Preliminary Assessment Public Summary

This *Preliminary Assessment Public Summary*, prepared by Puro.earth, contains general information about the CO_2 Removal Supplier and its project, as evaluated at the time of the Preliminary Assessment (PA). It also includes a *Non-Technical Project Summary* and a *Criteria Assessment Report* detailing: i) key criteria assessed and their associated outcomes, ii) Puro's comments, and iii) evidence provided by the CO_2 Removal Supplier.

The *PA Public Summary* serves as a transparent communication tool, enabling potential investors, buyers, and stakeholders to quickly understand the supplier's carbon removal capabilities and assessment status.

The supplier has also received an extended *Preliminary Assessment Report*. This confidential document offers in-depth insights, including specific remarks and actionable recommendations to guide the supplier's progression through the certification journey.

1. Supplier and Project Information

CO_2 Removal Supplier	
Company name	Boomitra Inc.
Company address	400 Concar Dr.,San Mateo, CA 94402, United States
Business ID	81-4232785
KYC status	Completed (2025/02/02)
CO_2 Removal Project	
Methodology	**Terrestrial Storage of Biomass, Edition 2023, Version 1**
Production Facility name	Oasis Biomass Carbon Removal and Storage
Facility registration date	2024/12/03
Production Facility ID	713078
Production Facility location	Ghanzi, 44444, Botswana
Host Country of removal	Botswana
Has this facility been registered in another registry?	☒No ☐Yes, additional information:
Preliminary Assessment Details	
Date of assessment	2025/05/07
Status of assessment	Final
Conclusion of assessment	Passed

2. Non-Technical Project Summary*

Our Oasis Biomass Carbon Removal and Storage project combines terrestrial storage of biomass best practices with novel approaches and is part of a broader effort to restore the natural savanna ecosystem by mitigating bush encroachment. The project utilizes biomass from the selective and sustainable harvesting of encroacher bush consisting of specific woody species that have negatively transformed the ecosystem. After harvesting the biomass is dried, processed and buried to create conditions that promote long-term stability and minimize re-emissions. Specialized equipment will be used for harvesting, processing, and storage—all of which will take place on-site to minimize project emissions.

*Added by the supplier. Between 150-200 words

The definition of CO_2 Removal Supplier and Production Facility can be found in the Puro Standard.

3. Criteria Assessment Report

Reminder: Sub-criteria either concern the Production Facility's technical eligibility or its maturity and quality. There are three types of sub-criteria:

- **Required to be passed:** These correspond to the core criteria related to the eligibility of a Production Facility. Suppliers must meet these criteria, as they may otherwise be impossible or costly to change at a later stage of the certification journey.
- **Required to be assessed**: These criteria are important for evaluation but do not necessarily determine pass or fail at this stage, as it is understood that the suppliers may be at different stages of development.
- **Not required:** These criteria are optional at this stage. They may provide additional information about the project maturity but are not essential for passing the preliminary assessment.

For a facility to be considered eligible for listing, all the sub-criteria that condition eligibility must be met (i.e. passed or assessed). If one of those sub-criteria is not met, the facility in its current state of development is not eligible for listing.

Disclaimer: The assessment has been made against the criteria in the current version of the methodology. Puro.earth relied on the CO_2 Removal Supplier for the correctness of the provided information during the time of the preliminary assessment and will make no representation as to the accuracy or completeness of this report. The CO_2 Removal Supplier must undergo a third-party audit before issuing CO_2 Removal Credits (CORCs). **Passing the preliminary assessment does not guarantee a success in the third-party audit.**

*Table 1. Criteria and sub-criteria assessment by Puro based on the documents submitted. Note: The sub-criteria marked with * do not apply for "subterranean injection of biomass".*

