Public Project Description

This document is a project description made available in the Puro Registry to summarize the information available about a certified production facility. The project description is organized as follow:

1 Production Facility and Supplier information

This project description corresponds to the following **Production Facility** and **CO_2 Removal supplier**, acting as registering entity of the facility.

Production Facility	
Production Facility name	Truecoco Ghana Ltd
Registration date (YYYY-MM-DD)	2024-04-12
Production Facility ID	816220
Location of facility	Truecoco Ghana, Badyloon Street, Tikobo One, Western Region, Ghana
Host Country of removal	Ghana
Has this facility been registered in another registry?	☒No ☐Yes, additional information (registration periods):
This table is filled in by the CO_2 Removal Supplier.	

CO_2 Removal Supplier	
Supplier name	Truecoco Ghana ltd
Supplier address	Truecoco Ghana, Badyloon Street, Tikobo One, Western Region, Ghana
Business ID	CS119272017
KYC status	Completed
This table is filled in by the CO_2 Removal Supplier.	

The above-mentioned production facility has undergone the following audit, during which the project description, alongside other audit documents were verified.

Facility Audit	
Type of audit	Combined Facility and Output Audit
General Rules version	4.1
Methodology name	Biochar Methodology
Methodology edition and version	Edition: 2022 Version: V3
Date of audit completion	2025-09-29
Conclusion of audit	The facility is eligible, the methodology has been correctly applied, and the auditor verified the issuance of 870.80 CORCs with no discrepancies.
Auditing body	Earthood Services Limited
Start date of crediting period	2025-01-04

End date of crediting period	2030-01-04
This table is filled in by the Issuing Body.	

2 Overview of activity, its location, and operators

The information in this section provides an overview of how and where carbon dioxide removal is achieved, and by whom.

2.1 Non-technical description

Instructions	*Please provide a non-technical description of the carbon removal activity taking place at the production facility. Word limit: 100 words.*
Non-technical description	Truecoco Ghana is an innovative CDR developer that is sourcing coconut husk (a totally waste biomass) directly from smallholder farmers and converted it to biochar through the process of pyrolysis. The biochar is then either sold or given directly to the local coconut cooperatives or blended with the topsoil to create a premium soil amendment that can remove CO2 from the atmosphere whilst improving soil properties, including water and nutrient retention. Truecoco Ghana's project is aiming to be the first Puro certified industrial project in Ghana, and to champion CDR across West Africa.
This table is filled-in by the supplier and verified by the auditor.	

2.2 Locations

Instructions	*Please provide a list of locations associated with the carbon removal activity. Additional locations or areas can refer to e.g. the location of the storage site, the spatial extent of the area of use of a carbon removal product or sourcing of a specific feedstock.*
Production Facility Location (as registered)	Address: Truecoco Ghana, Badyloon Street, Tikobo One, Western Region, Ghana Coordinates (WSG84, decimal format): Latitude: 5.0423491 Longitude: -2.701473
Additional location(s)	*Specify purpose, location, address, coordinates, to the extent possible, for one or multiple additional locations relevant to the removal activity.* None currently
This table is filled-in by the supplier and verified by the auditor.	

2.3 Operators

Instructions	*Please provide a full list of operators or organizations that contribute to the removal activity. Add rows as necessary. For each entity, provide the name, a business ID, an address, and the role of the entity.*
CO_2 Removal Supplier	*Entity name:* Truecoco Ghana Ltd *Entity business ID:* CS119272017 *Entity address:* Truecoco Ghana, Badyloon Street, Tikobo One, Western Region, Ghana *Role of entity:* Project developer
Organization 2	*Entity name:* Crystalchain *Entity business ID:* 82185136700036

	Entity address: 14 VILLA DESIRE FILLEAUD 92140 CLAMART *Role of entity:* CrystalChain has supported Truecoco throughout the entire registration process — from structuring and collecting the necessary data, to preparing the LCA and PDD, and submitting all documentation required for both the Facility Audit and the Output Audit.
Organization 3	*Entity name:* *Entity business ID:* *Entity address:* *Role of entity:*
This table is filled-in by the supplier and verified by the auditor.	

3 Technical description of the removal activity

The information in this section provides more technical details about the technologies and processes deployed to achieve carbon dioxide removal.

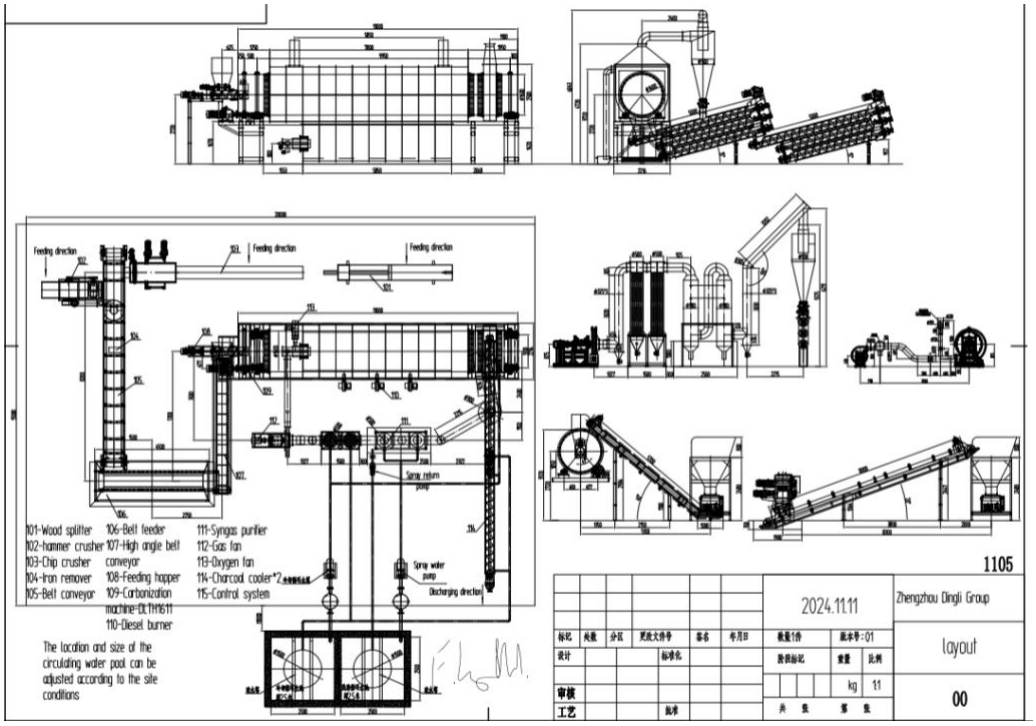
3.1 Technical description

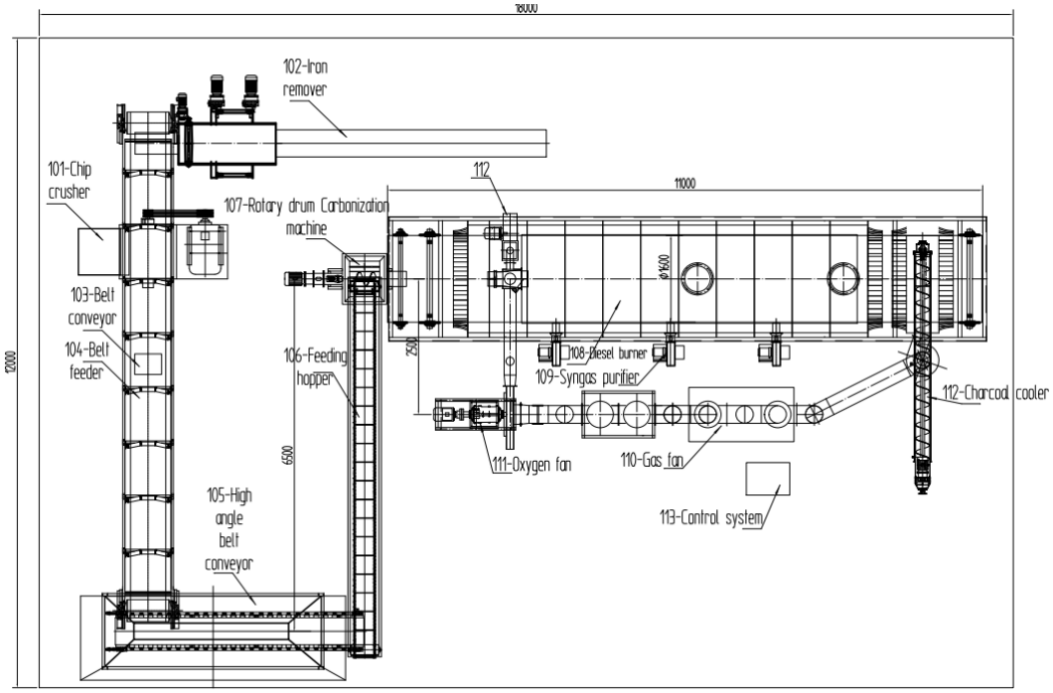
Instructions	*Please provide a technical description of the carbon removal activity taking place at the production facility. Word limit: 500 words.*
Technical description	Truecoco Ghana operates a continuous biomass carbonization system with a processing capacity of 2 metric tonnes (MT) per hour. The system is based on a two-layer rotary drum kiln, designed and built by a reputable pyrolysis machine manufacturer active across West Africa. The plant utilizes advanced pyrolysis technology to convert coconut husk—a totally waste agricultural biomass —into high-quality biochar, a stable form of carbon with long-term soil benefits. The carbonization process begins with the collection of coconut husks directly from smallholder farmers. These husks, typically left to decompose or openly burned, are subjected to an initial quality control (QC) check upon arrival at the site to ensure appropriate conditions for optimal pyrolysis performance. The husk feedstock is mechanically chipped using an industrial chipper. This preprocessing step ensures uniform particle size and bulk density, which are critical for maintaining consistent heat transfer and residence time within the pyrolysis chamber. The prepared feedstock is then fed into the carbonization system via conveyor. The rotary kiln carbonization chamber is preheated to approximately 550°C using diesel-fueled wood powder burners. Once the system reaches this temperature threshold, thermal decomposition (pyrolysis) of the coconut husk begins. As the material thermally degrades in the absence of oxygen, it generates syngas—a mixture of combustible gases—which is captured, purified, and recycled into the system to sustain chamber temperatures. This self-sustaining heating process significantly reduces fossil fuel dependence after initial startup, improving energy efficiency and lowering emissions. The carbonization process maintains a chamber temperature above 550°C and retains the material within the system for 32–45 minutes. This high-temperature, controlled-residence-time environment ensures the complete carbonization of feedstock into biochar. The dual-drum rotary design allows

