which recognizes existing legal and regulatory compliance mechanisms, would be more effective and less burdensome for CO ₂ Removal Suppliers. | |
| s.7.4.1 | Overall, with regards to the ten sections of 7.4.1, these requirements alone are possibly months of work for each company, in addition to the other added requirements. We request additional information on what is expected for each of the requirements and how suppliers can achieve and present them. | We will do our best to provide templates and guidance to the suppliers to make the requirements possible to comply with and audit. The effort required by the supplier will be proportional to the scale and risk of negative impacts. |
| s.7.4.1 | 7.4.1 How? What are Puro's requirements to demonstrate those Environmental and Social Safeguards? Is following 7.4.2 through 7.4.5 enough, or must every item on the list in 7.4.1 be addressed separately (and proof provided how)? Guidelines are highly welcome. A checklist provided by puro will heal a lot of the pain. A checklist that aligns with EU/North America projects and none for projects in the global south. Most of 7.4 is hardly answerable for an EU project. We had those issues before with guidelines, where a lot of questions could not be answered as they do not apply. Then a project might be ranked with lower quality for not fulfilling those aspects. | We expect suppliers to state that they adhere to every item and address those items separately if the issue is <i>material</i> . Some issues are automatically considered material on methodology level (in biochar for example emissions to air and soil, safe working conditions). We will do our best to provide templates and guidance to the suppliers to make the requirements implementable and auditable. |
| s.7.4.2 | "7.4.2 When the activity directly or indirectly impacts indigenous peoples or their livelihoods...". In some jurisdictions where local guidelines are limited or absent, we can see the need for this type of documentation, however, we request clarification on this added requirement and whether it anticipates exceeding Canadian local, provincial or federal practices. | If the matter is already covered in local jurisdiction in a manner compatible with the requirements, a summary and reference to local procedures and documentation will be sufficient. However, it is worth noting that the ICVCM CCP Criterion 7.6 specifically mention ILO Convention 169, which has not been widely ratified. |
| s.7.4.2 | Free, prior, informed consent should have a footnote reference or be in the list of definitions. It is not clear what the phrase means in practical terms. | Footnote to FAO manual added, where the concept of FPIC (free, prior, informed consent) is described. |
| s.7.4.2 | 7.4.2, When the activity directly or indirectly impacts indigenous peoples or their livelihoods, ancestral knowledge or cultural heritage, the CO ₂ Removal supplier shall develop the Production Facility with free, prior, informed consent (FPIC). FPIC is a good practice for local communities. We would like to clarify if FPIC only applies to indigenous | We will consider expanding the requirement to local communities at a later stage. Now, as a first step, we want to focus to ICVCM requirements and ensure that we have adequate processes and the capacity to ensure that the rights of indigenous people are respected. |

| Chapter 7: Requirements for CO ₂ Removal Suppliers | | |
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| Text Location | Comment | Response |
| | peoples. In our view all communities should be required to consent to activities which impact their livelihood, ancestral knowledge, cultural heritage, and/or customary rights and land tenure. | |
| s.7.4.3 | "7.4.3 The CO ₂ Removal Supplier shall provide documentation that shall robustly address all material environmental and social impacts..." While referenced in a fairly short section, this section likely would require large undertakings to develop a document that will satisfy or attempt to satisfy this requirement. It is easier to address objective environmental impacts of our system, but quite challenging to address more subjective social impacts inside and outside our activity boundaries. We request further information on how suppliers would be able to address social impacts. We would also request that Puro reconsider and possibly remove, or more specifically qualify, the inclusion of social impacts from the Standard General Rules considering the context that Puro's primary business operations is to qualify and quantif[y] carbon removal. | We note the concerns that suppliers have regarding the added workload related to complying with new requirements. However, we are committed to ICVCM requirements and want to ensure that carbon credit projects are not linked to human rights violations, and to support our suppliers and their stakeholders in moving forward also in socially sustainable manner. |
| s.7.4.3 | Should the reference not be 7.4.1 instead 7.3.1? | Thank you, corrected |
| s.7.4.4 | "7.4.4 The CO ₂ Removal Supplier may use screening tools and guidelines approved by the Issuing Body to demonstrate that the level of risk for negative impacts in the activity is low." We would like to request further details regarding this requirement's production, implementation, and rewording of this section to perhaps frame it around risk mitigation documentation. Will this risk assessment be a separate document that is required or, as a further request, can this point be moved to section 7.4.1? | We have removed clause 7.4.4 as it added more confusion than clarity and added some resources on materiality assessment in clause 7.4.3. There will be more guidance on environmental and social safeguards. |

| Chapter 7: Requirements for CO ₂ Removal Suppliers | | |
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| Text Location | Comment | Response |
| s.7.4.5 | "7.4.5 The CO ₂ Removal Supplier shall conduct a Stakeholder Consultation according to regulation by local authorities and following the Puro.earth Stakeholder Engagement Requirements." For each new project or facility how soon in the development phase should suppliers begin the Puro.earth Stakeholder Engagement Requirements? While we don't doubt that this framework is helpful in some jurisdictions where local guidelines are absent or limited, we would like clarification on its implementation for new project development in jurisdictions where stakeholder consultation is a normal course of business. Will there be a grandfather clause for facilities already in place and operation? | If the local requirements include a public stakeholder consultation, it is likely to be sufficient to comply with this rule. The facilities that were audited before the introduction of stakeholder engagement requirements will need to comply with the continuous feedback requirement. |
| s.7.4.iv | I would suggest that the fundamental human rights relating to freedom of association and collective bargaining are added into the list of example labor rights and working conditions. The rationale for this is that the inclusion of these rights would then align with the ILO conventions considered fundamental to the rights of human beings at work. This should be the minimum baseline that suppliers should be compliant with. | We will consider expanding the requirements to include collective bargaining in a future version. While we consider it an important right, we have now limited the amendments to the ICVCM CCP Criterion 7.2 in this update. |
| s.7.5 | We have carefully reviewed the proposed enhancements to additionality and leakage requirements in the Puro Standard. While we recognize the intent to strengthen the robustness and credibility of the carbon removal certification process, we must express some reservations regarding these changes, particularly in the context of biochar engineered removals. Additionality Requirements: Biochar activities in the global South inherently satisfy the criteria of additionality. The biochar process, which converts biomass into a stable carbon form stored in the soil, represents a clear departure from the business-as-usual scenario of biomass decomposition or combustion. This process intrinsically meets the essence of additionality, as it is not a standard practice and results in a net positive impact on carbon removal. Without carbon finance and CDR the Biochar industry would continue to be a nascent cottage industry in search of a market. | Until now Puro Standard has required all projects to assess Additionality with the same rules but specific to the circumstances to the project. We agree with you that there may be regional circumstances that would allow a group additionality rule, a standardized approach, to be developed. This revision of the General Rules includes that possibility in clause 7.4.4. according to the ICVCM defined principles for developing such Standardized approaches. |

| Chapter 7: Requirements for CO ₂ Removal Suppliers | | |
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| Text Location | Comment | Response |
| | We strongly support a standardised approach to assessing the additionality of biochar to be reviewed every 3-5 years. | |
| s.7.5.2 | 7.5.2 – 'Baseline periodically updated'. Need to add language clarifying that this is in line with the approach set out in the applicable methodology e.g. baseline updated for each crediting period, but not for each monitoring period. | We have replaced "periodically updated" with "updated for every renewal of a Crediting Period." |
| s.7.5.2 | on Additionality: How often does the baseline need to be re-evaluated? | Baseline is re-assessed and updated for every renewal of a Crediting Period. |
| s.7.5.3 | "7.5.3 A CO ₂ Removal Supplier shall demonstrate financial additionality, meaning that the project must convincingly show that the CO ₂ removals are a result of carbon finance." We request clarification about what information will be shared onto Puro's carbon registry and to what extent with clients or auditors, or, if this section is referring to the Baseline and Additionality Assessment document (template "o3_Puro additionality questions to suppliers v1.8"), we recommend that Puro harmonize the terms and content of requirement for supplier clarity. What increase in IRR is acceptable to demonstrate that carbon financing is necessary, and therefore the effort is "additional" for project development, and how will Puro determine that threshold? In the biochar methodology some aspect of financial additionality is included already in section 1.2.3, but is listed under a facility audit, and not a public statement or statement to a private company who might be purchasing the CORC. There is uncertainty and ambiguity in this requirement, and clarity is requested. Broadly speaking financial additionality is very challenging to legally justify and has become a major issue and criticism within traditional carbon offsets because claims and values can always be adjusted in favour or against a project. Thus, it is our opinion that financial additionality be removed because the service of carbon removal is at the core of any carbon removal transaction. As in, did the facility or action remove carbon, if yes, that value should still be monetizable, regardless of other activities or revenue sources. A proposed approach such as mentioned above | Additionality is a key requirement in voluntary carbon markets. We follow the principles and requirements of ICVCM CCPs is demonstrating and transparency of additionality of the CO ₂ Removal activities. More detailed guidance on additionality is provided in the separate requirements document that is available in the document library on our website, and an updated version will be available after the approval of the general rules. This is a separate document to the template mentioned in the comment. There has been criticism towards lack of additionality in the carbon offset market and we consider that the proper response to the criticism is to strengthen those requirements rather than remove them. |