ID	Criteria / Sub-criteria	Outcome	Comment	Evidence reviewed	Requirement for listed	Purpose of criteria
c1	**Planned biomass feedstock(s) is(are) eligible**	**Passed**			*Passed if required sub-criteria are met*	
c1.1	*Biomass feedstocks are identified and of eligible type (i.e. woody feedstocks)*	Passed	Identified biomass feedstocks are woody shrubs and trees from selective bush thinning operations in grassland. Feedstocks include about 15 different species, with average C/N ratio of 144 and high lignin content (>25% on average), which is eligible.	Boomitra_Biomass types and origins list for TSB.xlsx	Required to be passed	Technical eligibility
c1.2	*Biomass feedstocks belong to a category listed in rule 4.1.6 (A-E)*	Passed	The intended feedstocks fall under Requirement 4.1.6(e) — "biomass is sourced from land clearing in construction projects or for agriculture" — as clarified by Puro's Rule Clarification issued in December 2024.	Boomitra_Puro Project Description.pdf; Boomitra_Biomass types and origins list for TSB.xlsx; Boomitra_Land use.pdf	Required to be passed	Technical eligibility

c1.3	*Biomass feedstock chain-of-custody or traceability can be demonstrated*	Assessed	Biomass feedstocks are sourced from a single Project Partner, who is both the landowner and responsible for the entire biomass value chain — including harvest, transport, processing, and storage activities— all conducted on their own land. Thus, traceability is ensured from the start of feedstock procurement for the CO_2 removal activity.	Boomitra_Puro Project Description.pdf; Boomitra_Biomass types and origins list for TSB.xlsx	Required to be assessed	Technical eligibility
c1.4	*Biomass feedstock sustainability and/or environmental safety can be demonstrated, where applicable*	Assessed	Biomass feedstocks are declared to be sourced according to regulatory requirements. The biomass is not expected to be hazardous/toxic and its harvest is instead expected to result in positive environmental impacts. Regulatory and compliance documentation is still pending submission prior to the audit.	Boomitra_Puro Project Description.pdf; Boomitra_Biomass types and origins list for TSB.xlsx; Boomitra_Land use.pdf	Required to be assessed	Technical eligibility
c1.5	*Leakage effects related to feedstock use is minimal, where applicable*	Assessed	The Supplier declared that the biomass has no viable economic alternative uses. It is not suitable as fodder, has limited value as fuelwood due to high transportation costs from the remote site, and lacks other commercial applications. Therefore, leakage risks related to feedstock use are considered minimal.	Boomitra_Puro Project Description.pdf; Boomitra_Leakage.pdf	Required to be assessed	Technical eligibility
c1.6	*Land use change effects related to feedstock use is minimal, where applicable*	Assessed	The agricultural land clearing would occur regardless of the project, likely through alternative methods such as fire and agrochemicals, which are commonly used in baseline scenarios to manage woody bush encroachment, with comparable impacts on soil carbon. As a result, the land use change impacts associated with feedstock use are considered minimal.	Boomitra_Puro Project Description.pdf; Boomitra_Land use.pdf	Required to be assessed	Technical eligibility
c1.7	*Sourcing of biomass is legal and rightful (e.g. permits, authorisations), where applicable*	Assessed	A contract was signed between the Supplier and the Project Partner, who is both the landowner of the project area and the key operational partner. Sourcing of biomass is therefore legal and rightful.	Boomitra_Statement_of_non-double_counting_nor_claiming_by_associated_parties.pdf	Required to be assessed	Technical eligibility
c1.8	*Sourcing of biomass is secured (e.g. letters of intent, contracts)*	Assessed	A contract was signed between the Supplier and the Project Partner, who is both the landowner of the project area and the key operational partner. Sourcing of biomass is therefore secured.	Boomitra_Statement_of_non-double_counting_nor_claiming_by_associated_parties.pdf	Not required	Project maturity & quality
c2	**Planned storage site design is technically sound**	**Passed**			*Passed if required sub-criteria are met*	