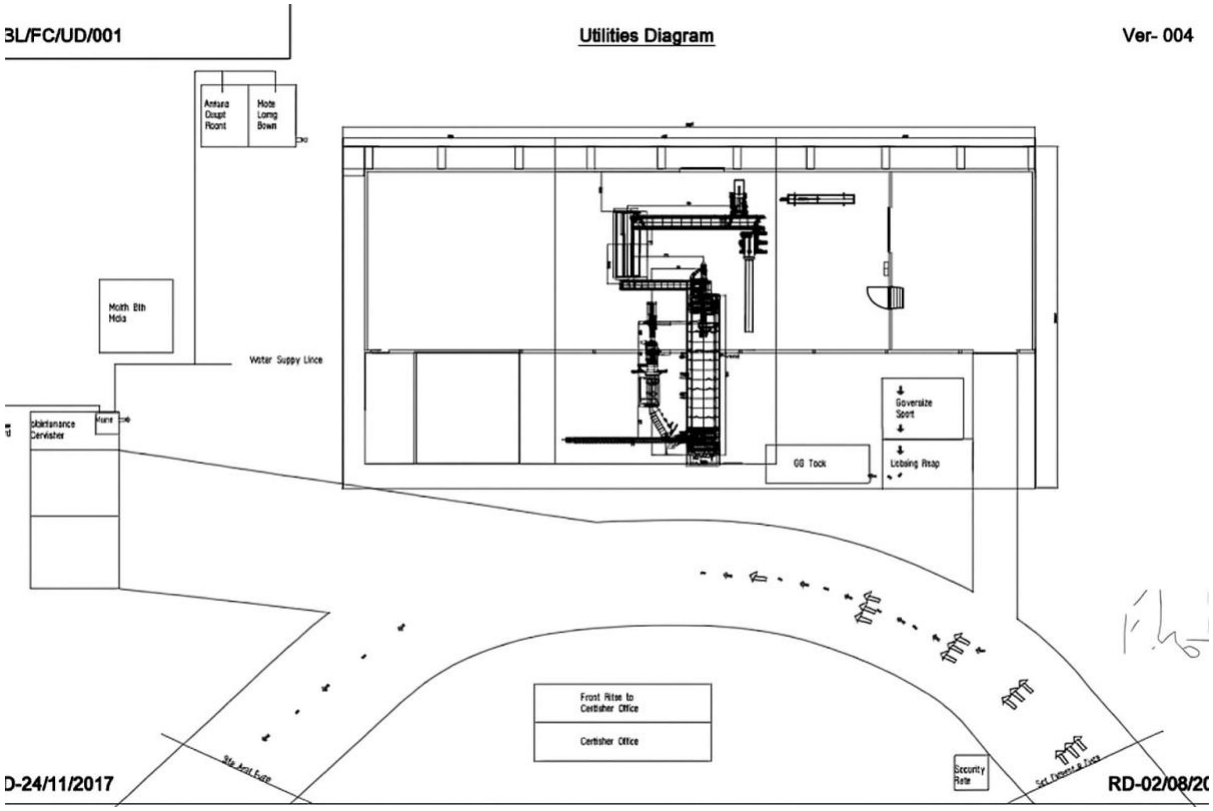
	for continuous input and output, enhancing operational throughput and minimizing downtime. Post-carbonization, the biochar product is passed through a cooling tower to safely reduce its temperature. The cooled biochar is then weighed and stored according to Truecoco's standard operating procedures (SOPs). Quality control protocols are maintained to ensure product consistency for agricultural applications. The produced biochar is either sold or distributed to local farmer networks and agricultural off takers. When applied to soil, biochar acts as a carbon sink, effectively sequestering atmospheric carbon in a stable form for hundreds to thousands of years. This contributes to long-term carbon removal from the atmosphere, while simultaneously improving soil structure, moisture retention, and nutrient availability. Truecoco Ghana's carbon removal facility integrates sustainable biomass sourcing, energy-efficient pyrolysis technology, and biochar utilization to deliver a scalable, circular approach to carbon sequestration and agricultural enhancement.
This table is filled-in by the supplier and verified by the auditor.	

3.2 Illustration

Instructions	*Please provide up to three illustrations of the process and technologies described above (e.g. picture of equipment, flowcharts of process).* *Note that you must own the rights to reproduce and publish the illustration and that you also authorize puro.earth to reproduce and publish the illustration in the Puro Registry.*
Authorization to reproduce and publish the illustration	☐ Puro.earth is authorized to reproduce and publish the illustrations below, for use in the Puro Registry.


101-Wood splitter
102-hammer crusher
103-Chip crusher
104-Iron remover
105-Belt conveyor
106-Belt feeder
107-High angle belt conveyor
108-Feeding hopper
109-Carbonization machine-DLTH1611
110-Diesel burner
111-Syngas purifier
112-Gas fan
113-Oxygen fan
114-Charcoal cooler*2
115-Control system
The location and size of the circulating water pool can be adjusted according to the site conditions
1105
2024.11.11
Zhengzhou Dingli Group
layout
00


18000
12000
102-Iron remover
101-Chip crusher
107-Rotary drum Carbonization machine
112
11000
103-Belt conveyor
104-Belt feeder
106-Feeding hopper
108-Diesel burner
109-Syngas purifier
112-Charcoal cooler
111-Oxygen fan
110-Gas fan
113-Control system
105-High angle belt conveyor
6500
2500



4 Application of the Puro Standard (boundary, baseline, additionality, quantification)

4.1 Scope and project boundary

Instructions	*Please provide a brief demonstration that the removal activity described above fits within the scope of the methodology and that the system boundaries of the removal activity correspond to the ones defined in the methodology. Word limit: 150 words.*
Scope and system boundary	Truecoco's carbon removal activity fits within the scope and system boundaries defined in the methodology, which includes the full biochar supply chain—from sustainable biomass sourcing to soil application. The project sources coconut husk waste directly from smallholder farmers in the Western Region of Ghana, ensuring environmental integrity and community benefit. The husks are processed using a continuous pyrolysis system that carbonizes the biomass into stable biochar under controlled, high-temperature conditions. The resulting biochar is distributed to local farmers and agri offtakers for application to soil, where it acts as a long-term carbon sink. Truecoco monitors each stage of the process, including feedstock quality, energy use, emissions, biochar output, and distribution. These monitored activities fall within the defined system boundaries of the methodology, ensuring that carbon removal is durable, traceable, and socially and environmentally safe.
This table is filled-in by the supplier and verified by the auditor.	

4.2 Baseline scenario

*The information in this section provides a summary of the project-specific **baseline scenario**.*

Instructions	*Please provide a summary of the project-specific baseline scenario. The summary shall be based on the additionality questionnaire (available separately). Word limit: 150 words.*
Summary of the project-specific baseline scenario	
This table is filled-in by the supplier and verified by the auditor.	

Further information on the baseline scenario:

Instructions	*If the methodology explicitly defines one or several possible baseline scenarios for the removal activity, please specify which ones was selected:*
Selected baseline scenario	
This table is filled-in by the supplier and verified by the auditor.	

4.3 Demonstration of additionality

*The information in this section provides a summary of the project-specific **additionality assessment**.*

Instructions	*Please provide a summary of the project-specific additionality assessment, considering baseline removal, regulatory and financial additionality. The summary shall be based on the additionality questionnaire (available separately). Word limit: 150 words.*
Summary of additionality assessment	
Baseline removal: The baseline scenario results in no durable carbon removals, whereas the project activity leads to the creation of durable carbon removals through the production of biochar. The project activity does not result in any leakage or activity displacement as the chosen feedstock is a waste biomass. The waste biomass that has no existing usage. Financial additionality: Our financial model indicates that the main revenue is from the sale of CORCs and physical biochar. However, the revenue share is predominately from the sale of CORCs, as demonstrated in the sensitivity analysis. Regulatory additionality: This project is not required by existing laws, regulations, or binding obligations.	
This table is filled-in by the supplier and verified by the auditor.	

5. In section 4.3, please complete the summary by including the context regarding regulatory additionality as described in the additionality questionnaire.

The following files are further made available in the Puro Registry.

Additionality questionnaire (required)	Filename	Baseline and Additionality Assessment – Truecoco Ghana.Final.29.07
	Description	Additionality questionnaire signed and audited, used to determine the additionality of the project following the Puro requirements for additionality.
Additional file (optional)	Filename	
	Description	

Additional file (optional)	Filename	
	Description	
Add rows as necessary, following same template as for additional file. The filename shall be the exact filename as provided in the audit documentation. The description shall be at most a 3-line summary of what the file contains. This table is filled-in by the supplier and verified by the auditor.		

4.4 Quantification of net carbon dioxide removal

*The information in this section provides a description of how **quantification of net carbon dioxide removal removals** is achieved, including **monitoring** of the removal activity, and calculation of **supply-chain emissions**.*

Quantification implementation

Instructions	*Please describe how the quantification of net carbon dioxide removal, as described in the methodology (see CORC equation), is implemented by the supplier. Word limit: 200 words.*
Description of quantification implementation	
Truecoco applies the CORC equation from the Puro biochar methodology to determine net CO_2 removal. Data collection and processing are managed through CrystalTrade dMRV tools to meet Puro's requirements. **Ebiomass** includes all emissions from transporting biomass to the site, factoring in diesel use and recorded distances from source to facility. **Eproduction** covers emissions from pyrolysis activities and related processes, including infrastructure construction, energy use, quenching, and product packaging, all incorporated into the project's life cycle assessment (LCA). **Euse** accounts for emissions from applying biochar to soil, which is done manually, with transportation to customers as the main emission source. **Estored** is calculated from the sold dry mass of biochar and its properties, alongside soil characteristics at the application site, to estimate the amount of CO_2eq sequestered. Finally, **CORCs** are calculated as: Estored – Ebiomass – Eproduction – Euse, in strict accordance with the Puro methodology. This ensures that all upstream, operational, and downstream emissions are fully deducted from the stored carbon amount, yielding a net CO_2 removal figure that reflects the project's verified climate benefit.	

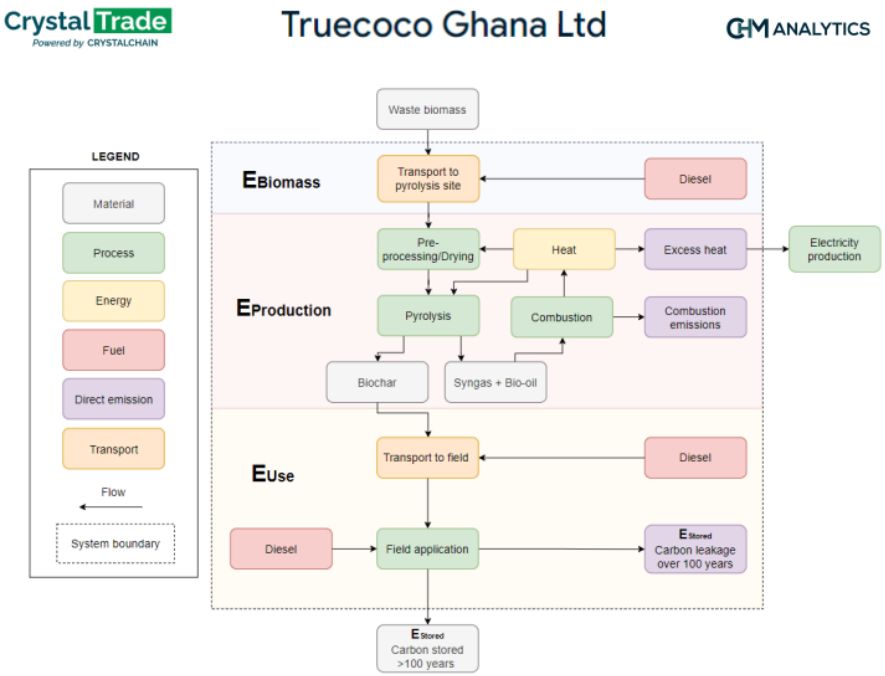


Figure 1: Flowchart of the product system

This table is filled-in by the supplier and verified by the auditor.