| Chapter 7: Requirements for CO2 Removal Suppliers | | |
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| Text Location | Comment | Response |
| | is more honest and transparent, versus internal and possibly subjective financial assessments. | |
| s.7.5.4 | Can you add the link to the Puro.earth Additionality Assessment Requirements? | In the document library: https://7518557.fs1.hubspotusercontent-na1.net/hubfs/7518557/Supplier%20Documents/Additionality%20Assessment%20Requirements.pdf |
| s.7.5.5 | "7.5.5 The Puro Standard may develop standardized approaches to facilitate the determination of a baseline." If pursued and eventually implemented, there needs to be public consultation and an education webinar for suppliers to eventually work through and learn how to enact the addition. | We will follow the requirements in ICVCM CCPs on developing Standardized approaches and those include a public consultation. |
| s.7.5.5 | Last sentence is hard to understand, break down in 2? | Agreed. Text changed. |
| s.7.6 | Positive impacts SDG: A CO2 Removal Supplier shall provide qualitative and quantitative evidence of positive impacts on SDGs for the Output Audit based on SDG Assessment Requirements provided by the Issuing Body. We understand the requirement of providing the qualitative descriptions of the positive impacts, but how are we meant to assess and show quantitative evidence of these positive impacts, which itself are most probably very abstract and absolutely out of our area of control? Such as the increase in yield or carbon content of some particular field, as we have no access to the end customers of our biochar? | Guidance will be provided in a separate document. Not all SDGs will be included in the Puro SDG assessment requirements, as some of them are only indirectly linked to supplier activities, and it may be that not all suppliers will be able to provide quantitative evidence on all their positive SDG impacts. |
| s.7.6 | 7.6 Positive SDG Impacts Naming and describing these SDGs has been done in the past and is straightforward and therefore we do not see issues with this first part. However, for "7.6.2 A CO2 Removal Supplier shall provide qualitative and quantitative evidence of positive impact", this lends to challenges when quantitative data is required. Carbon removal/climate change mitigation is straightforward, as this is our primary offering and quantified through our LCA and Puro CORC ratio, however some social factors are more difficult to quantify and will likely need to be excluded from our carbon removal listing. | Guidance will be provided in a separate document. Not all SDGs will be included in the Puro SDG assessment requirements, as some of them are only indirectly linked to supplier activities. |

| Chapter 7: Requirements for CO ₂ Removal Suppliers | | |
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| Text Location | Comment | Response |
| s.7.6 | Please add the SDG impact description to the project developer training / provide training material, schedule an extra session for us | Guidance will be provided. |
| s.7.6 | <p>Requirements for positive Sustainable Development Goals (SDGs) impacts descriptions</p> <p>Response</p> <p>We have reviewed the proposed changes to the requirements for describing the positive impacts on Sustainable Development Goals (SDGs) by CO₂ Removal Suppliers. We express our support for the inclusion of these requirements, recognizing their importance in ensuring that CO₂ Removal activities contribute positively to broader sustainable development objectives and avoid any form of greenwashing or dubious environmental claims. But we think these should be an option to submit rather than prescribed by the Rules. We are unsure how Puro or auditors are equipped or resourced to audit these outputs. We think the primary focus should be on CDR following clear principles to do no harm.</p> <p>Importance of Qualitative and Quantitative Descriptions: The requirement for CO₂ Removal Suppliers to provide both qualitative and quantitative descriptions of their expected positive impacts on SDGs is commendable. It ensures a comprehensive understanding of how these activities align with and contribute to global sustainable development efforts.</p> <p>Consistency with Host Country SDG Objectives: The stipulation that CO₂ Removal activities should be consistent with the SDG objectives of the host country is crucial. This alignment ensures that CO₂ Removal projects support local sustainable development priorities and contribute to global efforts in a manner that is contextually relevant and impactful.</p> <p>Adherence to UNDP Evaluation Guidelines: While we support these requirements, we strongly recommend that Puro.earth's criteria for assessing SDG impacts comply with the United Nations Development Programme (UNDP) Evaluation Guidelines. These guidelines provide a robust framework for evaluating the effectiveness, efficiency,</p> | <p>Thank you for the suggestion. We expect to mainly certify SDG impacts based on relatively straightforward methods (e.g. renewable energy produced by the supplier). However, we will consider adding an option to certify indirect SDG impacts based on professionally made evaluations.</p> |

Chapter 7: Requirements for CO₂ Removal Suppliers

| Text Location | Comment | Response |
|---------------|---|--|
| | <p>impact, and sustainability of development activities, ensuring that the assessment of SDG impacts is carried out in a standardised and internationally recognized manner. We advise referring to the guidelines available at https://erc.undp.org/methods-center/guidelines.</p> <p>Practicality and Feasibility: In implementing these requirements, it is essential that the assessment process is practical and feasible for CO₂ Removal Suppliers, especially for smaller entities. The process should be streamlined to avoid undue administrative burdens while still achieving the goal of transparent and verifiable reporting of SDG impacts.</p> <p>In summary, we believe that the implementation of these requirements is a positive step towards ensuring that CO₂ Removal activities contribute meaningfully to the SDGs.</p> <p>However, alignment with established UNDP guidelines is crucial for the credibility and international recognition of these assessments. We encourage Puro.earth to consider these aspects in finalizing the new requirements.</p> | |
| s.7.6.2 | 7.6.2 SDG Assessment Requirements not found in the Puro website. | Guidance on SDG requirements will be provided after the General Rules have been finally approved. |
| s.7.7 | There is an entire new section on reversals that requires estimation and quantification of reversal risks associated with project activities but there is zero information on how to do this under than it must be done with any references to literature values used. Given many of the reversal risks will be common for all projects under a given methodology, wouldn't it be best for Puro to develop and implement a standardised approach for each method that can be universally applied by project proponents (for example something similar to what was done with the permanence factor for the biochar method)? | Thank you for your suggestion. We agree that reversal risks are specific to CO ₂ Removal pathways and the Methodologies that guide projects in them. We are providing more information in the revised text of this Rules update to address the common approach to all CO ₂ Removal pathways and will provide additional specifications at the Methodology level. |
| s.7.7 | Quantitative feedback: Here, I want to highlight this passage under 7.7 Permanence and Risk of reversal: "Inherent Reversal – expected Reversal associated with Material Risks of particularly high likelihood, resulting from the inherent | Thank you for your commentary. We are paying close attention to the scientific developments on biochar and will revisit our approach in the next revision of the Biochar Methodology. We have adapted the text in this reversal section 6.7 (numbering changed) |

Chapter 7: Requirements for CO₂ Removal Suppliers

| Text Location | Comment | Response |
|---------------|--|--|
| | <p>nature of a particular CO₂ Removal technology. For example, decay of biochar in soil over time, or precipitation of mineral carbonates in rivers in the context of enhanced rock weathering. Inherent Reversal is separately quantified and accounted for in each Methodology."</p> <p>The Puro Standard document mentions biochar in the context of its potential decay in soil over time. This is referred to as "Inherent Reversal," which is the expected reversal associated with the material risks of a particular CO₂ Removal technology. This perspective is basically outdated and not in line with the research on biochar's permanence and stability. The research from Sanei et al highlights that biochar, when properly produced and carbonized, transforms into inertinite, a highly stable form of organic carbon. The study even suggests a potential timeframe of 100 million years for the degradation of inertinite biochar under very harsh conditions, which contradicts the notion of biochar's rapid decay as implied in the Puro Standard.</p> <p>Therefore, the discrepancy lies in the understanding of biochar's stability and permanence. The Puro Standard considers biochar as potentially subject to decay, whereas recent research suggests that when transformed into inertinite, biochar exhibits exceptional long-term stability. This difference in understanding could impact the assessment and quantification of biochar's role in CO₂ removal and its valuation in carbon credit markets.</p> <p>Therefore this text regarding biochar must be removed and the new paradigm on the permanence of biochar be integrated. This is also feedback for a new Puro Earth Biochar Methodology, of course.</p> <p>Reference: https://www.sciencedirect.com/science/article/pii/S0166516223002276</p> | <p>to provide more clarity in what a reversal of an issued CORC is. The degradation of biochar (stability) which is already accounted for in the Methodology before issuance of CORC is not a reversal event.</p> |
| s.7.7 | <p>Permanence and Risk of Reversal Section 7.7 does not make any mention of the resultant carbon dioxide degassing from land or ocean sinks. For example, where the storage is done in isolation from sinks that are active in the project. As a consequence, it appears that the</p> | <p>Thank you for your commentary. We are paying close attention to scientific developments and will update Puro Standard requirements when applicable. We have adapted the text in this reversal section 6.7 (numbering changed) to provide more clarity</p> |

| Chapter 7: Requirements for CO ₂ Removal Suppliers | | |
|---|--|---|
| Text Location | Comment | Response |
| | <p>General Rules expect that geological storage will represent a 1:1 removal over a climate-relative time period, which is counter to models that show >70% of the removed carbon dioxide will be degassed over a period of 100 years. (See Keller, et.al. "The Effects of Carbon Dioxide Removal on the Carbon Cycle." https://doi.org/10.1007/s40641-018-0104-3)</p> <p>"[I]nstantly removing 100 Gt CO₂ from the atmosphere in Earth system models ... will only reduce the atmospheric CO₂ concentration by 100Gt CO₂ immediately following the removal. After 100 years, atmospheric CO₂ is only ~25 Gt CO₂ lower because carbon is gradually released by the ocean and land in opposition to atmospheric CDR." (p.255) [The commenter] favors the inclusion of an acknowledgement that "pathways that use storage reservoirs that are isolated from the carbon cycle will need a buffer on net CO₂ Removal to allow for degassing".</p> | <p>in what a reversal of an issued CORC is. The degradation or degassing which is already accounted for in the Methodology before issuance of CORC is not a reversal event.</p> |
| s.7.7 | <p>We opine that biochar, due to its diverse nature and varying properties must not be treated as a uniform product but needs to be analyzed and classified.</p> <p>Given such an analysis, the statement on "inherent reversal" regarding biochar might be reconsidered. This risk, mentioned under 7.7, varies tremendously with different qualities of biochar and should become negligible with a sufficient grade of carbonization.</p> | <p>Thank you for your commentary. We have amended the text in 6.7 reversals. The degradation of biochar (stability) which is already accounted for in the Methodology before issuance of CORC is not a reversal event. The stability is variable, and the Biochar methodology requires biochar stability to be analyzed and stability quantified for each Production Facility and each monitoring period.</p> |