C2.1	*Storage site location is identified and secured*	Passed	The storage site will be located within the Project Partner's private farmland , where all project operations will take place. Storage will be divided across four locations within the 10,000-hectare project zone, each strategically positioned near biomass sources. Storage arrangements have been secured through a formal contractual agreement.	Boomitra_Design document of storage site.pdf; Boomitra_Project_Partner ParticipationAgreement_Highlighted.pdf	Required to be passed	Technical eligibility
C2.2	*Capacity of storage site and number of storage chambers at the site is estimated*	Passed	Total storage capacity has been estimated to be of 150,000 dry metric tonnes, i.e., 15,000 dry metric tonnes per year over 10 years. Each of the four planned storage locations will include 125 storage chambers.	Boomitra_Design document of storage site.pdf; Boomitra_241205-TSB Storage site questionnaire.xlsx	Required to be passed	Project maturity & quality
C2.3	*Storage chambers type (i.e. type of storage conditions) is identified*	Passed	The storage chambers consist of excavated belowground burial trenches, designed to enable a dry, cool, and anoxic environment for the biomass.	Boomitra_Design document of storage site.pdf; Boomitra_241205-TSB Storage site questionnaire.xlsx	Required to be passed	Technical eligibility
C2.4	*Technical and engineering drawings of the site and its chambers are available*	Passed	A technical illustration of the storage site, the four planned storage locations, and burial trenches have been shared, showing how the trenches will be distributed across the project area. A cross-sectional diagram of the storage chamber design has also been provided, detailing its internal structure.	Boomitra_Design document of storage site.pdf; Boomitra_241205-TSB Storage site questionnaire.xlsx	Required to be passed	Project maturity & quality
C2.5	*Storage chamber design is demonstrated to ensure storage conditions that inhibit decomposition*	Passed	The storage chambers are designed to prevent biomass decomposition by creating conditions that inhibit microbial activity. Biomass will be dried to below 20% moisture content, securely baled, and sealed prior to burial. A 2-meter upper soil layer will block light and oxygen while minimizing moisture infiltration. Additionally, the Supplier reported that the sandy soils of the Ghanzi region in the Kalahari Desert—comprising over 95% sand and characterized by low organic matter—will further limit microbial activity, enhancing long-term dry environment.	Boomitra_Design document of storage site.pdf; Boomitra_241205-TSB Storage site questionnaire.xlsx	Required to be passed	Technical eligibility
C2.6	*Storage chamber design is demonstrated to ensure minimal re-emissions of methane*	Passed	The storage chambers are designed to maintain dry, anaerobic conditions that inhibit decomposition, and thus prevent methane formation.	Boomitra_Design document of storage site.pdf; Boomitra_241205-TSB Storage site questionnaire.xlsx	Required to be passed	Technical eligibility
*C2.7**	*Storage site is designed to minimize external risks (fire, intrusions, etc)*	Assessed	Each of the four storage locations will be compartmentalized into 125 distinct trenches, ensuring that if one is compromised, it does not affect the integrity or stability of the biomass stored in the	Boomitra_Puro Project Description.pdf; Boomitra_Design document of storage site.pdf;	Required to be assessed	Technical eligibility