Monitoring and reporting

Instructions	*Please provide a summary of the monitoring procedures and monitoring plan which are in place at the production facility to ensure i) the safety of the removal activity, ii) the eligibility of the removal activity, and iii) the precise quantification of CORCs. The summary shall be project-specific and based on related evidence pieces that were submitted in the audit documentation. Word limit: 500 words.*

Summary of monitoring and reporting plan

Truecoco has implemented a robust, project-specific monitoring plan to ensure the safe operation of its pyrolysis system, the eligibility of its carbon removal activities, and the accurate quantification of CO_2 Removal Certificates (CORCs). The monitoring procedures were developed in alignment with the Puro.earth Biochar Methodology and submitted as part of the facility's audit documentation.

1. Safety of the Removal Activity. Truecoco's pyrolysis system is operated under strict safety protocols to minimize environmental and occupational hazards.
    a. Automated Combustion Control: The facility uses a high-temperature, continuous pyrolysis reactor with flame-out detection and automated shutdown features. This minimizes the risk of incomplete combustion or fire.
    b. Equipment Inspections: Routine mechanical and thermal inspections ensure reactor integrity, with logs maintained for all maintenance activities.
    c. Worker Safety Measures: All staff are trained in fire safety and handling of biochar. PPE is mandatory on site. Biochar cooling uses an enclosed system to prevent spontaneous ignition or dust inhalation.
    d. Emission Controls: The system includes gas treatment and heat recovery to reduce airborne pollutants. Emissions are periodically tested to meet Ghana EPA standards.

2. Eligibility of the Removal Activity. Truecoco's monitoring procedures ensure that all carbon removal activities meet the eligibility criteria defined by Puro.earth:

a. Sustainable Feedstock Sourcing: Only coconut husk waste is used, sourced from registered smallholder farmers. Each incoming batch is traced to its origin and verified as non-food, agricultural residue, avoiding land-use change.
b. Biochar Stability: Production conditions (temperature >550°C) and residence time (32 – 45mins) are monitored to ensure the formation of stable, long-lived biochar.
c. Legal and Environmental Compliance: The project operates under a valid Environmental Permit from Ghana EPA and has completed an EIA. Stakeholder consultations and grievance mechanisms are active to local actors in the project.

3. Precise Quantification of CORCs. Truecoco applies rigorous monitoring procedures to ensure the accurate quantification of carbon removals:
   a. Mass Measurement: All biochar produced is weighed using calibrated digital scales. All moisture is tested using a calibrated moisture meter.
   b. Carbon Content Testing: Samples of biochar are sent to a third-party lab for organic carbon analysis (C_org), using approved methods such as dry combustion.
   c. Data Logging and dMRV: All production and testing data are digitally logged. Truecoco uses CrystalTrade's digital MRV system, enabling transparent tracking, audit readiness, and validation of CORC issuance.

This monitoring system ensures operational safety, environmental integrity, and compliance with Puro.earth certification requirements.

This table is filled-in by the supplier and verified by the auditor.

Optionally, the following documents may be made available in the Puro Registry once the facility has completed its first Output Audit:

Can the monitoring plan and procedures be made available in the Puro Registry?	
Answer	☐ Yes, entirely. ☐ Yes, in a redacted version. ☒ No. If no, please provide a reason:
Filename(s) to be made public	Truecoco's monitoring plan and procedures is an important part of the company's IP.
This table is filled-in by the supplier.	

Supply-chain emissions

The determination of the supply-chain emissions of the removal activity shall be based on a project-specific life cycle assessment, made of a report and calculations. Calculations are updated at least annually, during the Output Audits, with data captured through above-described monitoring.

Instructions	*Please provide a summary or an abstract of the LCA performed. Word limit: 500 words.*
Summary of life cycle assessment	
Truecoco's facility in Ghana is their biochar production site, and this LCA was conducted to quantify the net carbon sequestration achieved. The plant transforms coconut husks waste, sourced from smallholder farmers in the region, into biochar. The biochar is either sold in pure form to local farming cooperatives for direct soil application, or mixed with compost and sold to agricultural off-takers. The following emission sources are considered in the LCA:	

EBiomass: As the biomass is considered a waste biomass, the emissions from the sourcing of the biomass are limited to the transportation emissions. EProduction: These emissions include emissions from the construction of the facility, operations, as well as end of life emissions. Construction emissions include e.g. construction of the site including the use of construction vehicles and construction waste processing, construction of the machine, transportation of materials and shipping of the pyrolysis unit. Emissions from operations include e.g. use of electricity, water and start-up fuel, as well as combustion emissions and emissions for the manufacturing as well as disposal of packaging materials used. EUse: As the biochar soil application is carried out manually, the only emission source associated with the use of the produced biochar is the transportation to the end use location. The cut-off criteria of the LCA set to 1% of the renewable and non-renewable primary energy use and max 1% of the total mass input of a specific unit process. Considering the emissions listed above, a ton of dry biochar from this project generates approximately 2.25 CORCs.
This table is filled-in by the supplier and verified by the auditor.

Optionally, the following documents may be made available in the Puro Registry once the facility has completed its first Output Audit:

Can the LCA report be made available in the Puro Registry?	
Answer	☐ Yes, entirely. ☐ Yes, in a redacted version. ☒ No. If no, please provide a reason:
Filename(s) to be made public	Truecoco's LCA is an important part of the project's IP.
This table is filled-in by the supplier.	

5 Social and environmental safeguards

The information in this section provides a summary of the project-specific measures taken to avoid and minimize negative social and environmental effects, as well as maximize positive impacts contributing to the sustainable development goals (SDGs).

5.1 Stakeholder engagement

In line with the Puro General Rules, the CO_2 Removal Supplier must have conducted a stakeholder engagement process and reported its outcome in a written format.

Instructions	*Please reproduce the summary of the stakeholder engagement report. Word limit: 500 words.*
Summary of stakeholder engagement	
Truecoco identified key actors who will be involved throughout the duration of the project to sensitise them to the project and gather their feedback. Truecoco identified a wide range of stakeholders, with our most important stakeholders being the smallholder farmer network. Truecoco has worked with the local farming network since 2017. Based on our experience, we selected leaders within the community to represent the farmer network.	

Truecoco's other identified stakeholders included: the MP for the Jomoro Region, representatives from the Ministry of Food and Agriculture, the agricultural department at the Sekondi-Takoradi Metropolitan Assembly, the Ghana Environmental Protection Agency, and the Carbon Markets Office. Truecoco also invited local NGOs working to improve farmer practices, as well as other industry experts engaged in the project, including input providers, project developers, and carbon marketplaces. All stakeholders were contacted either: 1) in person—primarily for the farmer network, 2) by email, or 3) via WhatsApp. Truecoco conducted different consultation activities to drive participation. The initial consultation by email outlined the ambition of the project. Truecoco also conducted farm visits to the local farmer network. However, the bulk of Truecoco's activities took place on 22/11/24. The programme consisted of a variety of presentations, one-to-one interviews and focus group sessions, Q&A, and feedback sessions. All stakeholders were given a platform to contribute. Truecoco presented its history and the ambition of the project, the problem-solution statement, details of the project and its co-benefits, the process of certification, and the grievance mechanisms available to stakeholders. Truecoco also invited Dr Emmanuel Dugan, one of Ghana's leading soil scientists from the CSIR, to present on the impact of biochar on soil fertility and his research in Ghana. Truecoco received feedback from all the stakeholders on topics concerning how to improve participation, the benefits to the region, continuous engagement processes, and the payment methods to be implemented. Truecoco responded to all comments directed to them and outlined how they would incorporate the feedback into the project. Consequently, Truecoco has made changes to the project to address three concerns that were raised. Firstly, concerns were raised around transparency and payment methods. In response, Truecoco is developing, with its dMRV partners, a transparent mobile money payment system. Secondly, concerns were raised regarding regular engagement with stakeholders. Truecoco is exploring ways to organise regular roundtable discussions with stakeholders throughout the project. Finally, there were questions about what opportunities would arise for the Western Region. Truecoco has established a KPI to employ and work within multiple local agricultural value chains. For future consultations during the crediting period, Truecoco will maintain three methods of contact. Firstly, there will be an opportunity for ongoing grievances. Truecoco has provided all stakeholders with their contact details and encouraged them to reach out to the business. Truecoco will also provide quarterly reports to update stakeholders and facilitate discussions about the project. Finally, Truecoco's sourcing team will maintain constant in-person communication with the farmer network, allowing farmers to raise concerns directly with the team.
This table is filled-in by the supplier and verified by the auditor.

In addition, the following documents are made available in the Puro Registry once the facility has completed its first Output Audit:

Stakeholder Engagement Report (required)	Filename	Puro Stakeholder Engagement Report. TruecocoFinal
	Description	Stakeholder engagement report completed and audited, following the Puro requirements for stakeholder engagement.
The filename shall be the exact filename as provided in the audit documentation. This table is filled-in by the supplier.		

5.2 Environmental and social safeguards

In line with the Puro General Rules, the CO_2 Removal Supplier must ensure that environmental and social safeguards are in place.

Instructions	*Please summarize the environmental and social impacts relevant to the project, based on the answers provided to the corresponding questionnaire in the audit documentation. Word limit: 500 words.*

Summary of environmental and social safeguards questionnaire

Truecoco operates in accordance with all relevant environmental and social safeguards as outlined by the Puro.earth General Rules (v4.0, §6.4). Since its inception in 2017, Truecoco has maintained full compliance with both national and international legislation, ensuring that its operations result in no net harm to the surrounding environment or communities.

In alignment with the Puro.earth Environmental and Social Safeguards framework, Truecoco:
- Adheres to all applicable local, national, and international legal requirements, and has done so since 2017.
- None of the rights of indigenous peoples and local communities are impacted by the project in line with applicable international human rights law, and the United Nations Declaration on the Rights of Indigenous Peoples and International Labor Organization (ILO) Convention 169 on Indigenous and Tribal Peoples.
- Maintains robust Health, Safety, and Human Resource policies, fully aligned with the Labour Act of Ghana (Act 651). These policies uphold workers' rights, ensure safe working conditions, and prohibit child labor, forced labor, and any form of human trafficking.