| Chapter 7: Requirements for CO ₂ Removal Suppliers | | |
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| Text Location | Comment | Response |
| s.7.7 | <p>Permanence and risk of reversal.</p> <p>7.7.1 The CO₂ Removal Supplier shall prepare a separate reversal risk estimation document detailing the impact, likelihood, and effect of all risks of Unexpected Reversal.</p> <p>This has traditionally been calculated and supported by Puro, it is part of the offering and standard that we meet with are CORC ratio, being derived by our biochar carbon and hydrogen ratios as well as temperatures, but now we will need to assess the risk of reversals associated with the CO₂ Removal activity and undertake appropriate measures to avoid and manage any material risks of reversals. Again, we cannot understand how these risks could be quantitatively estimated, given we do not have control over the end application of our biochar.</p> <p>Sections 7.7.2, 7.7.3, 7.7.4, 7.7.5, 7.7.6, 7.7.7 and 7.7.8 seem pretty cumbersome for individual companies, instead of developing internal policies the suppliers should be able to rely on Puro's policies and expertise on these.</p> | <p>Thank you for your commentary. The stability of biochar will continue to be calculated as earlier. It is not part of Reversals. We have amended the text and made it clearer. We will provide assistance at the Methodology level with more support for the projects for addressing the reversals .</p> |
| s.7.7 | <p>7.7. please do not use biochar decay in soil as an example that is proven. It is not and we should not state it anymore like this</p> <p>7.7.1 should be part of the methodology, I believe you are putting too much of a burden here on the supplier. Or please do provide a document and checklist to use.</p> | <p>Thank you for your commentary. We have amended the text in 6.7 reversals. The degradation of biochar (stability) which is already accounted for in the Methodology before issuance of CORC is not a reversal event. We will include guidance and support to assist the suppliers.</p> |
| s.7.7 | <p>7.7 Permanence and risk of reversal</p> <p>Permanence and risk of reversal has traditionally been calculated and supported by Puro and controlled for by the 10% buffer, and accounts for our risk of reversal. This additional risk assessment will now be calculated differently by various suppliers, which will not instill confidence in the CORC offerings. Additionally, Risk assessments can be difficult, quite detailed to calculate, represent only hypothesized impacts, and are only as good as the data that is being drawn upon.</p> | <p>Thank you for your commentary. There is no universal "10% buffer" in the General Rules. That has been removed in v3.0 of General Rules. We have amended the text in 6.7 reversals. The degradation of biochar (stability) which is already accounted for in the Methodology before issuance of CORC is not a reversal event. We will provide more information at the Methodology level with a focus on standardizing risk assessment process.</p> |

| Chapter 7: Requirements for CO2 Removal Suppliers | | |
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| Text Location | Comment | Response |
| | <p>Some suppliers might have limited access or resources to apply to this assessment. We see great challenges with the ability to calculate some of the requested values, such as nature-induced or human-induced risks, while geopolitical risks could be easier and essentially not applicable for biochar. Risks could be very high for terrestrial stored biomass or CCS.</p> <p>We realize that this risk assessment is of use for meeting the new standards, however, to be individually negotiated and produced by each supplier seems unwise and potentially destabilizing for our CORC standard that was traditionally maintained by Puro. Ideally, given our achievement of being certified by Puro, we should meet a standard risk of reversal, as we already have the guidance and assessment of permanence from the calculator document provided by Puro that reflects the work by Woolf et al. 2021. We ask for further clarification on the need for individual risk assessments and request that Puro internalize a standard for risk of reversal for each methodology and all suppliers within. We also request that Puro greatly reconsider the application of this requirement and the research and quantitative challenges that will be required of suppliers.</p> | |

| Chapter 7: Requirements for CO ₂ Removal Suppliers | | |
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| s.7.7 | <p>Our main comment is on the "Inherent reversal" for certain CDR technologies. In the segment, it says that biochar has inherent reversal due to a constant decay in soil. We (now) know that this can be contested by looking at the Reflectance Rate (Hamed Sanei) analysis on biochar permanence in over 550C temperatures.</p> <p>Of course, this still depends on the method of biochar production, and therefore we would welcome clarification on whether the focus here is on the labile fraction (that is already discounted from CORCs) or also on the inert fraction, or even by method of production? Please find our suggestion in bold in the passage.</p> <p>We understand this method of looking at biochar permanence is not in the existing Biochar Methodology, but due to the general nature of the general rules, we would welcome an open approach to this question.</p> <p>Please find the entire passage below: 7.7 Permanence and Risk of Reversal;</p> <p>"Inherent Reversal – expected Reversal associated with Material Risks of particularly high likelihood, resulting from the inherent nature of a particular CO₂ Removal technology. For example, decay of the labile fraction of biochar in soil over time, or precipitation of mineral carbonates in rivers in the context of enhanced rock weathering. Inherent Reversal is separately quantified and accounted for in each Methodology.</p> | <p>Thank you for your commentary. We are paying close attention to the scientific developments on biochar and will revisit our approach in the next revision of the Biochar Methodology. We have adapted the text in this reversal section 6.7 (numbering changed) to provide more clarity in what a reversal of an issued CORC is. The degradation of biochar (stability) which is already accounted for in the Methodology before issuance of CORC is not a reversal event.</p> |
| s.7.7 | <p>on Permanence: Please clarify. How should the risk estimation be quantified? Does this mean that the risk effect needs to be subtracted from the amount of CORCS?</p> | <p>We have amended the language (6.7, numbering changed). Where material risks are identified, the Methodologies in the Puro Standard shall include obligations on CO₂ Removal Suppliers for risk identification, preemptive risk mitigation, management, and reporting practices. Reversal risk is focusing on issued CORCs. The estimate of Reversal will not be subtracted from the Issuance of CORCs. Reversal should not be confused with the calculation of natural degradation which will continue to be accounted for as per Methodology.</p> |

| Chapter 7: Requirements for CO ₂ Removal Suppliers | | |
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| s.7.7 | in general on CORC volume: please provide a calculation / formula with which to calculate the eventual amount of CORCs, and include how we should take into account Uncertainty and Risk Effect. | Text was amended so that CO ₂ Removal suppliers are guided to focus on material sources of uncertainty impacting the amount of CORCs to be issued and submit is together with CORC quantification. The methodologies are required to common sources of uncertainty to support projects in making the assessments. (6.3 and 2.2.4.2, numbering changed) |
| s.7.7 | “Inherent Reversal” How does „precipitation of mineral carbonates in rivers in the context of enhanced rock weathering“ lead to re-emission of carbon? We suggest to remove both examples as there is no CDR pathway known to us with no inherent reversal risk. | Text was amended. The concept of inherent reversal was removed. |
| s.7.7 | It is described what needs to be provided in the reversal risk estimation document, but this document is not mentioned in the certification journB62:B64ey, e.g. under 2.2.1, we suggest amendment. | Thank you for your suggestion. We have included this requirement in the list of documents that make up the Production Facility Audit documentation. |
| s.7.7 | Please add the reversal risk assessment & uncertainty estimation to the project developer training / provide training material, schedule an extra session for us | Thank you for your commentary. We will provide guidance and training to the suppliers. |
| s.7.7 | [The commenter] proposes that the biochar methodology be updated and require a monitoring period significantly lower than 40 years. Specifically for the biochar methodology the risk of (non-inherent) reversal of biochar that has been soil applied can be assumed to be low, and covered by a risk buffer. We feel strongly that there should therefore be no need or scope for further compensation mechanisms because an adequate risk buffer would already have provided compensation by spreading the risk event across all CORCs issues under the methodology. At a standard level, whilst we agree that reversal events such as a leak of CO ₂ from geological storage are risks that must be identified and owned, it is not clear that the removal supplier should bear this risk (or the cost of insuring it) alone, nor that the Standard should at it's discretion decide the compensation mechanism. The buyers of CORCs are predominately using them as a | Thank you for your comment. We clarified the language for the liability for compensation of Reversal of an issued CORC are clarified. Text changes to clarify that the originator, the CO ₂ Removal Supplier, is liable when faulted, and that the compensation will apply to the CORCs held by the CO ₂ Removal Supplier. (Numbering changed, now 6.7.4 - 6.7.7.) |

| Chapter 7: Requirements for CO2 Removal Suppliers | | |
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| | means to compensate for their own emissions, not all of which are unavoidable, it seems reasonable that the buyer share responsibility to ensure that credits retired on their behalf are replaced if proven to be reversed and that the supplier and buyer can contractually regulate the risks and potential for compensation, inter alia. | |
| s.7.7 | <u>7.7, Overall Risk Effect</u> We request clarity on how this percentage is calculated, e.g., through a risk calculator provided by Puro.Earth or if this is methodology specific. | Reversal risk estimation is Methodology specific. Language has been amended. |
| s.7.7.1 | 7.7.1 – Reversal risk estimation document: this approach lists several qualitative risks e.g. political risk yet requires the calculation to be quantitative without setting out clear parameters to do so. Requirement for risk estimation is unclear. Furthermore, the use of “unexpected risk” is problematic, implying the others are expected. In reality, all identified are expected, with greater or lesser degrees of probability, or none are expected, just anticipated and mitigated. Requires further clarity. | Reversal risk estimation is Methodology specific. We will provide assistance at the Methodology level with more details on addressing these requirements. |
| s.7.7.1 | "7.7.1 The CO2 Removal Supplier shall prepare a separate reversal risk estimation document detailing the impact, likelihood, and effect of all risks of Unexpected Reversal." Similar to the point above, it is very challenging to imagine the path of achieving this kind of assessment if we are required to quantify and internalize that risk into our CORC ratio. As a descriptive/qualitative assessment this could be more achievable. We greatly request communication or education through a supplier webinar dedicated to assessing this entire section 7.7. as the work to develop documents and policies addressing this section represents large resource allocations and added risks to our business that seemingly was covered by Puro in the past. As a critique, Puro is seemingly taking large steps to greatly derisk their own operations and downloading the responsibility and liability to the individual suppliers. As | Thank you for your commentary. We have clarified the reversal risk text. The estimation of Reversals is for disclosure purposes. Reversal estimations will not be subtracted from the amount of CORCs issued. If a reversal is detected, the compensation liabilities and procedures are described in 6.7.4 - 6.7.7, numbering changed). Reversal of an issued CORC should not be confused with the calculation and subtraction of natural degradation as part of the quantification process described in the Methodology. |