			others. The storage site will also be subject to ongoing monitoring and regular inspection to detect any structural damage caused by vegetation growth, animal activity, natural events, unauthorized excavation, or vandalism. Fire prevention measures—including vegetation clearance and the establishment of firebreaks—will be implemented to protect the integrity of the stored biomass.	Boomitra_241205-TSB Storage site questionnaire.xlsx		
c2.8	*Storage site is designed to include monitoring of storage conditions, re-emissions and other risks*	Assessed	A monitoring plan has been drafted outlining the storage site's design features that support the monitoring of storage conditions, re-emissions, and external risks. Soil gas flux analyzers will be used to measure surface-level CO_2 and CH_4 emissions from areas with buried biomass and compare them to control plots.	Boomitra_Monitoring Plan.pdf; Boomitra_Puro Project Description.pdf	Required to be assessed	Technical eligibility
c2.9	*Authorisation of use of the land as a storage site is available*	Assessed	The storage site will be directly managed by the Project Partner, who is also the landowner. Therefore, land use authorization is not applicable.	Boomitra_Project_Partner ParticipationAgreement_Highlighted.pdf	Not required	Project maturity & quality
c3	**Permanence liabilities**	**Passed**			*Passed if required sub-criteria are met*	
c3.1	*Contractual framework for future maintenance of storage site have been drafted or completed*	Passed	• A draft contractual framework for a trust fund has been provided. This draft outlines the duration and specifies that funds will be used exclusively for monitoring and reporting any unintended re-emissions. • Evidence of a commercial agreement between the Supplier and Project Partner has been provided, confirming the Project Partner's commitment to securing and maintaining storage site integrity for long-term monitoring.	Boomitra_Permanence.pdf; Boomitra_Project_Partner Participation Agreement_Highlighted.pdf	Required to be passed	Technical eligibility
c3.2	*Funding needs for implementation of contractual framework have been estimated*	Assessed	The supplier will establish a trust, funded by a portion of CORC sales revenue, to cover post-closure monitoring. This trust will be regularly evaluated and adjusted to ensure sufficient funding for maintenance activities over the required 100-year permanence period. However, specific maintenance activities have not yet been identified, and their associated costs must still be quantified.	Boomitra_Permanence.pdf; Boomitra_Project_Partner Participation Agreement_Highlighted.pdf	Required to be assessed	Project maturity & quality

*c3.3**	*Legal documentation evidencing 100-year land use guarantee is available*	Assessed	A commercial agreement between the Supplier and the Project Partner confirms the legal ownership and long-term availability of land for biomass storage for a minimum of 100 years. The agreement specifies that the Project Partner, as the landowner, has granted an easement, enabling the Supplier to carry out project-related activities for the full 100-year term.	Boomitra_Project_Partner Participation Agreement_Highlighted.pdf	Required to be assessed	Project maturity & quality
c4	**Additionality is demonstrated**	**Passed**			*Passed if required sub-criteria are met*	
c4.1	*Carbon storage additionality to baseline*	Passed	Without the project, woody bush encroachment would likely be controlled through alternative methods such as fire and agrochemicals, which are commonly used in baseline scenarios. None of these methods result in anthropogenic or natural carbon storage. With the project, approximately 80% of the encroaching woody species are harvested by cutting the above-ground biomass while leaving the root systems intact. This practice contributes to maintaining soil carbon levels. Therefore, in accordance with Rule 4.1.6(e) as clarified by Puro's Rule Clarification issued in December 2024, the resulting carbon storage is considered additional to the baseline scenario.	Boomitra_Puro Project Description.pdf; Boomitra_Puro Additionality v1.9.pdf	Required to be passed	Technical eligibility
c4.2	*Financial additionality of project*	Passed	The Supplier has demonstrated with a cash flow model (and a sensitivity analysis) that the project is unviable without CORC revenue; minor refinement is required. The sale of CORCs is integral to the profitable running of the project and the payback of the initial investment.	Boomitra_Puro Project Description.pdf; Boomitra_Puro Additionality v1.9.pdf; Boomitra_Project Financial Modelling – Confidential.xlsm	Required to be passed	Technical eligibility
c4.3	*Regulatory additionality*	Passed	The project is not required by existing laws, regulations, or other binding obligations in Botswana.	Boomitra_Puro Project Description.pdf; Boomitra_Puro Additionality v1.9.pdf	Required to be passed	Technical eligibility
c5	**Project has monitoring, reporting, and LCA capabilities/plans**	**Passed**			*Passed if required sub-criteria are met*	
c5.1	*A monitoring plan has been drafted*	Passed	A preliminary monitoring plan has been drafted. It outlines the monitoring operations that will be in place to ensure long-term storage stability, maintain dry conditions, and estimate re-emissions. Additionally, the plan also highlights the key parameters that must	Boomitra_Monitoring Plan.pdf	Required to be passed	Project maturity & quality

