

Baseline and Additionality Assessment

The baseline and additionality assessment is a requirement for eligibility under the Puro Standard. The assessment is made by the CO₂ Removal Supplier and verified by the independent 3rd party auditor. The assessment made in this document will be publicly available in the Puro Registry.

The Puro Standard only certifies durable carbon removals from the atmosphere that are net-negative and does not certify emissions reductions or avoidance. The CORCs (Carbon dioxide removal certificates), issued therefore represent a net carbon removal (1 tCO₂eq. net) from the atmosphere to a durable storage of minimum 100 years, from which are subtracted any supply-chain emissions from the project, any re-emissions over the guaranteed storage time, and any baseline removals taking place in a baseline scenarios.

The CO₂ Removal Supplier must in this assessment:

- **Define** and quantify all reasonable **baseline alternatives** to the proposed project activity to remove carbon with carbon financing. A baseline is a scenario that reasonably represents the natural and anthropogenic carbon removals to a permanent storage (storage durability over 100 years) in the absence of the carbon removal activity proposed by the CO₂ Removal Supplier. Although anthropogenic emissions may take place in the baseline scenarios, these emissions do not constitute a reference point for the quantification of CORCs (only the baseline removals do).
- Demonstrate **carbon additionality to the baseline**, meaning that the project must convincingly demonstrate that it is resulting to higher volumes of carbon removals than the likely baseline alternatives (question A1.).
- Demonstrate **regulatory additionality**, meaning that the project is not required by existing laws, regulations, or other binding obligations (question A2.).
- Demonstrate **financial additionality**, meaning that the CO₂ removals achieved are a result of carbon finance and that the project activity would not be economically viable without the carbon finance. The project activity can have substantial other non-carbon income sources, if the carbon finance through CORCs is significant for the economic viability of the project. To demonstrate financial additionality, CO₂ removal Supplier must provide the responses in this form and must be able to provide full project financials for verification.

Reference documents: [Puro Standard general Rules v3.0](#), rule 2.1.3 and [Additionality Assessment requirements](#)

Activity name	Activity description	Removals to storage (100+ yr) due to project activity (human activity)	Natural removals to storage (100+ yr), not man-made
Baseline: Burning as charcoal briquettes	Charcoal fines and processed into briquettes to be burnt in BBQs	None	None
Alternative scenario 1: Not producing charcoal in the first instance	The charcoal industry does not exist, then biomass would not be harvested and be burnt as charcoal	None	Some Hard to quantify as permanence of biomass is questionable.
Project activity: Applying fines to fields	Applying the biochar (charcoal fines) to agriculture soil to improve soil condition	Some 1.91 tCO ₂ / 1t of biochar (original LCA) Output LCA 1.82tCO ₂ /1t biochar	None

A1. Does the project lead to higher volumes of carbon removal than the baseline?	Yes / No
Without the addition of carbon finance, the charcoal fines would be processed into charcoal briquettes, packaged, shipped to Europe and burnt in BBQs	Yes

A2. Is the project required by existing laws, regulations, or other binding obligations ?	Yes / No
	No

A3. Is the project first-of-its-kind?	Yes / No
It is the first of its kind size and kind in Namibia converting biochar fines into a soil conditioner	Yes

A4. Is the project dependent on carbon finance?	Yes / No
Without the carbon finance, the project would produce and sell charcoal briquettes which would lead to additional emissions in the atmosphere.	Yes

A5. Does the project need a large investment to achieve carbon removal ?	Yes / No
	No

A6. If investment is needed, is/was carbon finance considered when the investment decision is/was made?	Yes / No
Yes, carbon finance will be considered when building a second site	Yes

Some projects may demonstrate additionality through simple cost analysis: this is applicable for projects where ex-ante investment analysis is not applicable, because a large investment is not needed. Example of such project could be charcoal producers starting to produce biochar for soil applications using existing equipment with minor adaptations.


Financial Additionality – large investment is not needed (Answer to A5 is “no”)	Project response
Please describe adaptations needed and the related cost items and include evidence in attachment.	4,397 Namibian Dollar to produce 1t biochar (232 USD) 191 NAD to apply 1t of biochar (10.10 USD)
Please summarize the simple cost analysis here and provide additional calculation spreadsheet in attachment. All formulas used in the spreadsheet shall be readable to the verifier and all relevant cells shall be viewable and unprotected. Mark confidential when needed.	Production costs could include: <ul style="list-style-type: none"> • Biomass sourcing & transport • Biomass processing • Biochar production • Biochar separation Application cost include: <ul style="list-style-type: none"> • Biochar transport • Field application Planboo is not charging any money for the biochar from the farmers

If large investment is needed, , CO2 Removal Suppliers can be guided by the CDM Methodological Tool 27 of the UNFCCC Clean Development Mechanism [“Investment Analysis”](#) to demonstrate financial additionality.

Financial Additionality – large investment is needed (Answer to A5 is “yes”)	Project response
Please show your calculations to determine the benchmark rate for either equity IRR or WACC, whichever you are using. Please include documentation of how the rate is suitable for the technology and region.	N/A
Please state how CORC revenues change the expected IRR or NPV of the project.	IRR stays the same as biochar is sold at an equivalent price of charcoal briquettes.
Please conduct a sensitivity analysis in relation to the investment analysis and summarize the results here.	N/A
Please provide full calculation spreadsheet file as an attachment. All formulas used in the spreadsheet shall be readable to the verifier and all relevant cells shall be viewable and unprotected. Mark confidential when needed.	Attached on Puro platform

I hereby declare that all information provided is truthful and precise to the best of my knowledge.

Date, Place: 28/02/2024, Ahangama Sri Lanka
Representative name, title, organization

X 
Marc Hernandez Folguera, CTO, Planboo Eco AB