| Chapter 7: Requirements for CO ₂ Removal Suppliers | | |
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| Text Location | Comment | Response |
| | individual companies we likely do not have the resources to hold this type of liability, let alone to develop the internal policy to an expert level for offering permanence and risk of reversal. We understood this factor of risk, previously managed by Puro, was part of the justification for Puro’s high commission fees on CORCs. If this work is to all fall upon the supplier alone, will fee rebates follow from Puro? Permanence and risk reversal is certainly an important factor with regards to presenting a certain and dependable carbon removal offering, however, the new requirement applies a significant risk and cost to individual suppliers. We suggest that Puro develop and institute a methodology-specific risk of unexpected reversal in order to unify and strengthen each methodology’s carbon removal offering. | |
| s.7.7.2 | 7.7.2 – supplier shall multiply output volume by overall risk effect. Unclear why this is required since there is no requirement for a buffer pool | Thank you for your comment. We clarified the language for compensation of Reversal of an issued CORC are clarified. (Numbering changed, now 6.7.4 - 6.7.7.) |
| s.7.7.4 | How are “avoidable reversals” defined? The definition could be the difference between no monitoring and 40 years of constant monitoring. | Thank you for your suggestion. We agree that the definition needs further clarification. We amended the text. |
| s.7.7.4 | on Monitoring: What exactly will be required for monitoring? Will this be specified in each methodology? Is the period of 40 years required for every methodology? | Monitoring practices are specific and within the Methodology. |
| s.7.7.6 | 7.7.6 For BCR the liability can’t be shifted to a 3rd party. The rules are not clear here on how to work with liability in BCR. | Thank you for your comment. Currently, the transfer is possible for permitted geological storage site in some jurisdictions. We have moved this language to the Methodology level. |
| s.7.7.6 & 7 | 7.7.6 & 7.7.7: these paragraphs would benefit from restructuring by defining what the liability for reversal is at the outset (e.g. compensation), then stating the options for where that liability sits. It is essential that there is an option that the removal supplier need not take on the liability, however, we expect T&S suppliers will balk at the idea of assuming full liability as it is envisaged in these pages. So we would encourage Puro to think a little more creatively about what that liability is; if it is compensation, does it need | Thank you for your comment. We clarified the language for the liability for compensation of Reversal of an issued CORC are clarified. Text changes to clarify that the originator, the CO ₂ Removal Supplier, is liable when faulted, and that the compensation will apply to the CORCs held by the CO ₂ Removal Supplier. (Numbering changed, now 6.7.4 - 6.7.7.) |

| Chapter 7: Requirements for CO ₂ Removal Suppliers | | |
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| Text Location | Comment | Response |
| | to be for the full reversal, or can it be a % relating to real risk (sort of buffer-y) or amortised over a period of time | |
| s.7.7.7-8 | The sections 7.7.7-7.7.8 specify reductions in CORCs in the case that Unexpected Reversals occur. Is this a potential double-penalty given that section 7.7.2 requires an up-front reduction of CORCs given a conservative risk estimate of reversals? Here is an example. A project loses 10% of its potential CORCs from the calculation of a reversal risk assessment. If this same project experiences an Unexpected Reversal event that amounts to 10% reversal, is this also subtracted? Are we subtracting 10% two times? | The estimation of Reversals is for disclosure purposes only. Reversal estimations will not be subtracted from the amount of CORCs issued. If a reversal is detected, the compensation liabilities and procedures are described in 6.7.4 - 6.7.7, numbering changed). Reversal of an issued CORC should not be confused with the calculation and subtraction of natural degradation as part of the quantification process described in the Methodology. |
| s.7.7.8 | 7.7.8 – compensation for unexpected reversals: if supplier is no longer liable for storage since this liability has been passed onto a 3rd party, then unclear why compensation for reversal could include reducing output volumes or withdrawing existing CORCS. | Thank you for your comment. We will better define the issue of liability for reversal in the Methodology where it is possible to the transfer of liability to a 3rd party. Currently, the transfer is possible for permitted geological storage site in some jurisdictions. |
| s.7.7.0 | <p>"Inherent Reversal – For example, decay of biochar in soil over time, or precipitation of mineral carbonates in rivers in the context of enhanced rock weathering. Inherent Reversal is separately quantified and accounted for in each Methodology"</p> <p>Comment: I believe this use of the term Inherent Reversal is confusing. It is "degradation" not reversal. The key difference is that no CORCs are issued for this degradation, it is just part of the carbon accounting. Reversals is an event that eliminates the climate impact of an issued CORC. Not the case here. Would recommend not using the word reversal for degradation that is never issued as CORC and already subtracted in the carbon accounting and monitoring reports.</p> | Thank you for your suggestion. We amended the text in definition of Reversal to clarify that degradation or loss that is already accounted for in the methodology before issuance of CORCs is not a reversal. |

Chapter 7: Requirements for CO₂ Removal Suppliers

| Text Location | Comment | Response |
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| s.7.7.6 | <p>"7.7.6 The CO₂ Removal Supplier is, from the outset, liable for any Unexpected Reversal of CO₂ Removal occurring during the Long-Term storage period. However, the CO₂ Removal Supplier may, under certain circumstances and when permitted by local legislation, be able to transfer its liability to a 3rd party (e.g. the local government or other competent authority or organization)."</p> <p>The Unexpected Reversal can be a result of "force-majeure", such as a war or earthquake. The key issue for liability is if the CO₂ Removal Supplier is at fault. If the supplier is not at fault and is not responsible for the reversal, it is not liable and the event is considered force-majeure. If there is fault, they are liable. This text squarely puts liability on CO₂ Removal Supplier regardless of fault.</p> | <p>Thank you for your comment. We clarified the language for the liability for compensation of Reversal of an issued CORC are clarified. Text changes to clarify that the originator, the CO₂ Removal Supplier, is liable when faulted, and that the compensation will apply to the CORCs held by the CO₂ Removal Supplier. (Numbering changed, now 6.7.4 - 6.7.7.)</p> |
| S.7.7 & s.7.3 | <p>Rules for reversal events and uncertainty assessment.</p> <p>Response</p> <p>We acknowledge the introduction of detailed rules for managing the risk of reversal events and conducting uncertainty assessments for CO₂ Removal activities under the Puro Standard. While we agree in principle with the necessity of tracking and quantifying reversal risks, we wish to express our concerns regarding the potential complexity and administrative burden these new rules may introduce.</p> <p>Complexity of Risk Assessment: The requirement for CO₂ Removal Suppliers to prepare a comprehensive reversal risk estimation document that includes a wide range of risk factors (nature-induced, human-induced, geopolitical, etc.) is undoubtedly thorough. However, the complexity of this assessment, especially for diverse environmental and geopolitical factors, could be challenging for suppliers to manage efficiently.</p> <p>Efficiency of Quantification Process: The process of quantifying reversal risks, particularly the Overall Risk Effect, and adjusting the CO₂ Removal Output volume accordingly, is critical for accuracy. Yet, this process must be streamlined to ensure it does not become overly cumbersome or technically</p> | <p>Regarding the potential complexity and administrative burden these new rules may introduce, we are clarifying their implementation through more detailed guidelines and requirements at the Methodology level.</p> |

| Chapter 7: Requirements for CO ₂ Removal Suppliers | | |
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| Text Location | Comment | Response |
| | onerous for suppliers, especially smaller entities with limited resources | |
| s.7.7.4 | Long-term Monitoring and Compensation: The commitment to monitor, report, and compensate for avoidable reversals for a minimum of 40 years is a significant responsibility. While this long-term approach is commendable for ensuring the permanence of CO ₂ Removal, it's crucial that the monitoring and compensation mechanisms are practical and sustainable over such an extended period. We also note the apparent disconnect between the obligation to monitor and the liability for any reversal which seems to extend to 100 years if not longer. | We have amended the text in this clause to consider the specific requirements at the Methodology level including "...obligations on CO ₂ Removal Suppliers for risk identification, preemptive risk mitigation, management, and reporting practices." |
| s.7.7.8 | Liability and Compensation Mechanisms: The stipulation that the CO ₂ Removal Supplier is liable for any Unexpected Reversal of CO ₂ Removal, with the option to transfer liability under certain conditions, adds another layer of complexity. The outlined compensation mechanisms, including the withdrawal of CORCs and purchasing equivalent CORCs, need clear, straightforward guidelines to ensure they are manageable and fair. | We have made the language clearer and added text explaining that CO ₂ Removal Supplier liable when at fault and the fault is a consequence of the actions or omissions of the CO ₂ Removal Suppliers. |
| s.7.7 | Many requirements for the „CO ₂ Removal Supplier“ as an Account Holder role are mentioned, however it is unclear which of the „CO ₂ Removal Supplier“ tasks can or should be performed by the project developer (or Sales Channel, Auditor, MRV provider) Account holder who acts on behalf of the CDR supplier. In 7.7. the transfer of liability to a third party is hinted to, but only in the context of reversal risks. We suggest adding a clear description of this role, or more generally: Describe all the System roles interacting in the Puro scheme with the Issuing Body and the Registry Operator (as it is stated "These rules define the roles and responsibilities of different actors in the System...") | We have paid attention to clarifying in each clause the actor who "shall". The transfer of liability for reversals is related to Geological storages and was removed from the General Rules to be added to the relevant Methodologies. The hint to insurances as in "particular compensation mechanisms or contractual frameworks" was removed and will be considered in the next revisions of these general Rules. The definition for CO ₂ Removal Supplier was extended to include different roles authorized to represent the CO ₂ Removal supply chain end-to-end. |

Appendix A: Article 6 Procedures for the use of CORCS for Nationally Determined Contributions (NDCs) and Other International Mitigation Purposes

| Text Location | Comment | Response |
|---------------|---|--|
| s.A | <p>Aligning trading of CORCs to comply under Article 6 of the Paris Agreement and CORSIA.</p> <p>Response</p> <p>We acknowledge and appreciate the efforts to align the trading of CO₂ Removal Certificates (CORCs) with the stipulations of Article 6 of the Paris Agreement and the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). This strategic alignment is a commendable step towards enhancing the offtake opportunities and marketability of CORCs, which is crucial for the growth and effectiveness of the carbon removal market.</p> <p>The detailed procedures outlined for authorising the use of CORCs under Article 6, including the definitions, additional requirements, and the process for obtaining a Letter of Authorization, demonstrate a thorough approach to compliance and transparency. This alignment will undoubtedly assist in facilitating international cooperation, ensuring accurate accounting of mitigation outcomes, and preventing double claiming of CORCs between Nationally Determined Contributions (NDCs) and other international mitigation efforts.</p> <p>However, we emphasise the importance of ensuring that these procedures are implemented in a manner that is efficient and does not create undue administrative burdens. The complexity of international carbon markets and the intricate requirements of Article 6 and CORSIA necessitate a system that is both rigorous and user-friendly. Ensuring that the processes are streamlined and accessible</p> | <p>Thank you for your feedback. The Puro team is working towards making the incorporation of these requirements and procedures as efficient as possible. Also, we are closely monitoring the development of the Article 6.4 mechanism to understand what necessary changes we may need to implement.</p> |