			be measured and recorded for the accurate quantification of CORCs.			
c5.2	*Monitoring plan includes protocol for biomass record keeping*	Assessed	The preliminary monitoring plan outlines the key parameters required for biomass record-keeping, including the assignment of ID numbers to biomass batches, weighing, and the geographical coordinates of biomass sourcing.	Boomitra_Monitoring Plan.pdf	Required to be assessed	Project maturity & quality
c5.3	*Monitoring plan includes protocol for dry mass determination of biomass placed in storage is prepared*	Assessed	A detailed protocol for dry mass determination has not yet been provided; however, the preliminary monitoring plan identifies moisture content, particle size, and bale density as key parameters to be recorded.	Boomitra_Monitoring Plan.pdf	Required to be assessed	Project maturity & quality
c5.4	*Monitoring plan includes protocol for monitoring of storage conditions*	Assessed	It is currently unclear whether storage chambers will be equipped with the necessary devices to monitor storage conditions. Storage chamber conditions (temperature and humidity) will have to be monitored once the chambers have been sealed and the monitoring plan must include details related to the recording, reporting, and analysis of data. Once the storage site is completed, scheduled site inspections will be conducted quarterly to assess potential structural damage caused by flora and fauna (e.g., fencing stability), natural events, unauthorized excavation, or vandalism. Inspections will document the date, time, inspector(s), any observed damage, the recipient of the report, photographic evidence, and the geospatial location.	Boomitra_Monitoring Plan.pdf	Required to be assessed	Project maturity & quality
c5.5	*Monitoring plan includes protocol for monitoring and abatement of re-emissions*	Assessed	Automated soil gas flux chambers, equipped with GHG gas flux analyzers, are planned to monitor CO_2 and CH_4 re-emissions on a daily basis. The equipment has a resolution of 0.1 ppm for CH_4 and is expected to detect CH_4 concentration of at least 2 ppmv as required.	Boomitra_Monitoring Plan.pdf	Required to be assessed	Project maturity & quality
c5.6	*Monitoring plan includes protocol for monitoring of parameters needed for LCA calculations*	Assessed	In addition to the parameters listed above for Criteria 5.2, the preliminary monitoring plan also includes the use of GPS trackers and operator logs, which will record fuel consumption for all operational processes, such as drying, chipping, and baling. Further work is required to fully implement these measures.	Boomitra_Monitoring Plan.pdf	Required to be assessed	Project maturity & quality

c5.7	*Measurement devices needed for monitoring have been identified*	Assessed	The measurement devices will include automated soil gas flux chambers equipped with GHG gas flux analyzers, which will be used to monitor CH_4 and CO_2 re-emissions on a daily basis. Additional equipment will consist of biomass weighing apparatus and GPS trackers for biomass sourcing. However, it remains unclear how moisture content and temperature will be measured within the storage chambers.	Boomitra_Monitoring Plan.pdf	Required to be assessed	Project maturity & quality
c5.8	*Information system used to keep data records is prepared*	Assessed	The supplier has stated that all monitoring parameters, including fuel consumption for operations such as harvesting, baling, weighing, excavating, and filling, will be tracked. An actual data management system for record-keeping has not yet been shared yet.	Boomitra_Monitoring Plan.pdf	Required to be assessed	Project maturity & quality
c5.9	*An LCA model specific to the project's operation is prepared*	Assessed	A preliminary LCA has been submitted, correctly identifying the project scope and in line with the Methodology requirements. Emission factors have not yet been provided; however, key data sources have been identified, and some relevant measurements are already included in the Monitoring Plan. Overall, LCA modeling has started, with further refinement being needed.	Boomitra_LCA.xlsx; Boomitra_Monitoring Plan.pdf	Required to be assessed	Project maturity & quality
c5.10	*A GWP20-stress test on the LCA results was performed, if applicable*	Assessed	The storage chamber is designed to maintain dry conditions; therefore, the GWP20 stress test is not applicable.	Boomitra_Design document of storage site.pdf	Required to be assessed	Project maturity & quality
c6	**Environmental and social safeguards**	**Passed**			*Passed if required sub-criteria are met*	
c6.1	*Stakeholder consultations have been planned or conducted*	Assessed	Stakeholder consultations are planned in the form of a town-hall with neighbouring landowners and relevant NGOs operating in the region, such as Cheetah Conservation Botswana, and virtual meetings with local government representatives, NGOs, researchers, and local experts. Ongoing communication and grievance mechanisms will be established to address stakeholder feedback and concerns using accessible channels such as a dedicated telephone line and email address.	Boomitra_Puro Project Description.pdf; Boomitra_Puro Stakeholder Engagement Report.pdf	Required to be assessed	Project maturity & quality
c6.2	*Regulation applicable to project has been identified*	Assessed	Applicable regulations for the project have been identified and include: governance of environmental impacts (*Environmental Assessment Act*), forest reserve	Boomitra_Puro Project Description.pdf; Boomitra_List of applicable regulations.xlsx;	Required to be assessed	Project maturity & quality