Truecoco's commitment to environmental integrity is demonstrated by:
- Holding a valid Environmental Permit issued in compliance with the Environmental Protection Act, 2025 (Act 1124), specifically Sections 3(2)(c)(0) and 29(2).
- Meeting the requirements of the Environmental Assessment Regulations, 1999 (LI 1652).
- Completion of a formal Environmental Impact Assessment (EIA), ensuring that the project identifies, monitors, and mitigates any potential environmental risks associated with operations.

Truecoco has identified the material environmental and social impacts and risks associated with its operations through a combination of formal Environmental Impact Assessment (EIA), stakeholder consultations, and internal risk assessments. Alongside identifying the risks, Truecoco has put together a mitigation strategy to minimize the impact of each risk.

Environmental Risks:
Biomass Sourcing – Risk of land degradation is mitigated by using only coconut husk waste, with full traceability through farmer registration.
Air Emissions – Controlled through high-temperature pyrolysis and rigorous QC protocols. Emissions testing ensures compliance with Ghana EPA standards.
Water Use – Managed via a closed-loop recycling system; all discharge complies with EPA limits.
Soil Impact – Risk of over-application is addressed by limiting biochar use to 5MT/ha/year and requiring farmer training; biochar is co-applied with compost.

Social Risks:
Labor Rights – Risks of child labor or unsafe conditions are mitigated through full compliance with Ghana's Labour Act (Act 651), formal contracts, and ID verification.
Gender Equity – Truecoco enforces equal hiring, equal pay, and zero-tolerance for harassment, supported by a grievance mechanism.
Community Relations – Proactive engagement with farmers, officials, NGOs, and local agencies ensures transparency and local support.

These risks were determined via national EIA processes, ongoing stakeholder engagement, and alignment with Puro.earth's social and environmental safeguard framework.
This table is filled-in by the supplier and verified by the auditor.

In addition, the following document is made available in the Puro Registry once the facility has completed its first Output Audit:

Environmental and social safeguard questionnaire (required)	Filename	Puro Environmental and Social Safeguards_Truecoco.final
	Description	Questionnaire based on a template provided by Puro, to ensure compliance with the Puro General Rules, regarding social and environmental safeguards.
The filename shall be the exact filename as provided in the audit documentation. This table is filled-in by the supplier.		

5.3 Permits, risk assessments and impact assessments

Depending on the nature and scale of the removal activity, the CO_2 Removal Supplier may have obtained permits or conducted specific environmental assessments (e.g. Environmental and Social Impact Assessment, Environmental Risk Assessment) for compliance with local laws and regulations.

Were the obtention of one or several construction or environmental permits required for the removal activity, for compliance with local laws and regulations?	
Answer	☒Yes, permits were required and successfully obtained. ☐ No, permits were not required.
Permits obtained	Name of permit: Environmental Permit ID of permit: EPA/WR/AER/EO/CU/5/25/0049024/03 Issuer of permit: Environmental Protection Authority Date of issuance: June 11th 2025 Permit file (.pdf): TRUECOCO GHANA LIMITED – EPA 2025.pdf Permit URL (if available):
If several permits were obtained, provide the information for each of them. This table is filled-in by the supplier and verified by the auditor.	

Was an environmental and social impact assessment study (EIA) conducted?	
Answer	☒ Yes, an EIA was legally required and thereby conducted. ☐ Yes, an EIA was not legally required but conducted voluntarily. ☐ No, an EIA was not legally required and not conducted.
EIA Report (if conducted)	Title of study: Annual Environmental Report Filename of report: 2024 AER – Truecoco Ghana Ltd, Allowule.EPA.pdf Can the report be published in the Puro Registry: No
This table is filled-in by the supplier and verified by the auditor.	

Was an environmental risk assessment study (ERA) conducted?	
Answer	☒ Yes, an ERA was legally required and thereby conducted. ☐ Yes, an ERA was not legally required but conducted voluntarily. ☐ No, an ERA was not legally required and not conducted.
ERA Report (if conducted)	Title of study: Annual Environmental Report Filename of report: 2024 AER – Truecoco Ghana Ltd, Allowule.EPA.pdf

	Can the report be published in the Puro Registry: No
This table is filled-in by the supplier and verified by the auditor.	

5.4 Positive impacts on SDGs

Depending on the nature of the removal activity, the activity may have positive impacts on the UN Sustainable Development Goals (SDGs).

Instructions	*Please provide a summary of the positive impacts on the SDGs that the removal activity has or plans to have. If those impacts are certified as SDG Attributes, then the summary shall be based on related pieces that were submitted in the audit documentation (SDG Reporting files). If those positive impacts are not certified as SDG Attributes, then the summary shall be limited to a qualitative description of positive impacts in relation to SDGs. Word limit: 150 words.*
Summary	Truecoco's project is not requesting the verification of any additional SDGs for the Puro audit. However, the project prides itself on positively contributing to the local community by working across multiple SDGs streams. As a project in the global south, Truecoco project places emphasis on the social and environmental impacts. SDG impacts include: SDG1, No Poverty: Truecoco's project provides new and additional revenues to smallholder farmers. SDG2; Zero Hunger: Application biochar leads to improved soil quality and increases smallholder farmer yields. SDG8, Decent Work & Economic Growth: Truecoco's project generates employment opportunities locally both directly and indirectly. SDG12, Responsible consumption & production: Truecoco's feedstock, coconut husk, is a pure waste agricultural feedstock that is recycled to create biochar. SDG13, Climate Action: Application of biochar removes CO2 from the atmosphere. SDG15, Life on land: Biochar contributes to reclamation, remediation and restoration of soil eroded land.
This table is filled-in by the supplier and verified by the auditor.	

In addition, the following document is made available in the Puro Registry once the facility has completed its first Output Audit:

SDG Reporting (required)	Filename	N.a
	Description	SDG Reporting based on a template provided by Puro, disclosing with SDG indicators are reported and how they are or will be demonstrated.
The filename shall be the exact filename as provided in the audit documentation. This table is filled-in by the supplier.		

6 Other documents available in the Puro Registry

Alongside this project description, several other documents are made available in the Puro Registry for more details.

The documents referenced in this project description are compiled in the following table:

Instructions	To finalize the project description, please list the names of all the public documents to be made available in the Puro Registry, in the order they appear, specifying the number of pages of each document. Add rows as necessary.	
#	**Document names**	**No of pages**
1	Baseline and Additionality Assessment – Truecoco Ghana.Final.29.07	10
2	Puro Stakeholder Engagement Report. TruecocoFinal	9
3	Puro Environmental and Social Safeguards_Truecoco.final	15
4		
5		
6		
7		
8		
9		
10		
This table is filled-in by the supplier.		

Besides the documents referenced in this project description, the 3rd-party auditor has reviewed a complete audit package containing numerous documents, performed a site visit, and prepared an audit report and statement.

The facility described here will further be audited annually, in Output Audits, to verify the performance of the removal activity, resulting in the issuance of CORCs. All audits lead to audit reports and statements, which will be available in the Puro Registry, alongside further details on CORC quantification for each monitoring period.

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 $tCO_2eq.$ net) from the atmosphere to a durable storage of minimum 100 years, and for mineralization and geological storage minimum 1000 years. Net carbon removal is determined from stored gross CO_2 volume by subtracting supply-chain emissions from the project, any re-emissions over the guaranteed storage time, any baseline removals taking place in a baseline scenario, and any negative indirect leakage effects relative to the baseline scenario.

The CO_2 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 0r 1000 years) in the absence of the carbon removal activity proposed by the CO_2 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 and A2.).
- Demonstrate **regulatory additionality,** meaning that the project is not required by existing laws, regulations, or other binding obligations (question A4.).
- Demonstrate **prior consideration of carbon credits** through documentation demonstrating that the time period between the commitment date and production facility audit is max. 3 years. (question A5)
- Demonstrate **financial additionality**, meaning that the CO_2 removals achieved are a result of carbon finance. This means that the CO_2 Removal Supplier must show that the carbon credits were needed to secure the investment or to overcome specific barriers to the investment.
- To support the claim the of financial additionality, the project activity cannot already be *common practice* without carbon finance (question A6).

Reference documents: Puro Standard general Rules v4.0, section 6.5 and Additionality Assessment requirements v2.0.

7 General questions to all CO_2 Removal Suppliers

A1. Baseline Determination

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: *Decomposition*	*Coconuts are being dehusked by small holder farmers on site. The coconut husks are considered a waste product and are left on the fields to decompose. Potential increases in soil carbon due to the decomposition of the coconut husk are not permanent and therefore do not present a storage of carbon (100+ years).*	None	None
Project activity: *Biochar production*	*Coconut husks are being collected and brought to the biochar facility to be used as feedstock. The resulting biochar is applied to the soil directly or through the incorporation into fertilizer products.*	Between 9,700 – 10,000 CORCS per year	None
Alternative scenarios			

A2. Does the project lead to higher volumes of durable carbon removal than the baseline?	Yes / No
The baseline scenario results in no durable carbon removals, whereas the project activity leads to the creation of durable carbon removals through the production of biochar.	Yes

A3. Is the project scenario aligned with net-zero transition? The following activities are considered not to be aligned with net-zero transition: a) directly leading to an increase in the extraction of fossil fuels, b) relating to coal-fired electricity generation, or c) involving other unabated fossil fuel-powered electricity generation, other than new gas-fired generation that is part of increased zero-emissions generation capacity in support of national low carbon energy transitions	Yes / No
Yes, the project activity is aligned with net-zero transition. The project activity does not result in any leakage or activity displacement as the chosen feedstock is a waste biomass with no existing uses. All emissions caused by the project happen within the scope of the project, are in line with Puro requirements and accounted for in the project LCA.	Yes

A4. Is the project required by existing laws, regulations, or other binding obligations?	Yes / No

This project is not required by existing laws, regulations, or other binding obligations. This is also reflected by this being the first industrial sized biochar project in Western region of Ghana, possibly in all of Ghana.	No

A5. What was the Commitment Date of this facility? Commitment Date is defined as "The calendar date on which the CO_2 Removal Supplier committed to implementing the CO_2	**Date**
Removal activity (e.g., the date when contracts for the purchase or installation of equipment required for the mitigation activity were signed). In the case where a mitigation activity does not involve capital expenditure, it refers to the date when the first physical actions were taken to implement the mitigation activity." If an exception listed in clause 2.1.3 of the Additionality Assessment Requirement applies, describe the situation here.	
Truecoco signed the contract for the purchase of the equipment for mitigation activity 13th January 2025.	

A6. Is the Technological Readiness Level of the Methodology 8 or 9?	**Yes/No**
According to the "Puro Additionality Assessment Requirements, Version 2.0", the readiness level of biochar is 6-7.	No

If the answer to question A6 is Yes, please answer question A6.1 to A6.3. Questions A6.2 and A6.3 are different based on whether you are applying a distributed technology (such as enhanced rock weathering) or more centralized technology based on plants/factories producing something. See clauses 3.2.5 and 3.2.6 in the Puro Additionality Assessment Requirements with references for more information.