Appendix A: Article 6 Procedures for the use of CORCS for Nationally Determined Contributions (NDCs) and Other International Mitigation Purposes

| Text Location | Comment | Response |
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| | <p>will be key to encouraging wide participation and compliance among stakeholders.</p> <p>We look forward to seeing these changes contribute positively to the global efforts in carbon mitigation and support the broader goals of the Paris Agreement.</p> <p>We recommend continuous review and potential simplification of these procedures to maintain their efficacy and practicality in a dynamic environmental context.</p> | |
| s.A | <p>Article 6 procedures for use of CORCs towards Nationally Determined Contributions (NDCs), international mitigation purposes (CORSIA), and/or other purposes.</p> <p>Response</p> <p>We have carefully reviewed the proposed changes concerning the use of CO₂ Removal Certificates (CORCs) for Nationally Determined Contributions (NDCs), international mitigation purposes like CORSIA, and other applications as outlined in Appendix A of your document. We fully support these amendments and appreciate the efforts to align CORC usage with the objectives of the Paris Agreement's Article 6 and other international mitigation frameworks.</p> <p>Enhanced Transparency and Accountability: The detailed procedures for authorizing, tracking, and reporting CORCs under Article 6 significantly enhance transparency and accountability. These measures are crucial for ensuring that CORCs contribute effectively to global climate goals without double counting or misrepresentation.</p> <p>Support for International Collaboration: By defining clear roles and responsibilities for host and using countries and outlining the process for authorization and corresponding adjustments, these changes facilitate</p> | <p>Thank you for your feedback. The Puro team is working towards making the incorporation of these requirements and procedures as efficient as possible. Also, we are closely monitoring the development of the Article 6.4 mechanism to understand what necessary changes we may need to implement.</p> |

Appendix A: Article 6 Procedures for the use of CORCS for Nationally Determined Contributions (NDCs) and Other International Mitigation Purposes

| Text Location | Comment | Response |
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| | <p>international collaboration. They provide a structured approach for countries to cooperate on climate action using mitigation outcomes.</p> <p>Flexibility for Various Applications: The ability to assign multiple authorized uses to CORCs, including for NDCs, CORSIA, and other purposes, demonstrates a flexible and forward-thinking approach. This flexibility ensures that CORCs can be utilized effectively across a range of contexts and objectives.</p> <p>Proactive Conflict Resolution: We recommend that Puro.earth proactively identifies and addresses potential conflicts or complexities that might arise in specific contexts, such as the Indonesian Sistem Registri Nasional (SRN). This proactive approach will ensure smoother implementation and reduce the likelihood of disputes or misunderstandings regarding CORC usage.</p> <p>Continual Adaptation and Improvement: As international climate agreements and mitigation strategies evolve, we encourage Puro.earth to continually adapt these procedures. This will ensure ongoing alignment with global climate goals and the latest scientific and policy developments.</p> | |
| s.A.1 | Generally: why is “double claiming” used here and not above, what does double claiming mean to Puro, what’s the difference to double use? Can you link to the definitions used? | We replaced “double claiming” with the term “double counting” for consistency across the whole document. Thank you! |
| s.A.1 | Also regarding the ITMO-xyz labels, are those Puro inventions, or generally defined acronyms? It would aid readability if it were made clear whether each of these definitions are coming from Puro internally or refer to external requirements (UNFCCC, CORSIA, ICVCM, respectively) | These labels/acronyms were developed by the Puro team to facilitate the alignment/tagging with the external definitions and accreditations. |
| s.A.2 | What is meant by under whose jurisdiction a “CDR project operates”? It is not the jurisdiction under which the registering account holder entity (e.g. | “CDR project operates” refers to the location where the carbon removal takes place. |

Appendix A: Article 6 Procedures for the use of CORCS for Nationally Determined Contributions (NDCs) and Other International Mitigation Purposes

| Text Location | Comment | Response |
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| | could also be the project developer) is registered but the location where the carbon removal takes place, right? See feedback about removal activity / Production Facility location above | |
| s.A.3.1 | A.1: in this context it is more appropriate to refer to avoiding double counting between NDCs and OIMP, as this is strictly what the 6.2 rules deal with and what corresponding adjustments seek to prevent. The Paris language is more appropriate as what it is still being upheld whatever the use is NDC exclusivity; it's either in or out. | We will make this clearer in the text. |
| s.A.3.1.2 | Addendum 3: Tags for CORSIA One of the features of Puro is the tradability of CORCs. But it is not clear whether the addition of the -IMP tag thereby boxes-in those CORC only for CORSIA. [The commenter] can envisage a situation whereby an airline wants to purchase [The commenter] CORCs with both -IMP and -OTH tags, potentially at different prices, but does not know in advance the quantity required of either. [The commenter] favors an arrangement whereby -IMP and -OTH tags can be applied ex-post and at the discretion of the purchaser, in this case, the airline at such point as a determination is made as to the total quantity of -IMP CORCs required to comply with CORSIA. To the extent that this is envisaged, then the flow-charts should reflect that the tags can be swapped (if the underlying CO ₂ Removal activity is the same). | We will explain the potential of 'stacking' of uses of CORCs. |
| s.A.3.1.2 | A.3.1.2: same comment on double counting > claiming. | Text replaced with use of "double counting" |
| s.A.3.1.2 | Application of labels should allow for the greatest flexibility of CORC use. The application and authorization process to support all possible uses – the potential 'stacking' of uses – would benefit from additional clarity in this document. | We will explain the potential of 'stacking' of uses of CORCs. Nonetheless, CORCs can only be retired for a single purpose or use. |

Appendix A: Article 6 Procedures for the use of CORCS for Nationally Determined Contributions (NDCs) and Other International Mitigation Purposes

| Text Location | Comment | Response |
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| s.A.3.1.2 | <p>We believe that Puro.Earth's position on Corresponding Adjustments needs to be clarified as the draft General Rules do not clearly state if Corresponding Adjustments are required for all voluntary transactions, or only those used in Article 6 and/or CORSIA compliance.</p> <p>We would appreciate if Puro.Earth could provide more detail on how the process for Corresponding Adjustments tagging would work in practice. Understanding what would be done, how and in what time frame is essential for market actors. We would appreciate details covering issuance and first (international) transfer for each of the different usages (ITMOXXX) described in the consultation.</p> | <p>Corresponding Adjustment are only necessary for CORCs that are eligible for NDC use and other international mitigation purposes such as CORSIA. Corresponding Adjustment for CORCs are not required for all voluntary transactions.</p> |
| s.A.3.1.2 | <p>Labels in practice</p> <ul style="list-style-type: none"> • It is unclear from the consultation how Puro.Earth is proposing to operationalize the process of credit labels. In the market today, suppliers can offer credits with a Letter of Authorization (LoA) to primary or secondary buyers who, in turn, may use them for one or more different obligations. As such, clear prescriptive guidance is needed that states: <ul style="list-style-type: none"> o When in the credit lifecycle is a label applied? <ul style="list-style-type: none"> ▪ When would CORCs be labelled CORSIA eligible or ITMO-IMP? ▪ Would Puro.Earth tag issued CORCs that have a Corresponding Adjustment with all labels in order to avoid the above scenario (where final usage is not defined)? Can a CORC be labelled with all three ITMO-XXX? <ul style="list-style-type: none"> o If a credit is transacted, does the label become fixed in both sellers and buyer's account, or could a buyer request a label alteration (assuming the credit is eligible for other labels)? E.g., ITMO-NDC to ITMO-OTH? o What happens if the host or acquiring country does not make the applicable | <p>The Puro team is working towards preparing the incorporation of these requirements and labels in the different platforms that we operate. It is possible for CORCs to be multiple labels if authorized for multiple uses provided, they meet all aggregated requirements. We have clarified the labels and provided more information on the lifecycle of labels depending on end-use at Retirement.</p> |

| Appendix A: Article 6 Procedures for the use of CORCs for Nationally Determined Contributions (NDCs) and Other International Mitigation Purposes | | |
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| Text Location | Comment | Response |
| | <p>corresponding adjustment? Is there a time limit when ITMO-NDC label expires?</p> <p>o Is there a time limit when ITMO-IMP or ITMO-OTH expire?</p> | |
| s.A.3.1.3 | <p>If "CORCs may have more than one authorized use assigned to them" e.g., they can be labelled both ITMO-OTH & ITMO-NDC and with what consequences for corresponding adjustments? Is it possible for Puro to safeguard that all the non-"ITMO"-labelled CORCs are truly not accounted for by any host country to prevent double counting, probably not, right?</p> | <p>SEE RESPONSE ABOVE The labelling of CORCs within the Article 6 framework depends on meeting the requirements of the desired authorized use. For example, if an entity wants to use CORCs for other international mitigation purposes such as CORSIA, the CORCs need to be CORSIA eligible according to CORSIA Eligibility Unit Criteria (EUC).</p> |
| s.A.3.1.4 | <p>A.3.1.4: it is not within Puro's gift to assert the rights of host countries, including on revocation. Furthermore, the capacity for host countries to revoke authorisation is currently undecided and indeed contested. It is probably safer for Puro to simply state that the appendix will follow the relevant rules (and future decisions) of the CMA.</p> | <p>Thank you for your feedback. We agree with the statement and have clarified the text.</p> |
| S.A.3.2 | <p>Article 6 / NDC: Reading new version 4.0 of General Rules, can you confirm if Puro will systematically require from projects located in country with NDC to seek [a]uthorization from host country and obtain Corresponding Adjustment (when CORCs are traded internationally).</p> | <p>CO₂ Removal Suppliers supplying only the voluntary carbon market will not be required by Puro to participate in the Article 6 framework. Puro's understanding is that unless the country's designated authority under Article 6 of the Paris Agreement wishes to provide authorization for voluntary use, the request for a Letter of Authorization is not necessary.</p> |
| s.A.3.2.1 | <p>Host country authorization in Annex A. I understand the important principle of strict emission reduction management in Puro and the avoidance of double counting, but I think that even in doing this, it is important to distinguish by project type and size. At present, there are few voluntary emission reduction mechanisms applying biochar methodology [name of crediting programs], and limited by the market size, the actual output of this type of plant is very small, usually a plant with an annual output of 10,000 tons of biochar is difficult to achieve, so the annual emission reduction of this type is not much. It is completely impossible to</p> | <p>We understand your concerns associated with the process of "authorization of use" of the mitigation outcomes (i.e., CORCs) that falls within the design of the Article 6.4 mechanism. The actual "authorization of use" depends on the designated national authorities who oversee the definition and implementation of the Nationally Determined Contributions (NDCs). Only CO₂ Removal Suppliers that wish to supply CORCs for NDC use or other international mitigation purposes (OIMP) such as CORSIA, need to ask for authorization of use. Puro aims at facilitating this process by designing a process to incorporate the necessary labels for these authorized uses to the CORCs. It is not within Puro's mandate to determine which CORCs require "authorization of use" or not. We expect more</p> |

