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)
Baseline: No crop residue valorisation	Agricultural waste disposal by burning or decomposition, re-emitting in the atmosphere 100% of the carbon contained in the biomass.	None	None
Alternative scenario 1: Compost	Although not at all a common practice in the region due to the high relief, compost could be considered a theoretical alternative scenario, mixing the coffee husk with other locally available biomasses to fertilise the soil	None	None
Alternative scenario 2: *None*		None	None
Alternative scenario 3: *None*		None	None
Project activity: None		None	None

A1. Does the project lead to higher volumes of carbon removal than the baseline?	Yes / No
No carbon removal (100+ years) in the baseline scenario	Yes

A2. Is the project required by existing laws, regulations, or other binding obligations?	Yes / No
No laws, regulations, or other binding obligations require to build such a project. Biochar was not even registered in Brazil; NetZero was the first company to request such registration.	No

A3. Is the project first-of-its-kind?	Yes / No
First industrial-scale project dedicated to biochar production in Latin America, and world's largest biochar project using coffee husk as feedstock.	Yes

A4. Is the project dependent on carbon finance?	Yes / No
Roughly half of the revenues of the project come from carbon finance. The project would thus be barely breakeven without carbon finance and would have therefore never been implemented.	Yes

A5. Does the project need a large investment to achieve carbon removal?	Yes / No
The project required ~18 million R$ (~3.3 million euros) to be invested in a very rural area of Brazil. 100% of this investment was equity brought by NetZero. The project is de-facto one of the largest investments ever made in the city of Lajinha, where the factory is located.	Yes

A6. If investment is needed, is/was carbon finance considered when the investment decision is/was made?	Yes / No
Yes, the project's business plan was designed since the beginning to have revenues from carbon finance.	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.	
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.	

If large investment is needed, , CO_2 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.	Without CORCs, the IRR of the project is negative.
Please state how CORC revenues change the expected IRR or NPV of the project.	Same as above.
Please conduct a sensitivity analysis in relation to the investment analysis and summarize the results here.	CORC revenues account for roughly half of the project's revenues.
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.	See confidential business plan provided in folder #10 of the online shared drive, under the name "BP NetZero Lajinha.xlsx" - The file presents a detailed breakdown of revenues and costs in a fully auditable way (all formulas and hypothesis are explicit) - Revenues are estimated based on existing sale contracts. In particular, the price of biochar is based on the contracts signed with local farmers - Costs are based on actual costs when available; alternatively, they are based on estimates from the R&D and Production teams

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

X 

Paris, 27 October 2023
Olivier Reinaud, Managing Director, NetZero