			management (*Forest Act*), land management and administration (*Botswana Land Policy*), ownership, use, and management of public and underground water (*Water Act*), conservation and utilization of wildlife (*Wildlife Conservation and National Parks Act*), and the administration and management of tribal land (*Tribal Land Act).*	Boomitra_Puro Environmental and Social Safeguard.pdf		
c6.3	*Procedures to acquire relevant permits have been identified, started, or completed*	Assessed	The Supplier declared that permitting was not required.	Boomitra_Puro Project Description.pdf	Required to be assessed	Project maturity & quality
c6.4	*Occupational health and safety measures have been planned*	Assessed	The Supplier indicates compliance with the *Labor Act*, which governs all workforce-related activities, by implementing fair employment practices, worker safety, the provision of personal protective equipment (PPE), as well as safety drills and emergency response trainings. Protocols outlining specific measures for managing and mitigating occupational health and safety hazards during operations have been prepared but not submitted yet.	Boomitra_Puro Project Description.pdf; Boomitra_Puro Environmental and Social Safeguard.pdf	Required to be assessed	Project maturity & quality
c6.5	*Environmental impact assessment (EIA) or environmental risk assessment (ERA) has been* planned, drafted, completed	Assessed	A Project Brief was submitted to the Botswana Department of Environmental Affairs. However, it remains unclear whether an Environmental Impact Assessment (EIA) is required under the Environmental Assessment Act and whether one has been or will be conducted.	Boomitra_Puro Project Description.pdf; Boomitra_List of applicable regulations.xlsx; Boomitra_BDEA Project Brief.pdf; Boomitra_Puro Environmental and Social Safeguard.pdf	Required to be assessed	Project maturity & quality
c7	**Project has likely co-benefits and positive SDG impacts**	**Passed**			*Passed if required sub-criteria are met*	
c7.1	*Project-specific co-benefits have been identified*	Assessed	The project contributes to the restoration of degraded grasslands, enhancing soil quality, fertility, and water retention, while also supporting biodiversity. It promotes sustainable agricultural practices that improve the resilience of agricultural systems to climate change. Additionally, the project supports local economic growth by improving livestock productivity and provides long-term carbon sequestration benefits.	Boomitra_Puro Project Description.pdf; Boomitra_SDG Contributions.pdf	Required to be assessed	Project maturity & quality
c7.2	*Project-specific SDG targets or indicators have been identified*	Assessed	Supplier has identified several links with SDG targets within SDG 8, 2, and 9, 13, and 15. However, at this stage of project development, the Supplier has not yet	Boomitra_Puro Project Description.pdf; Boomitra_SDG Contributions.pdf	Required to be assessed	Project maturity & quality

			indicated whether they intend to pursue formal SDG certification.			
c8	**Project team has access to relevant knowledge and skills**				*Passed if required sub-criteria are met*	
c8.1	*Relating to biomass sourcing, handling, processing*	Assessed	No specific information was provided and therefore a formal assessment was not conducted.	No information provided	Not required	Project maturity & quality
c8.2	*Relating to biomass decomposition*				Not required	Project maturity & quality
c8.3	*Relating to environmental monitoring and carbon accounting*				Not required	Project maturity & quality