Appendix A: Article 6 Procedures for the use of CORCS for Nationally Determined Contributions (NDCs) and Other International Mitigation Purposes

| Text Location | Comment | Response |
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| | <p>affect the nationally determined contributions (e.g., does a glass of milk change the taste of a river?). Moreover, the factory is privately owned and should not require authorization from the relevant government to declare emissions reductions. If such a standard is implemented, few companies will be able to obtain authorization from local governments, which are usually very conservative, and the profits from emissions reductions belong to companies, so government officials are either corrupt or do nothing. So this standard could lead to Puro's projects getting smaller and smaller, which is completely at odds with the idea of becoming the largest scientific carbon removal certification body.</p> <p>Therefore, I propose that 1) biochar projects do not require authorization from the government of host country, or 2) even if authorization is required, it should be based on the annual emission reduction of 100,000 tons, that is, equipment with emission reduction of more than 100,000 tons needs authorization from the government of host country, otherwise the authorization is not required.</p> | <p>details to come forward on how the Article 6.4 mechanism will be implemented in the coming year. Puro aims at supporting CO₂ Removal Suppliers that participate in this market by incorporating the necessary requirements in its Standards and infrastructure.</p> |
| s.A.3.2.1 | A.3.2.1: it may make sense to specify to whom the host country is submitted the letter of authorisation for clarity (e.g. not Puro but the UNFCCC). | The LoA is requested by the CO ₂ removal supplier, who would be the recipient of the reply from the designated authority of the host country. |
| s.A.3.2.1 | CORSIA and Article 6 do not apply vintages in the same manner, nor does Article 6 reference CORSIA for eligibility. We recommend clarification of this section, and clarity that CORCs used for NDC's must meet Article 6 requirements, and CORCs used for meeting other international mitigation frameworks – such as CORSIA – must meet their respective eligibility requirements. | Noted and amended in the text. Thank you for your suggestion. |
| s.A.3.2.2 | I want to re-summarise my earlier input to Marianne and the Puro team on this subject. | Puro.earth is preparing to have technical capability in our software platforms to manage the letters of authorization and the labels. We will communicate |

Appendix A: Article 6 Procedures for the use of CORCS for Nationally Determined Contributions (NDCs) and Other International Mitigation Purposes

| Text Location | Comment | Response |
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| | <p>[the commenter] now has an [name facility] assembly factory (image below), an experienced CEO, two partnered engineering companies and a very long list of follow on projects at various stages of development > 1 million t/y CO₂ removal. All are underpinned by the assumption of revenue from carbon removal certificates via the Puro Rules.</p> <p>The LoA I suggest this be staged over a year or two by first demonstrating that LoAs have been achieved in e.g., Finland & other Nordics, second by Puro assisting your suppliers in the other jurisdictions.</p> <p>I believe an LoA will be very hard and very slow to get from National bureaucracies that have not yet embraced or legislated carbon removal. I am reasonably well connected to Australia's national compliance market processes, and I have no idea how to achieve an LoA in Australia.</p> <p>[Information on projects].</p> <p>[Production facility] was contracted on the assumption of revenue from carbon removal certificates to enable the physical biochar to be sold at low cost to farmers - stimulating demand for biochar and CORCs.</p> <p>For biochar CORC producers who can document they are genuinely carbon negative, using allowed biomass residues and safe clean processes compliant with local regulations to produce biochar that goes into the soil with no risk of being used for combustion and who are supported by the local community - I wonder what else there is to say.</p> <p>Most of the biochar CORC producers are currently small not large</p> | <p>how it plans to assist CO₂ removal suppliers navigate the process of "authorization of use" with the project's host country. At this moment, we expect further clarifications by the UNFCCC into how this process will take place. Appendix A describes our initial labeling approach as well as the process of request and submission of the Letter of Authorization as we understand it.</p> |

| Appendix A: Article 6 Procedures for the use of CORCS for Nationally Determined Contributions (NDCs) and Other International Mitigation Purposes | | |
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| Text Location | Comment | Response |
| | organisations with limited resources. The additional Rules requirements to qualify and quantify seem quite onerous and expensive. | |
| s.A.3.2.2 | Letter of Authorization (LoA) This is an addition that has the potential to be a bureaucratic nightmare to have approved. Since there is not in sight that there will even exist an authority in the government that would potentially grant approvals for carbon removal operations, since no legislation exists yet. We understand the importance and benefits of being able to function within Article 6 of the Paris Agreement and this might become relevant in the future, possibly in 2030's. But at this stage introducing LoA in the Puro Standard seems very much premature. | We understand your concern. Our goal was to provide context to the implementation of requirements of Article 6 of the Paris Agreement. Our understanding is that this process is a work in progress that Puro will monitor to best support CO2 Removal suppliers navigate and comply as necessary. |
| s.A.3.2.2 | We have a concern regarding how the A.3.2.2 Letter of Authorization (LoA) would work if countries do not have existing methodologies for biochar or other carbon removal aligned with the Paris Agreement Nationally Determined Contributions. Given the large implications and connection to the global compliant carbon offset market, how will suppliers meet this new requirement, which, in itself could be a lengthy and bureaucratic process, that could ultimately fail to meet requirements set by Puro. | CO2 Removal Suppliers supplying only the voluntary carbon market will not be required by Puro to participate in Article 6 of the Paris Agreement framework. Puro's understanding is that unless the country's designated authority under Article 6 of the Paris Agreement wishes to provide authorization for voluntary use, the request for a Letter of Authorization is not necessary. |
| s.A.3.2.2 | Regarding the role of the "carbon removal supplier" here, can this/must this request be conducted by the project developer if there is a power of attorney in place? Would appreciate general clarification for all instances of "carbon removal supplier" | Thank you for your suggestion. We will provide further clarification as the implementation of Article 6.4 becomes clearer. |
| s.A.3.2.3 | It's great to have this detailed description of the authorization process but in contrast the authorization process for Auditors seems missing and could be linked to in the definitions under 1.5; | Thank you for your suggestion. |
| s.A.3.2.3 | Why are only CORSIA-labels mentioned in the Description of Fig. A.1 and not the ITMO ones? | The use of CORSIA-labels in the diagram was provided as an example. We have changed this to cover all possible cases. |

| Appendix A: Article 6 Procedures for the use of CORCS for Nationally Determined Contributions (NDCs) and Other International Mitigation Purposes | | |
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| Text Location | Comment | Response |
| s.A.3.3 | A:1: corresponding adjustments won't technically be made to national GHG inventories. They appear in the "emissions balance" contained in the "structured summary" which flows from Article 13, as per decision 18/CMA.1 at COP24. This comment applies to subsequent text too e.g. the clauses around figure and table A.1. Overall: it might be safer for Puro to avoid prescribing process where it falls within the domain of the UNFCCC, simply deferring and providing for anything additional Puro requires on top for e.g. reporting/registry purposes. | Text amended for clarity. |

Appendix B: Ongoing Issuance and Digital Monitoring, Reporting, and Verification.

| Text Location | Comment | Response |
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| | Originally Appendix B -ONGOING ISSUANCE AND DIGITAL MONITORING, REPORTING AND VERIFICATION | Renamed to Appendix A - ONGOING ISSUANCE AND DIGITAL MONITORING, REPORTING AND VERIFICATION |
| s.B | Provisions on the issuance of 80% emission reduction . Because the methodology chosen by Puro is itself high standard, and the emission reduction calculation process covers the whole life cycle, which is already the most stringent practice, so according to the current standard - issuing 90% emission reduction, this is already a conservative approach, I do not know why the buff increased to 20%? Is it on the high side? Can you give a reasonable explanation? | Thank you for your confidence in the high standard of Puro Methodologies. We admit that 80% is a conservative number especially for industrial carbon removal. Please, note that when the balance is calculated after the period the full 100% of carbon removal that has been verified will be issued. The 80% may be revised in next iterations of the General Rules when we have gathered more data points. |
| s.B | Specifically, [the commenter] supports the ability for issuance of credits on monthly basis as compared to annually as well as the certification with external methodology. Continuous/Semi-Continuous (monthly) credit issuance as compared to annual credit issuance is crucial to support underwriting capital-intensive CDR projects and will lower the cost of carbon dioxide removal credits. | You have very well described the reasons why Puro Standard is aiming for higher and more frequent digital MRV and issuance of CORCs. Our aim is that monthly issuance will evolve to weekly and in some cases real-time sensor reading. |
| s.B.6.1 | B.6.1 seems to say that the formula is [Verified CORCs-Issued CORCs] And then: a) too few CORCs have been issued -> balance is negative - Isn't that the other way round? This could be solved if the formula was inverted or the positive and negative changed place | Thank you for bringing this to our attention. We changed the language in B6.1 - B.6.3. The formula was kept as is [verified CORCs (minus) issued CORCs], resulting in positive balance when too few CORCs have been issued and more needs to be issued [Positive Balance] and vice versa for Negative Balance. |
| s.B.5.7 | B.5.7 – with ongoing issuance, puro will issue 80% of reported volume. 20% penalty for ongoing issuance is very high, suggest reducing this and providing clarity as to when the remainder of reported volume is issued | We would like CO ₂ Removal Suppliers to see this as a possibility to have earlier access to 80% of their reported Output ahead of the usual 12-months verification cycle audit. The remaining 20% of their reported output will be issued as normal at the end of 12 months verification cycle audit. We would be looking at ways to reduce this % in the future but we are taking a conservative stance as we work out the details of this process. |
| s.B.6 | B.6 – ongoing issuance Balance: suggest providing a worked example for clarity | We will consider this proposal for future version of the supporting documentation |