A6.1. Please define the region being considered and explain why it is relevant level of aggregation for the assessment if different from the host country.
[Information]

A7. Does the carbon removal project have other income sources besides carbon finance? Include also information about any subsidies you receive or expect to receive. Please describe your business model here, in a short answer (max. 100 words).	**Yes / No**

To date, the model has not incorporated any subsidies or grant funding for the project. Carbon finance is the primary source of revenue for our model. However, Truecoco will also be	Yes

A6.2. Market size or current installations

Distributed technology: What is your estimate for a realistic target market size and what constraints to the market size growth have you identified?

Centralized technology (plants): What projects have you identified that fulfil the criteria in Additionality Assessment Requirements clause 3.2.6? a) output range of +/- 50% of the project,
b) located in the same region,
c) applying the same measure,
d) produce comparable goods or services in terms of quality, properties, and applications,
e) started commercial operation before the proposed start date of the project, and
f) are not registered in a carbon crediting program.
How many of them apply a different technology?

Please mention or link to any sources you have.

[Information]

A6.3. Market penetration rate

Distributed technology: What is your estimate of the market penetration rate of the activity? How common or widespread is the project activity or similar activities in the relevant sector and region, and what is the trend of adoption over time?

Centralized technology (plants): Provide your calculation of market penetration rate based on the formula in clause 3.2.6 in Additionality Assessment Requirements.

[Information]

selling the physical biochar, at a below market rate, as a soil amendment. Truecoco will also work with local partners to sell the wood vinegar as an organic fungicide to the local market.	

Please note: Questions under headings '2. Simple cost analysis', '3. Investment analysis', and ' 4. Barrier Analysis' are mutually exclusive options.

8 Simple cost analysis or investment analysis

Some projects may demonstrate additionality through simple cost analysis: this is applicable for projects that have no other source of income besides carbon finance or where ex-ante investment analysis is not applicable, because capital expenditure (capex) is modest compared to operating expenditure (opex). This can include e.g. enhanced rock weathering projects.

B1. Describe how the criteria above applies to your project
It does not apply to this project. The project chooses to conduct an investment analysis.

B Simple cost analysis	Project response
B2. Please describe your cost structure here and include evidence in attachment.	
B3. Please summarize the simple cost analysis here. Please include any public subsidies received or expected. Compare with alternative scenarios, if relevant.	
B4. Please 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.	
B5. Are you willing to provide full calculation spreadsheet to be visible in Puro Registry? If yes, please specify the name of the file that has been provided. If not, please ensure that there is sufficient information provided in your answers in this document.	
B6. Is the information shared here consistent with information presented to the company's decision-making management, investors or lenders?	
B7. Is the information shared here consistent with the information in the audit documentation presented to Puro and its verifiers (e.g. LCA model)? If not, please explain why there are differences.	

9 Investment Analysis

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 with Investment Analysis.

<table>
<tr><th>C. Financial Additionality – Investment analysis</th><th>Project response</th></tr>
<tr><td>C1. Describe the relevant alternative scenarios in terms of investments analysis.
If the only alternative scenario is to carry out the project without CORCs, please answer the following questions:
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. Please specify the currency and whether the rate is nominal or real.</td><td>The IRR has been set on the basis of a number of research documents and advice from project financiers for West Africa. The IRR has been set at 20%. This is typical of an IRR value for a biochar project in an emerging market. See below links to articles that verify our IRR rate.

Atmospheric carbon removal via industrial biochar systems: A techno-economic-environmental study

UNDP Africa Investment Insights Report, 2022 edition</td></tr>
<tr><td>C2. Please state how CORC revenues change the expected IRR or NPV of the project.</td><td>To demonstrate the impact of CORC revenue on the NPV of the project, we have modelled four differing situations. The impact is outlined below.

Situation 1
<table><tr><td>Price per CORC (USD)</td><td>180</td></tr><tr><td>Biochar per MT (USD)</td><td>80</td></tr><tr><td>Project NPV (USD)</td><td>3.994m</td></tr></table>
Situation 2
<table><tr><td>Price per CORC (USD)</td><td>140</td></tr><tr><td>Biochar per MT (USD)</td><td>80</td></tr><tr><td>Project NPV (USD)</td><td>2.548m</td></tr></table>
Situation 3
<table><tr><td>Price per CORC (USD)</td><td>100</td></tr><tr><td>Biochar per MT (USD)</td><td>80</td></tr><tr><td>Project NPV (USD)</td><td>1.102m</td></tr></table>
Situation 4
<table><tr><td>Price per CORC (USD)</td><td>60</td></tr><tr><td>Biochar per MT (USD)</td><td>80</td></tr></table></td></tr>
</table>

	Project NPV (USD)	-361k
C3. Please conduct a sensitivity analysis in relation to the investment analysis and summarize the results here.	Please find the sensitivity analysis of the key variables of the project below. I have outlined three variables that play the most significant impact on the project. The cost of feedstock, CORC price and biochar price. This sensitivity analysis is based on the project length. The project length is modelled to seven years. Our first variable explores the impact of changing feedstock cost. Our feedstock is coconut husk that we will purchase from an established farmer network. Coconut husk is currently a waste product that has no	

value, however we will pay for the farmer network to supply the feedstock for the project.

Model	Cost per MT (USD)	Total cost (USD)	Cost per ton of biochar (USD)
Current	40	3.85m	114
Best	25	2.38m	71
Worst	70	6.67m	200

The second variable looks at the impact of the CORC price on the revenue of the project. As outlined above, the project is heavily dependent upon carbon finance. With a higher CORC revenue, the project is able to sell the product at a lower price, with the ambition of facilitating the growth of the biochar market.

Model	CORC price (USD)	CORC revenue per MT of biochar (USD)	Total CORC revenue (USD)
Current	120	298	9.984m
Best	180	447	14.92m
Worst	60	149	4.97m

The third variable looks at the impact of biochar sales on the revenue of the project. As outlined above, the project is heavily dependent upon carbon finance. We expect to sell the biochar at a below global market rate due to the lack of demand in Ghana. Globally biochar can sell for >USD600, we project that biochar will sell for <USD100 in the local context. However, our project is designed to work with smallholder farmers in Ghana.

Model	Biochar/ MT (USD)	Total biochar revenue (USD)	Biochar/ CORC revenue (USD)
Current	80	3.21m	47
Best	150	6.02m	88
Worst	20	802k	12

C4. Is the information shared here consistent with information presented to the company's decisionmaking management, investors, or lenders?	Yes
C5. Is the information shared here consistent with the information in the audit documentation presented to Puro and its verifiers (e.g. LCA model)? If not, please explain why there are differences.	Yes
C6. Are you willing to provide full calculation spreadsheet to be visible in Puro Registry? If yes, please specify the name of the file that has been provided.	Yes
C7. If you are not willing to disclose the full spreadsheet, please provide here a summary of the confidential file that has been provided to the Auditor and Puro.earth. Please include: • **Overall description of the spreadsheet, including type of terms (real/nominal), currency, forecasting periodicity** • **Capital structure, if the measure is based on equity return** • **Information sources on main revenues and costs** • **Expected breakdown of income from the different sources** • **Expected or already received public subsidies** • **Growth assumptions** • **Model duration and a comparison with expected lifetime**	Our financial model is a DCF model in USD using nominal values. The return on capital is structured as IRR on the investment providing an NPV and ROI. The project return is calculated as a percentage of the initial investment. The information sources on main revenues being CORC sales and biochar sales are from real market data both locally and internationally. CORC prices are set according to the Puro exchange and other third party data sources. The revenue from biochar has been forecasted using local market research and accumulated expressions of interests from buyers. Over the course of five years, the project is expected to receive 82% of its revenue from CORC sales and 18% of revenue from biochar sales. The financial model does not forecast receiving any subsidies or grants. The model runs until June 2032. Growth assumptions are based on machinery efficiency increases only currently.

10 Barrier Analysis

In Barrier Analysis only one barrier needs to be demonstrated but there needs to be clear, objective, and verifiable evidence to demonstrate its existence. If possible, please provide quantitative estimates for the barrier.

D. Barrier Analysis	No/yes	Project response
D1. Are there financial barriers? (e.g., financing is not accessible for the type of activity in the country due to the risks)		
D2. Are there institutional barriers? (e.g., the investor not being the beneficiary of cost savings associated with the investment)		
D3. Are there information barriers? (e.g., lack of awareness of the financial benefits of by-products)		
D4. Please explain how CORC revenues are crucial element in overcoming identified barrier(s)		
D5. Are there subsidies for the carbon removal activity? If yes, please explain how they are not sufficient to		

overcome the barrier.		
D6. Please attach verifiable evidence for the existence of the barrier and describe the evidence here. If the file can be included publicly in the Puro registry, please specify the name of the file here. If the evidence is not public, please ensure		
that you describe it in sufficient detail.		
D7. Please demonstrate that at least one other alternative in baseline determination (first question) does not face any significant barriers, including the barriers faced by your project.		

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

William Orr

Date, Place: 29th July, Tikobo Number One, Western Region, Ghana Representative name, title, organization: William Orr, Project Manager, Truecoco Ghana

Stakeholder Engagement Report

CO_2 Removal Supplier	Truecoco Ghana Ltd
Production Facility	Truecoco Ghana Ltd
Production Facility ID	816220
Date of report last update (YYYY -MM-DD)	2025-01-06

Stakeholder Engagement Report

The purpose of this document is to gather results of the Stakeholder Engagement that has been conducted by the CO_2 Removal Supplier, for its Production Facility, in line with Section 6.4 of the Puro General Rules 4.0 and the Puro Stakeholder Engagement Requirements.

This report is divided in the following sections:
1 Identified stakeholders
2 Consultation activities and outcomes
3 Plans for continued consultation during crediting period
4 Summary

This report will be made **publicly available** in the Puro Registry. It shall not contain information about private individuals (e.g. name, personal address) for privacy reasons. Such information shall be provided separately (e.g. list of participants to consultation activity, as an appendix to the report).