Appendix B: Ongoing Issuance and Digital Monitoring, Reporting, and Verification.

| Text Location | Comment | Response |
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| s.B | <p>We understand the need for MRV to raise the level of CORC validity and have no issue with the monthly reporting of CORC output and possible real-time digital monitoring. However, we would require that Puro provide the technological specifications as well as integration support for real-time digital monitoring, or there should be a monetary benefit provided to suppliers from Puro for achieving this goal.</p> <p>We also have a concern regarding the 20% holdback of CORCs and have expressed so to Puro in the past. Our CORC sales agreement to our major offtaker has the full output of our facility's CORC production going to them, minus the 10% for Puro securities. For future production, we would like clarification of what will happen with the 20% hold back and if 10%, or even 20%, of that will be allowable for sale through the ongoing issuance balance.</p> | <p>We would like CO₂ Removal Suppliers to see the monthly reporting as a possibility to have earlier access to 80% of their reported Output ahead of the usual 12-months verification cycle audit. The remaining 20% of their reported output would be issued as normal at the end of 12-months verification cycle audit. We would be looking at ways to reduce this % in the future but we are taking a conservative stance as we work out the details of this process.</p> <p>Regarding your concerns on the additional 10% hold back, we do not have procedures for that in the General Rules.</p> |
| s.B | <p>We appreciate the description of the requirements and procedures for "Method 2", however just as in done for Appendix A, we suggest a definition of the roles and responsibilities in this process including an assessment the involved digital MRV systems. Happy to collaborate on drafting quality & process requirements anytime.</p> | <p>Thank you for your suggestion and will consider this proposal for a future version of the General Rules and supporting documentation/processes.</p> |
| s.B.3 | <p>B.3: Regarding early steps towards digital MRV: add the perspective of including specialized 3rd party MRV providers to facilitate streamlined certification in a reliable and scalable way</p> | <p>Thank you for your suggestion and will consider this proposal for a future version of the General Rules and supporting documentation/processes.</p> |

Appendix B: Ongoing Issuance and Digital Monitoring, Reporting, and Verification.

| Text Location | Comment | Response |
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| s.B.4 | <p>B.4: For a successful mitigation of manual efforts & certification bottlenecks through digitization & automatization, it is not only relevant to evaluate each Production Facility's capability to maintain consistent operation, but even more so to evaluate comprehensive MRV systems as providers of trustworthy near-real time certification-relevant data for any given project. Main feedback: We suggest evolving the standard to enabling & accrediting (few) 3rd party Monitoring & Reporting systems providers to support effective and trustworthy certification, instead of Puro working out accurate data flows & tailored IT interfaces with each individual supplier for obvious transformation & scaling efficiency considerations.</p> | <p>Thank you for your suggestion and will consider this proposal for a future version of the General Rules and supporting documentation/processes.</p> |
| s.B.6 | <p>B.6: We suggest developing this scheme further to not potentially yield "virtual" CORCs for which no verifiable tracking records along the chain of custody exist. (Same issue for leftovers described under 3.2.8.)</p> | <p>Thank you for your suggestion and will consider expanding the requirements in a future version of the General Rules and supporting documentation/processes.</p> |

Appendix B: Ongoing Issuance and Digital Monitoring, Reporting, and Verification.

| Text Location | Comment | Response |
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| s.B | <p>Going beyond, we suggest to generally move to digital MRV no matter what the project’s output consistency or monitoring periods are.</p> <ul style="list-style-type: none"> ▪ To harness the benefits of digitization and automatization, it is essential to establish mechanisms for auditing and accrediting MRV providers' systems to ensure that they align with the relevant certification requirements, are secure and efficient and thus are fit to support largescale adoption of the certification framework ▪ To allow for streamlined data flows, input of certification relevant data should be simplified through online templates (e.g. provided by 3rd party measurement, monitoring, and reporting system providers), data interfaces between different stakeholder’s IT systems should be used in automated ways allowing to feed in performance verification relevant data (e.g. via APIs to adjacent data systems) to advance precision and mitigate errors and manipulation vulnerabilities. ▪ To implement the above, while fostering collaboration and inclusive ecosystem development, launch a digital MRV program soon: Open applications to invite full consortia of carbon removal project suppliers, MRV providers, and certificate-buyer representatives to implement requirements, roles, and responsibilities along the data trail together with auditors, Issuing Body, and Registry Operator. | <p>We recognize the value in your suggestion and will consider expanding the requirements in a future version of the General Rules and other supporting documentation/processes.</p> |

Appendix B: Ongoing Issuance and Digital Monitoring, Reporting, and Verification.

| Text Location | Comment | Response |
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| s.B | <p>Ongoing Issuance and Digital Monitoring, Reporting, and Verification.</p> <p>Response</p> <p>We have reviewed the proposed changes to your rules regarding Ongoing Issuance and Digital Monitoring, Reporting, and Verification (dMRV) as detailed in Appendix B. We wish to express our full support for these initiatives.</p> <p>Advancement Towards Real-Time dMRV: The transition from traditional monitoring and reporting methods to a real-time digital approach represents a significant technological advancement. This evolution aligns well with the increasing digitalization in various sectors and will enhance the efficiency, accuracy, and transparency of the monitoring process.</p> <p>Monthly Output Reporting: The shift from annual to monthly Output Reporting, as an interim step towards real-time dMRV, is commendable. It will ensure more timely and precise tracking of carbon removal activities. This change is particularly beneficial for engineered carbon removal projects, which often have the capability for continuous, automated monitoring.</p> <p>Ongoing Issuance Right: The introduction of the Ongoing Issuance Right, contingent upon regular industrial operation and successful performance verification, is a positive step. It will incentivize CO₂ Removal Suppliers to maintain high operational standards and consistent monitoring practices.</p> <p>Balanced Approach to Compliance: The provisions for reviewing and potentially revoking the Ongoing Issuance Right if conditions are not met strike a good balance between encouraging efficient operation and ensuring compliance with standards.</p> | <p>Thank you for your support.</p> |
| s.B | <p>[The commenter] welcomes the proposal to adopt a 20% buffer, rather than the 3-month cut off limit. welcomes Puro's clarity as to the implementation of the change in routine.</p> | <p>Noted. Thank you.</p> |

Appendix B: Ongoing Issuance and Digital Monitoring, Reporting, and Verification.

| Text Location | Comment | Response |
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| s.B | <p>[The commenter] proposes that the biochar methodology (and if necessary, the Standard) be updated so that established projects that have successfully passed the output audit multiple times, who demonstrate robust MRV, and where uncertainty and reversal risk buffers are established, can, at the discretion of Puro self-report output for longer than 12 months between 3rd output audits. e.g., [project name] has 3 times been audited and successfully demonstrated CORC factors of 2.95, 3.01, and 2.86. The 20% buffer (in addition to any new uncertainty buffer) is more than adequate to avoid over issuance. Reducing the frequency of external audits to say 2 years, would reduce the operating cost and administrative burden without increasing the risk of over issuance and partially compensate for the increase administrative burden of the current proposals.</p> | <p>Thank you for your suggestion and will consider expanding the requirements in a future version of the General Rules and supporting documentation/processes.</p> |

General Comments without specific reference to any chapter/appendix.

| Text Location | Comments | Response |
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| n/a | <p>We would welcome the opportunity to speak with Puro to better understand the context with which some of these changes are proposed or what additional information/documentation is being developed/provide additional feedback if appropriate.</p> | <p>We have scheduled a Supplier Townhall meeting for the 6th of February 2024 to discuss the updates to its General Rules with the projects within Puro.earth ecosystem.</p> |
| n/a | <p>Finally, there is an old saying that you can't have your cake and eat it. Everything has two sides, it is impossible to cover all sides. I think Puro should rethink its positioning, either sticking to small and beautiful (like the current Puro, creating a high-quality carbon credit label), or large and comprehensive (like verra, becoming the world's largest carbon emission reduction certification platform)? Of course, I understand that all companies want to grow as quickly as possible, and I support</p> | <p>Our mission is to mobilize the economy to reward carbon net negative emissions. There is enough carbon in the atmosphere for many companies, but we intent to be the world's largest engineered carbon removals certification platform.</p> |