11 Identified stakeholders

Provide an overview of the stakeholders that have been identified as relevant to include in the stakeholder engagement process, following the categories defined below:

Stakeholder categories	Identified stakeholders
Local Stakeholders, i.e. stakeholders in the immediate environment of the facility of the CO2 Removal Supplier, and most prone to experience direct or indirect effects of the respective carbon removal activity.	Truecoco identified leading representatives from the local smallholder farming community as the key actors of the project.
Stakeholders with **land-tenure rights** within the vicinity of the project boundary	Truecoco identified the landlord for Truecoco's operational site as a key stakeholder with land-tenure rights, and local smallholder farmers who will be represented during the project
Representatives of relevant **local authorities** and relevant **local politicians**	Truecoco identified the local MP Madame Dorcas Affo-Toffey, member of parliament for the Jomoro Constituency, Western Region, and the local representatives from the Ministry of Food and Agriculture, and representatives from agricultural department at Sekondi-Takoradi Metropolitan Assembly, and representatives from the Ghana Environmental Protection Agency and Carbon Markets office

Local **non-governmental organizations** (NGOs) or international NGOs who are active in the region and relevant to the topic	Truecoco identified representatives from Quarcoo initiatives, a local NGO that works with smallholder farmers to improve farmer practices, and Ghoshen Global Vision an environmental and food security NGO that works in the Western Region of Ghana
Representatives of relevant **working groups** or **vulnerable** and **marginalized** groups within the vicinity of the project boundary	Truecoco identified the local smallholder farming community as a relevant working group. Truecoco has not been able to identify vulnerable or marginalized groups within the vicinity of the project boundary.
Relevant **industry experts**, given there are any in the near environment	Truecoco has identified a range of industry experts, including the Council for Scientific and Industrial Research – Ghana's leading research body, HJA Africa – a leading inputs provider in Ghana, Oko Energy – a project developer based in Ghana, and
	representatives from leading marketplaces, Patch and Supercritical.
Other, please specify:	Truecoco identified the financiers of the project, Growth Investment Partners, and representatives from the Ministry of Trade and Industry Singapore as key stakeholders for the project
Answers are to be written in the second column without disclosing private information. For instance, instead of the name of a specific resident, use terminology like "local residents". Likewise, instead of naming specific public employees, prefer to mention the roles and departments. *In case there are no identified stakeholders in a given category, provide a brief justification instead.*	

Activity directly or indirectly impacting indigenous peoples or their livelihoods, ancestral knowledge or cultural heritage:

Question	Answer
Does the list of identified stakeholders include any indigenous peoples or communities?	☐ Yes ☒ No
If answer is "Yes" to the question above, has the free, prior and informed consent (FPIC) been obtained from those indigenous peoples or communities?	☐ Yes. Please provide evidence of the obtention of the FPIC in a separate document.
As per rule 2.1.6 in the Puro Stakeholder Engagement Requirements, note that "FPIC is distinct from stakeholder engagement in that it is derived from indigenous peoples' right to self-determination. While stakeholder engagement involves consultation and collaboration with all parties affected by a project, FPIC goes a step further by requiring the explicit consent of indigenous peoples before proceeding with activities that impact them."	

12 Consultation activities and outcomes

Provide an exhaustive list of all the **stakeholder consultation activities** that have been conducted. Add as many rows as necessary. The activity categories can for instance be one of the following (but not limited to these ones): public meeting, online webinar, paper questionnaire, electronic questionnaire, interviews, focus group, site visit, door-to-door visits, etc.

Activity categories	Activity name	Activity date (YYYY-MM-DD)
Presentation	Presentation on Truecoco's project, looking at the scale and ambition of the project. As well as exploring the positive impacts for the stakeholders, and explaining how they can engage in the project.	2024-11-22
Presentation	Presentation to the participants of the stakeholder engagement on the benefits of biochar, and soil fertility in Ghana. Led by Dr Emmanuel Dugan, CSIR, one of Ghana's leading soil scientists.	2024-11-22
Focus groups	Group session amongst key stakeholders, during which stakeholders were encouraged to engage with other members of the group and discuss different elements of the project.	2024-11-22
Interviews	One to one interviews with key stakeholders held by Truecoco representatives.	2024-11-22
Question and Answer session	A question and answer session held between Truecoco and the stakeholders.	2024-11-22
Feedback session	Led by stakeholders, who were encouraged to present back to Truecoco about different elements of the project that they liked and had concerns with.	2024-11-22
Farm visits	Truecoco's team has had ongoing engagement with members of the local farming community who are eager to engage in the project.	November 2024 – ongoing
Key documentation	All stakeholders were presented with documentation that outlined the key aspects of the project. The documentation was prepared in three languages; English, Twi and Nzema.	November 2024

Website post	Truecoco posted on LinkedIn and Truecoco's website that outlined details of the stakeholder engagement, the project, and how people could contribute to the project. This was also sent to stakeholders, and available for any interested parties.	2024-11-27

Provide a list of all the **stakeholder invitations** that have been sent out, grouping whenever relevant the invitations (e.g., for all local residents as one row). Add as many rows as necessary. The invitation format can be one of the following (but not limited to these ones): postal letters, email, social media publication, public board information, telephone calls, verbal communication, etc.

Invitation format	Invitation name	Invitation date (YYYY-MM-DD)
In person	Invitation to the local farmer representatives were provided in-person by a representative of Truecoco. In person invitations were largely to representatives of the smallholder farmer community	November 2024
Email	"Invitation to stakeholder meeting" – Emails were sent to key stakeholders in the project over a series of weeks. The email included a location, date and RSVP for the stakeholder engagement, and a three page pdf that outlined very information about the project. The list of individuals who received the invitation by email and the date is included in the attached presentation	October – November 2024
WhatsApp	WhatsApp is a widely used tool of communication for business in Ghana. Invitees received a communication by WhatsApp which included details of the event and a three page pdf that outlined very information about the project. The list of individuals who received the invitation by WhatsApp and the date is included in the attached presentation	October – November 2024

As **supporting evidence** to this report, please provide in a separate subfolder, the following:

- Example of invitations sent out, for different consultation activities (e.g. letters, emails, website announcements).
- Lists of all stakeholders invited to the consultation activities and stakeholders participating in the consultation activities. The lists will not be made public, as they can contain private information.

In case identified relevant stakeholders (section 1) were not invited to the consultation activities, please provide clear **reasons for not inviting** them. Add as many rows as necessary. Leave blank if not applicable.

Identified stakeholders	Reasons for not inviting
Not applicable	All identified stakeholders were invited to the stakeholder engagement

Provide an extensive summary of i) the **information that was provided to stakeholders** during the consultation activities, ii) the **feedback received** during the consultation activities (with a particular focus on concerns, potential issues and critiques), and iii) the **responses provided to stakeholders** about their feedback.

Summary of the feedback received during the consultation activities
Information Provided to Stakeholders Over the course of the consultation, Truecoco presented the following information to the applicable stakeholders: 1. **Introduction to Truecoco:** A presentation on Truecoco's history, including its previous, current, and future operational plans. 2. **Introduction to the Truecoco Project:** An overview of what biochar is, the benefits to stakeholders, Truecoco's 2030 goals for the project, and a lifecycle analysis of the project. 3. **Problem-Solution Statement:** An outline of four key problems currently faced and the role biochar production can play in resolving them. 4. **Project Details:** A description of the machinery and process for creating biochar, the project's integrity (what it means for the project and how it will be upheld), and an outline of the project partners and their engagement in the project. 5. **Project Co-Benefits:** An explanation of the project's co-benefits, Truecoco's aim for growth and impact, an outline of the UN Sustainable Development Goals (SDGs), and Ghana's role in the carbon market, including Truecoco's intended contribution. 6. **Biochar, Soil, and Fertility:** Presented by Dr. Emmanuel Dugan, a leading soil scientist from the Council for Scientific and Industrial Research (CSIR), this presentation explored: ○ What is biochar? ○ The benefits of biochar application. ○ Materials used to produce biochar. ○ Methods of biochar application. ○ A summary of the presentation and research conducted by CSIR in Ghana. 7. **Process of Certification:** An explanation of Puro.earth's role in the certification process, as well as an outline of the steps for achieving certification. 8. **Grievance Mechanism:** Contact details and an explanation of how stakeholders can provide feedback to the project developers.

Feedback Received from Stakeholders

During and prior to the stakeholder engagement, Truecoco encouraged stakeholders to provide feedback on the project. Following the presentations and group sessions, stakeholders raised the following feedback points:

1. Truecoco should increase the content concerning success stories about the project. This will help drive participation from both farmers and potential buyers.
2. Stakeholders requested clarity on how much processing will take place in Tikobo One and what benefits it will bring. Since the majority of processing will occur in Tikobo One, they recommended that most of the biochar should remain in the Western Region.
3. Alongside advising farmers on the best ways to use biochar, Truecoco should introduce plans to improve local farming practices. Programs to support better yields and farming methods should be established.
4. Questions were raised about the price at which waste would be purchased and how Truecoco will engage farmers on pricing. Stakeholders emphasized the need for consistent transparency regarding feedstock payments.
5. Continuous engagement with farmers is essential. Suggestions included roundtable meetings and inperson sessions to maintain ongoing communication.
6. Stakeholders inquired about the payment methods Truecoco will use and requested flexibility. Farmers predominantly use mobile money, which improves transparency and payment efficiency.
7. Concerns were raised about how contactable Truecoco will be throughout the process. Stakeholders recommended WhatsApp as the primary point of contact.
8. Stakeholders asked for more details on how Truecoco plans to achieve 250,000 metric tons (MTs) of CO_2 removal by 2030.

Responses Provided to Stakeholders

Following the feedback presented, Truecoco addressed stakeholders' questions and comments with the following responses:

1. Truecoco is committed to improving the consistency and quality of project content. As the project progresses and Truecoco begins purchasing feedstock and producing biochar, there will be more opportunities to create and share success stories.
2. Tikobo One will benefit significantly from the project. This includes increased employment opportunities, additional revenue streams for local farmers from what was previously a waste product, and the sale or donation of biochar to local farmers at below-market rates.
3. At this time, there are no specific plans or programs to improve local farming practices.
4. The price for feedstock will vary depending on market dynamics.
5. Truecoco's sourcing team will maintain continuous engagement with the farmer network. Further roundtable meetings and in-person sessions will be organized to collect regular feedback.
6. Mobile money will be the primary payment method used by Truecoco for transactions with farmers.
7. As part of the stakeholder engagement process, Truecoco has provided stakeholders with contact details, including email and WhatsApp communication.
8. As outlined in the presentation, Truecoco aims to achieve 250,000 Puro-certified CORCs by scaling to multiple sites throughout Ghana. The initial focus will be on collaborating with

farmer networks in the Western Region, with plans to expand to other Ghanaian agricultural value chains.

In case any relevant stakeholders **could not take part** in the consultation activities due to reasons such as lack of mobile access or physical disability, please describe and summarize how you engaged with them, what their specific feedback was, and how it was answered. Leave blank if not applicable.

Consultation of stakeholders that could not take part in the scheduled consultation activities

Not applicable

As **supporting evidence** to this report, please provide in a separate subfolder, the following: ● Materials presented during the consultation activities (e.g. presentations)

- Documentation of the feedback received (e.g. meeting notes, questionnaire answers)
- Documentation of the responses provided to stakeholders (e.g. consultation reports)

Provide an extensive description of the **changes made to the project** plans to address the concerns and issues raised during the consultation activities.

Description of the changes made to the project for addressing concerns and issues

The Key Concerns and Issues Raised During the Consultation Activities Were:

1. **Transparency and Payment Methods:** A number of farmers expressed concerns about the method of payment, the regularity of payments, and the value of the product.
2. **Engagement and Grievance Mechanisms:** Stakeholders raised concerns about the availability and consistency of feedback from Truecoco. In addition to further engagement on the project, farmers are eager to receive more regular training sessions on the best use of biochar.
3. **Opportunities for Actors in the Western Region:** Concerns were raised about the opportunities the project will create for local stakeholders.

Changes to the Project to Address the Concerns and Issues Raised:

1. Truecoco, in partnership with their dMRV provider, will look to develop a transparent mobile money payment system. This system will ensure farmers receive the full value of payments, traceability of transactions, and transparency in all payment processes.
2. In addition to the existing engagement methods (quarterly reports and in-person consultations), Truecoco will host more frequent roundtable discussions with stakeholders. These sessions will focus on providing farmers with more information on improving farming practices and biochar application. Truecoco will also engage farmers in advance to tailor the sessions to best suit participants' needs.
3. Truecoco has always maintained a strong focus on working within the Western Region. Having started as Ghana's first organic coconut processor, based in Tikobo One, Truecoco has historically provided many local opportunities. As the project scales up, Truecoco's ambition is to continue developing additional sites in the Western Region. Alongside opportunities within the coconut sector, there are also further opportunities in other agricultural value chains in the Western Region. Truecoco will focus on providing employment opportunities locally.

13 Plans for continued consultation during crediting period

Provide a description of the current plans for maintaining a continued engagement of the stakeholders during the crediting period.

Description of the plans for continued consultation of stakeholders during the crediting period

During the crediting period, Truecoco has outlined the following plans for continued consultation with stakeholders:

1. **Ongoing Grievance Mechanism:** During stakeholder engagement, Truecoco provided all necessary contact details (email and WhatsApp) to stakeholders. This information is also available on the website. Stakeholders are encouraged to contact Truecoco if they have any immediate feedback or concerns regarding the project.
2. **Quarterly Reports:** Truecoco will provide quarterly reports via email to stakeholders. These reports will include key data on the progress of the project and updates that Truecoco intends to implement. The quarterly reports will also offer stakeholders the opportunity to respond or raise grievances if they have any concerns about the project.
3. **In-Person Consultation:** This applies specifically to the farmer network. Truecoco's sourcing team will maintain regular contact with the farmer network and address any consultation or engagement needs raised by stakeholders.

14 Summary

Based on all the information provided above and the evidence provided separately, write an overall summary of the stakeholder engagement. This summary must follow the structure of this report, tackling identified stakeholders, consultation activities and outcome, and plans for continued consultation. This summary is limited to 500 words. This summary must be re-used in the Project Description.

Overall summary (500-word limit)

Truecoco identified key actors who will be involved throughout the duration of the project to sensitise them to the project and gather their feedback. Truecoco identified a wide range of stakeholders, with our most important stakeholders being the smallholder farmer network. Truecoco has worked with the local farming network since 2017. Based on our experience, we selected leaders within the community to represent the farmer network.

Truecoco's other identified stakeholders included: the MP for the Jomoro Region, representatives from the
Ministry of Food and Agriculture, the agricultural department at the Sekondi-Takoradi Metropolitan Assembly, the Ghana Environmental Protection Agency, and the Carbon Markets Office. Truecoco also invited local NGOs working to improve farmer practices, as well as other industry experts engaged in the project, including input providers, project developers, and carbon marketplaces. All stakeholders were contacted either: 1) in person—primarily for the farmer network, 2) by email, or 3) via WhatsApp.

Truecoco conducted different consultation activities to drive participation. The initial consultation by email outlined the ambition of the project. Truecoco also conducted farm visits to the local farmer network. However, the bulk of Truecoco's activities took place on 22/11/24. The programme consisted of a variety of presentations, one-to-one interviews and focus group sessions, Q&A, and feedback sessions. All stakeholders were given a platform to contribute. Truecoco presented its history and the ambition of the project, the problem-solution statement, details of the project and its co-benefits, the process of certification, and the grievance mechanisms available to stakeholders. Truecoco also invited Dr Emmanuel Dugan, one of Ghana's leading soil scientists from the CSIR, to present on the impact of biochar on soil fertility and his research in Ghana.

Truecoco received feedback from all the stakeholders on topics concerning how to improve participation, the benefits to the region, continuous engagement processes, and the payment methods to be implemented. Truecoco responded to all comments directed to them and outlined how they would incorporate the feedback into the project. Consequently, Truecoco has made changes to the project to address three concerns that were raised.

Firstly, concerns were raised around transparency and payment methods. In response, Truecoco is developing, with its dMRV partners, a transparent mobile money payment system. Secondly, concerns were raised regarding regular engagement with stakeholders. Truecoco is exploring ways to organise regular roundtable discussions with stakeholders throughout the project. Finally, there were questions about what opportunities would arise for the Western Region. Truecoco has established a KPI to employ and work within multiple local agricultural value chains.

For future consultations during the crediting period, Truecoco will maintain three methods of contact. Firstly, there will be an opportunity for ongoing grievances. Truecoco has provided all stakeholders with their contact details and encouraged them to reach out to the business. Truecoco will also provide quarterly reports to update stakeholders and facilitate discussions about the project. Finally, Truecoco's sourcing team will maintain constant in-person communication with the farmer network, allowing farmers to raise concerns directly with the team.

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Environmental and social safeguards questionnaire

CO_2 Removal Supplier	Truecoco Ghana Ltd
Production Facility	Truecoco Ghana Ltd
Production Facility ID	816220
Date of report last update (YYYY-MM-DD)	2025-07-31

Environmental and Social Safeguards Questionnaire

The purpose of this document is to provide a summary of how the CO_2 Removal Supplier complies with the environmental and social safeguards, as defined in Section 6.4 of the Puro General Rules 4.0. The responses from the supplier are expected to be commensurate with the identified impacts and risks.

This document consists of five sections, noting that the fifth section does not apply to all suppliers:

1. General overview and compliance
2. Labor practices and rights
3. Environmental impact and management
4. Social impact and community relations
5. Biomass sustainability

This document forms part of the evidence needed for the Production Facility Audit. It is corroborated by other documents and evidence provided by the supplier to Puro.earth and the 3rd-party auditors, demonstrating environmental and social safeguards. This questionnaire will be made **publicly available** in the Puro Registry.

15 General overview and compliance

Provide a description of your operations and the context where you are operating in, as relevant for environmental and social safeguards.
Truecoco operates in accordance with all relevant environmental and social safeguards as outlined by the Puro.earth General Rules (v4.0, §6.4). Since its inception in 2017, Truecoco has maintained full compliance with both national and international legislation, ensuring that its operations result in no net harm to the surrounding environment or communities. The production facility is located just outside Tikobo No.1, in the Western Region of Ghana, where Truecoco engages in coconut waste valorization through the industrial-scale production of biochar from coconut husks, a purely waste agricultural feedstock. The project contributes to long-term soil improvement, sustainable waste management, and permanent carbon removal, while also enhancing livelihoods among local smallholder farmers. In alignment with the Puro.earth Environmental and Social Safeguards framework, Truecoco: - Adheres to all applicable local, national, and international legal requirements, and has done so since 2017. - None of the rights of indigenous peoples and local communities are impacted by the project in line with applicable international human rights law, and the United Nations Declaration on the Rights of Indigenous Peoples and International Labor Organization (ILO) Convention 169 on Indigenous and Tribal Peoples. - Maintains robust Health, Safety, and Human Resource policies, fully aligned with the Labour Act of Ghana (Act 651). These policies uphold workers' rights, ensure safe working conditions, and prohibit child labor, forced labor, and any form of human trafficking. Truecoco's commitment to environmental integrity is demonstrated by:

- Holding a valid Environmental Permit issued in compliance with the Environmental Protection Act, 2025 (Act 1124), specifically Sections 3(2)(c)(o) and 29(2).
- Meeting the requirements of the Environmental Assessment Regulations, 1999 (LI 1652).
- Completion of a formal Environmental Impact Assessment (EIA), ensuring that the project identifies, monitors, and mitigates any potential environmental risks associated with operations.

In terms of stakeholder engagement, Truecoco has actively involved a wide range of actors to ensure inclusive and participatory project development. Stakeholder consultations have included:

- Local smallholder farmers participating in the project.
- Traditional and local government leaders, including actors from the Ministry of Food and Agriculture, and the Sekondi-Takoradi Metropolitan Assembly Agricultural Department.
- National regulatory bodies such as the Ghana Environmental Protection Agency (EPA) and the Carbon Markets Office.
- Local NGOs focused on agricultural development, as well as industry experts, input suppliers, project developers, and carbon marketplace representatives.

These ongoing engagements ensure that Truecoco's operations remain socially responsible, environmentally sound, and aligned with evolving best practices in carbon removal, rural development, and safeguard compliance.

Provide an overview of the material environmental and social impacts and risks in your operations, and how they were determined.

Truecoco has identified the material environmental and social impacts and risks associated with its operations through a combination of formal Environmental Impact Assessment (EIA), stakeholder consultations, and internal risk assessments. These evaluations were carried out in compliance with the Environmental Protection Act (Act 1124), the Environmental Assessment Regulations, 1999 (LI 1652), and the Puro.earth Environmental and Social Safeguards framework.

A. Environmental Impacts and Risks 1. Biomass Feedstock Sourcing ○ Risk: Unsustainable biomass sourcing could lead to land degradation or competition with food production.
    - ○ Mitigation: Truecoco uses only coconut husk waste, a by-product of existing agriculture, with no land-use change or food system interference. Traceability is ensured through farmer registration.

2. Air Emissions from Pyrolysis ○ Risk: Incomplete combustion may result in GHG emissions. ○ Mitigation: High-temperature pyrolysis is controlled via Truecoco's high tech pyrolysis machine and guaranteed by rigorous quality QCs. Truecoco conduct emissions testing to meeting Ghana's EPA permit requirements.

3. Water consumption ○ Risk: Excessive water consumption can be used during the process of creating biochar.

- Mitigation: The facility operates a closed-loop water recycling system and manages all condensate in line with EPA discharge limits.

4. Soil Impacts from Biochar Application ○ Risk: Over-application or improper use of biochar could lead to soil imbalance or erosion.
   - Mitigation: Application rates are limited to 5MT/ha/year, and farmer training is mandatory. The biochar is co-applied with compost for optimal soil health impact.

B. Social Impacts and Risks 1. Labour Rights Violations ○ Risk: Potential for child labor, unfair wages, or unsafe working conditions— especially in rural contexts.
   - Mitigation: Truecoco adheres to Labour Act of Ghana (Act 651), verifies identity documents, and contracts all staff formally.

2. Gender Inequality and Workplace Harassment ○ Risk: Female employees could face discrimination or lack of access to benefits.
   - Mitigation: Truecoco maintains a gender-equal hiring policy, offers equal pay for equal work, and enforces a zero-tolerance harassment policy with a confidential grievance mechanism.

3. Community Impacts and Engagement ○ Risk: Community opposition or negative perceptions could arise if stakeholders are excluded.
   - Mitigation: Extensive stakeholder engagements were held with farmers, political representatives, NGOs, and local government bodies (e.g., MOFA, EPA, Carbon Markets Office). Feedback mechanisms are ongoing.

Risk Determination Process
- Environmental Impact Assessment (EIA): Carried out under national law and reviewed by Ghana EPA.
- Stakeholder Consultations: Conducted with farmer groups, civil society actors, regulators, and technical experts.
- Internal Safeguard Review: Based on Puro.earth's safeguards questionnaire, mapped against project lifecycle.