| General Comments without specific reference to any chapter/appendix. | | |
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| Text Location | Comments | Response |
| | Puro's continuous expansion of its influence through innovation, but only if it adheres to its unique and high standard of positioning. I sincerely wish Puro a new glory. | |
| n/a | Hello, at first review, there seems to be a lot added for suppliers from the last version. Is there going to be a webinar on the new additions and what that will translate to for supplier set up? Some of the new requirements seem very nebulous. Without an introduction to the new requirements I will have to consult [a few] other Biochar producers I am connected with to understand their views. | We have scheduled a Supplier Townhall meeting for the 6th of February 2024 to discuss the proposed update to its General Rules. |
| n/a | Before the new standard is released, will the devices that are applying for registration still in accordance with the existing standard? If the new standard is published, will it be limited to newly submitted registered devices? Does there needs to submit additional materials for previously successfully registered devices? | When the new version of General Rules v4.0 is approved, it will be applied for new submissions. Already certified project (Production Facilities) will have to adopt the new General Rules at latest in the next Production facility audit. |
| n/a | One question I did have was what happens when an updated version of a methodology is published? - When biochar v2 was released, projects could continue with the existing methodology until a cutoff date (Jul 22), when the new methodology was to be adopted. Can projects switch over to the new methodology asap? What do suppliers need to do? - Do existing projects need to provide any revision to their production facility report, do suppliers need to get project re-validated or is adopting the new methodology in calculating future CORC issuance sufficient? | 1) The transition period between an updated methodology and its preceding version will be communicated case by case when the proposed methodological update has been approved. 2) This depends on the type of revisions in the methodology. Ongoing production facilities or projects may need to update their Output reporting in accordance with the approved methodology at the next performance verification. In other cases, ongoing production facilities may need to re-validate their projects for a renewed crediting period. Nevertheless, it is possible for the CO2 removal supplier to want to make the update before the end of its crediting period and undergo new audits. |
| n/a | We believe that the definition of "Removal" on page 7 should be amended by replacing the word "CO2" with "greenhouse gases". Although CO2 is the most important greenhouse gas, it is not the only one. For example, CH4 is also very important. | We follow the IPCC definition of removal: ". It includes anthropogenic enhancement of biological, geochemical or chemical CO2 sinks, but excludes natural CO2 uptake not directly caused by human activities." Methane is important to keep away from the |

| General Comments without specific reference to any chapter/appendix. | | |
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| | | <p>atmosphere by emission avoidance or methane destruction to CO₂, but those are not removal activities.</p> <p>https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_TechnicalSummary.pdf</p> |
| n/a | <p>Our clients have smaller boilers (largest 400 kW). At the moment we have been trying to add the first of many supplier's to Puro since Aug/Sep and we have not yet been able to send in the right documentation to be able to book an inspection.</p> <p>The issue is that it is not easy to understand what kind of documents and information you are asking for (it is also sometimes difficult to apply to small machines/local isolated heating systems).</p> <p>Furthermore Puro has been slow in answering emails, it could take weeks before we get an answer. This slows down the process and makes it problematic for especially our suppliers that need the income from sold carbon removals.</p> <p>When it comes to these changes Puro suggests it's too diffuse to understand - the suppliers need to know more specifically what extra work this implies. What extra documents need to be handed in?</p> <p>Since we are already struggling with Puro's documentation and slow process, we might not be able to continue with Puro if the changes are too heavy.</p> | <p>We understand these updates to our General Rules will require additional documentation. Puro scheduled a Supplier Townhall meeting for the 6th of February 2024 to discuss the proposed update to its General Rules.</p> |
| n/a | <p>Qualitative feedback:</p> <p>My standpoint and first principle is the development of that standard was that it should be easy to comply with, work for large and small companies and have the least amount of administration and bureaucracy. That is what I would ask for in the a new Puro Standard.</p> <p>For CDR to scale we need the least amount of friction to the process and CDR companies needs the least amount of burdensome admin and bureaucracy. So cut away as much as possible and refine the standard as much as possible. Use Einsteins device: "make things as simple as possible, but no simpler". And the one of Mr. Musk: "If you're not</p> | <p>Standard setting is a balance between supply and demand serving both parties. These updates to our General Rules represent our commitment to continue guarantee the integrity of CORCs and harmonize the Puro Standard with the requirements of the voluntary carbon market and the compliance market. We understand these updates to our General Rules will require additional documentation. Puro is working on implementing the General Rules on the platform and automating processes (where possible) to make it easier for the users.</p> |

| General Comments without specific reference to any chapter/appendix. | | |
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| | adding things back in at least 10% of the time, you're clearly not deleting enough.”. | |
| n/a | <p>My Proposal:</p> <p>Before Implementing the new Rules</p> <p>i) Puro gauges the capacity of a sample of existing biochar CORC suppliers to comply with the new documentation called for in the new Rules - either with a survey or an interview process.</p> <p>ii) Puro conducts a Supplier Town Hall aimed at Q/A on the new Rules</p> | <p>We have scheduled a Supplier Townhall meeting for the 6th of February 2024 to discuss the current update to its General Rules.</p> <p>Puro is engaging with the existing biochar suppliers (and other CO2 removal suppliers) to understand their concern in complying with these new requirements and how Puro platform and/or partners can be of help in this process.</p> |
| n/a | <p>General</p> <p>I believe the whole process missed guidance from puro especially for current suppliers through the changes and adaptations. The relevance of that consultation was not clear to everybody, although not is meant by some proposals.</p> <p>It seems like a whole new standard and way more than an adaptation</p> <p>I welcome the new alignment in terminology with other international standards (CO2 removal, baseline, long term, etc.)</p> <p>Guidelines and examples per methodology would help a lot :</p> <p>On content and detail level for the Production facility documentation. Especially IV. Baseline and Additionality Assessment Report V. Stakeholder Consultation Report. VI. Environmental and Social safeguards assessment. VII. Positive SDG impacts description. VIII. Verified Output quantification for the Monitoring Period</p> | <p>Thank you for your feedback. We will continue with our efforts to improve our communications.</p> <p>In this revised version, we have included more details in the sections you mentioned. We have also pointed out that more information will be included in the Methodologies to help CO2 Removal Suppliers efficiently address the new requirements.</p> |
| n/a | <p>Overall, we fully understand that Puro is trying to reach new markets and comply with other carbon offsetting frameworks, potentially even the compliance market. However, we are still adapting to the ICROA additions. Adhering to CORSIA and IC-VCM comes with, as far as we have been able to assess and interpret, an exponential increase in reporting, documentation, and new liabilities. These requirements were seemingly provided by Puro and will also be individually developed by suppliers with potentially large variations in detail and</p> | <p>Thank you for your feedback. Puro will continue developing processes and tools to help create consistency in the efficient application of these requirements.</p> |

| General Comments without specific reference to any chapter/appendix. | | |
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| Text Location | Comments | Response |
| | quality. Potential large variations of risk and leakage between suppliers will not instill confidence by CORC purchasers looking to the Puro platform for consistent carbon removal products, especially within individual methodologies. | |
| n/a | General statement: While global in nature, CORSIA is a cooperative, sector-based approach to reduce emissions from international aviation. As such, to avoid unintended confusion, particularly as additional international frameworks are added, we recommend that Puro avoid the construct that 'international mitigation' and 'CORSIA' are synonymous. This could be clarified throughout the document with the following modification, "...international mitigation frameworks, such as CORSIA..." | Text amended. Thank you for pointing this out. |
| n/a | It is unclear whether this document considers ex-ante (prepurchase) or ex-post (offset) credits. Please clarify. | This document only considers ex-post issuance. |
| n/a | Please clarify on what you consider to be direct, and indirect emissions. | The determination of direct and indirect emissions is dependent on the CO ₂ Removal pathway and corresponding Methodology. Thus, the Methodology document will provide clear definition in the classification on the emissions associated to the CO ₂ Removal activity. |
| n/a | Please provide (calculation) examples throughout the document, and be consistent with definitions (e.g., when defining 'Output' as a volume, no need to write 'Removal Output volume'). | Calculation examples will be provided in the Methodologies. |
| n/a | "CO ₂ Removal" & "CDR" is both used, why not decide for one term consistently? | We use CO ₂ Removal across the text. |

| General Comments without specific reference to any chapter/appendix. | | |
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| Text Location | Comments | Response |
| n/a | <p>Amending Puro Registry requirements to include carbon removal year of production (vintage).</p> <ul style="list-style-type: none"> o Addition appreciated; We suggest to also add <ul style="list-style-type: none"> ▪ A) a unique identifier of a tracking record that provides all the data relevant for the CORC’s carbon removal certification and full chain of custody to authorized stakeholders ▪ B) a uniquely identifiable and verifiable carbon storage attestation for each tracked carbon sink, confirming the establishment of the durable sequestration by the account holder owning the carbon removal creation. | <p>Thank you for your suggestion. We will explore the implications of these suggestions with other relevant stakeholders.</p> |
| n/a | <p>Amending Puro Registry requirements to include carbon removal year of production (vintage).</p> <p>Response</p> <p>We appreciate the intent to align CDR with the VCM, however we do not think that vintages is an appropriate defining feature of a CORCS as opposed to a renewable energy certificate or avoidance credit.</p> <p>While the vintage attribute (e.g. monitoring period) should be an accessible data point and may enhance the traceability of CORCs we do not think vintages should be a defining trait of the CORC or in any way limit fungibility between vintages.</p> <p>Vintages may have a perverse impact on price discovery if derivative contracts and forward contracts start limiting the products eligible for physical delivery/settlement. If the CDRmarket can avoid this lack of commodification that would be desirable.</p> | <p>Thank you for sharing your insights. We will carefully consider with other stakeholders your suggestion.</p> |
| n/a | <p>Puro.Earth has proposed innovative solutions for a post-Paris world that uphold the highest standards of emission removals. While we are aligned broadly with the proposals suggested, further clarity is needed on items such as: the exact mechanisms proposed for labeling, financial additionality testing, Puro.Earth’s right to suspension, FPIC, and non-permanence calculations.</p> | <p>We have provided additional information in the corresponding sections.</p> |

| General Comments without specific reference to any chapter/appendix. | | |
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| n/a | <p>I would like to see that Puro and its CO2 Removal Suppliers implement whistleblowing protocols and policies. See details of [commenter]'s process here and policy here. This would provide a means for stakeholders to raise relevant issues and has potential to raise transparency. Whistleblowing systems could be as simple as establishing a page on a website with a form/email address with which reports can be registered. Whistleblowing systems should be accompanied by public policies requiring investigation of all reports and preventing retaliation. Effective whistleblowing measures have been shown as an important way of protecting vulnerable people and create transparency. See this recent example: https://www.somo.nl/offsetting-human-rights/</p> | <p>Our Whistleblowing policy is not included in this document, but we have been working on it and it will be available in our website soon.</p> |

VERSION HISTORY

| Date | Version | Notes |
|--------------------|----------------|--|
| 16-January 2024 | 0.1 | Summary observations without list of detailed comments and responses |
| 26-January 2024 | 1.0 | Amended with the list of detailed comments and responses |
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