Requirement: Abide by national and local laws, objectives, programs, and regulations and, where relevant, international conventions and agreements.	**Rule** 6.4.1.1.i
Do you comply with the requirement?	☒ Yes ☐ No
If not, how and why do you not comply? If yes, how do you know that you comply with the requirement?	

Please provide details considering the laws and regulations that are most relevant to your operations. Also, include any regulations that are specifically related to your carbon removal activities.
Truecoco fully abides by all national and local laws, programs, and regulations governing its operations in Ghana, as well as relevant international conventions and agreements. Legal compliance forms a foundational principle of Truecoco's operational model and environmental and social safeguards. 1. National and local legal compliance - Environmental Protection Act, 2025 (ACT 1124) ○ Truecoco holds a valid Environmental Permit, issued by the Ghana EPA, in accordance with this Act. ○ All operations are subject to monitoring and oversight under Section 29(2), and emissions, water use, and waste are managed in line with EPA guidelines. - Environmental Assessment Regulations, 1999 (LI 1652) ○ A formal Environmental Impact Assessment (EIA) has been conducted, submitted, and approved. Mitigation measures and monitoring plans are in place to ensure compliance. - Labour Act, 2003 (Act 651) ○ All employment practices align with national labour law, including contract issuance, working conditions, anti-discrimination policies, and protections against forced and child labour. - Local Government Engagement ○ Truecoco engages with the local district authorities, and traditional leaders to ensure operations align with community development plans and local governance structures. 2. International Conventions and Agreements - Paris Agreement (UNFCCC): By enabling verified CO_2 removals via biochar, Truecoco directly contributes to global climate goals. - ILO Core Conventions: Including freedom of association, elimination of forced and child labour, and equal treatment in employment. - Universal Declaration of Human Rights: Guiding principles on human dignity, nondiscrimination, and equitable development.
Identify any documents or other records that you rely upon to verify compliance.
Truecoco the following documents that can be verified for compliance: 1. Annual Environmental Report 2. Environmental Permit 3. HR policy 4. Health and Safety manual 5. Ethical policy 6. Fire certificate 7. Code of conduct

Requirement: Respect for **human rights** and avoiding discrimination; abiding by the International Bill of Human Rights and universal instruments ratified by the host country.	**Rule** 6.4.1.1.ii

Do you comply with the requirement? Motivate below.	☒ Yes ☐ No
All of Truecoco's work is in full alignment with human rights, indigenous people's rights and fair labour practices. None of the human rights are violated by Truecoco. The communication channels and procedures outlined in the stakeholder engagement report enable reporting, should any stakeholder feel that there are gaps in the implementation of human rights in Truecoco's operations.	

Requirement: Recognize, respect, and promote the protection of the rights of IPs & LCs (**indigenous peoples and local communities**) in line with applicable international human rights law, and the United Nations Declaration on the Rights of Indigenous Peoples and International Labor Organization (ILO) Convention 169 on Indigenous and Tribal Peoples.	**Rule** 6.4.1.1.iii
Do you comply with the requirement? Motivate below.	☒ Yes ☐ No
All of Truecoco's work is in alignment with human rights, indigenous people's rights and fair labour practices. None of the rights of IPs and LPs are violated by Truecoco. The communication channels and procedures outlined in the stakeholder engagement report enable reporting, should any stakeholder feel that there are gaps in the implementation of IPs and LCs rights in Truecoco's operations.	

Note that there is an additional question on free, prior, informed consent below (section 4), and there is a requirement to publish a separate stakeholder engagement report based on a Puro template.

16 Labor practices and rights

Requirement: Labor rights and working conditions, including prohibiting forced labour, child labour or trafficked persons whether in own operations or employed by third parties, fair treatment of employees.	**Rule** 6.4.1.1.iv
Do you comply with the requirement?	☒ Yes ☐ No
If not, how and why do you not comply? If yes, how do you know that you comply with the requirement?	
Truecoco is fully committed to upholding labour rights and ensuring fair, safe, and ethical working conditions in both its direct operations and throughout its value chain. The company explicitly prohibits all forms of forced labour, child labour, and human trafficking, whether within its own facilities or through third-party partners and suppliers. To ensure compliance with these standards, Truecoco implements the following measures: 1. Due Diligence (DD) Procedures. Truecoco conducts due diligence checks on all staff. This includes verification of identity, age, and legal work status to prevent the employment of minors or trafficked individuals.	

2. Contractual Employment and Identity Verification. All employees are formally contracted under terms that comply with the Labour Act of Ghana (Act 651). As part of the onboarding process, staff are required to submit their national identity cards, which serve to: 1) Confirm legal age of employment (18+). 2) Prevent identity fraud. 3) Support traceability and legal accountability
3. Fair and Transparent Working Conditions. Employment contracts clearly define: 1) Wages and benefits. 2) Working hours and rest periods. 3) Health and safety obligations. 4) Grievance and disciplinary procedures. This ensures fair treatment, protects against exploitation, and promotes a healthy workplace culture.
4. Third-Party Oversight. Truecoco extends its labour safeguards to suppliers and subcontractors by: 1) Requiring adherence to the same labour standards. 2) Conducting periodic monitoring and field visits. 3) Ensuring no indirect labour is sourced through exploitative intermediaries.
5. Ongoing Monitoring and Training. Supervisors and HR staff are trained to recognize signs of forced or illegal labour. A grievance mechanism allows workers to report concerns anonymously and without fear of retaliation.

This approach ensures that Truecoco not only complies with national legislation but also aligns with international best practices on labour rights and working conditions, as required by Puro.earth's environmental and social safeguards.

Identify any documents or other records that you rely upon to verify compliance.

Truecoco has identified the following documents that can be verified for compliance.

1. Employment contracts
2. National identity cards of all employees
3. Code of conduct
4. HR policy
5. Ethical policy
6. Fire certificate

Requirement: Ensuring a safe working environment and mitigating occupational health and safety hazards.	**Rule** 6.4.1.1.iv

Describe occupational health and safety hazards that you have identified.

All health and safety hazard are outlined in the Truecoco health and safety manual. Truecoco uses the system of classification of sources of risk and specific associated risks that the International Labor Organization does in this regard considering only those that are applicable to the type of work being performed. They are the following:

CODE	DESCRIPTION OF THE SOURCE OF RISK
1	Corridors and traffic surfaces
2	Workspaces
3	Stairs
4	Machines
5	Manual tools
6	Objects. Manual Handling
7	Objects. Storage
8	Lifting equipment and equipment
9	Refrigerating plants
10	Transport vehicles
11	Fires
12	Chemical substances
13	Chemical pollutants (gases, vapors)
14	Biological pollutants
15	Noise
16	Vibrations
17	Hot or cold
18	Ionizing radiation
19	Non-ionizing radiation
20	illumination
21	Physical workload
22	Mental workload
23	Organization of work

Describe the measures undertaken to mitigate the hazards.

All health and safety measures are outlined in the Truecoco health and safety manual. Please see the attached document, Truecoco_Health&Safety.August25

Requirement: Providing for equal opportunities in the context of gender; providing equal pay for equal work and protecting against and appropriately responding to violence against women and girls.	**Rule** 6.4.1.1.v
Do you comply with the requirement?	☒ Yes ☐ No

If not, how and why do you not comply?
If yes, how do you know that you comply with the requirement?

Truecoco is committed to ensuring equal opportunity, fair compensation, and a safe working environment for all employees, regardless of gender. The company's approach is guided by the principles outlined in the Labour Act of Ghana (Act 651) and reinforced by international labour standards, including the ILO Convention on Gender Equality and the UN Sustainable Development Goals (particularly SDG 5: Gender Equality).

To fulfil this commitment, Truecoco has implemented the following safeguards:

1. Equal opportunity and non-discrimination: All hiring, promotion and training decisions are based on merit, skills and qualifications. 2. Equal pay for equal work: Truecoco enforces a wage structure that ensures equal pay. Wage structures are determined by job grades, responsibilities, and experiences. 3. Protection against gender-based violence and harassment: Truecoco maintains a zerotolerance policy on all forms of sexual harassment, abuse, and gender-based violence. Truecoco's framework ensure that Truecoco's operations meet the Puro.earth gender safeguards criteria, whilst promoting gender equality opportunities in the workplace.
Identify any documents or other records that you rely upon to verify compliance.
Truecoco has identified the following documents that can be verified for compliance. 1. Truecoco's Code of Conduct 2. Truecoco's HR policy 3. Employment contracts

17 Environmental impact and management

Requirement: Pollution prevention, including pollutant emissions to air, water, and soil as well as noise and vibration, and generation of waste and release of hazardous materials, chemical pesticides, and fertilizers.	**Rule** 6.4.1.1.vi
Does the carbon removal activity result in the following impacts? For **each potential impact**, please provide detailed information about its extent and the current measures in place to mitigate these negative impacts.	
a. Pollutant discharges to air	
Flue gases Dust from material handling Smoke during start-up and shutdown of the machine To mitigate the impact of the potential sources of pollution, the pyrolysis unit is equipped with cyclone separators and particulate filters, burners and filters are regularly maintained and comply with Ghana's EPA air standards. Furthermore, only dry feedstock is used to reduce smoke generation during start-up and shutdown. A detailed description of impacts and mitigation measures are provided in the Environmental Evaluation Report.	
b. Pollutant discharges to water	
Rainwater run-off from biochar storage area Cooling water discharge The facility uses a closed-loop cooling system to prevent wastewater discharge. Furthermore, the project minimizes run-off of contaminated water by preventing contact with rainwater and installing stormwater drains and sediment traps in accordance with EPA guidance. A detailed description of impacts and mitigation measures are provided in the Environmental Evaluation Report.	
c. Pollutant discharges to soil	

Pyrolysis liquids Biochar or feedstock To minimize the risk of soil contamination, all liquid wastes are stored in drums in special containment zones, and a spill response plan is in place. The potential of pollutant discharge to soil is also minimized by the impermeable concrete flooring all throughout the production facility. A detailed description of impacts and mitigation measures are provided in the Environmental Evaluation Report.
d. Noise
The Truecoco biochar facility coes comply with "Ghana Standard for Environment and Health Protection - Requirements for Ambient Noise Control (GS 1222:2018)". The Ambient Noise Level (LAeq) is measured bi-annually.
e. Vibration
Truecoco's facility is based in a rural area, a situated over 1km outside of Tikobo Number 1. There is no potential impact from vibrations to any members of the local community.
f. Waste
Ashes and fines Used packaging materials Maintenance debris Pyrolysis condensates Oily residues from maintenance All solid waste is collected separately and disposed of/recycled through licensed EPA-approved disposal sites. Appropriate waste manifests and disposal records are maintained. All liquid waste is collected separately, stored in sealed containers, stored in a designated area and disposed of through licensed hazardous waste handlers. Staff is trained in safety measures and emergency procedures for liquid waste handling.
g. Release of hazardous materials
No hazardous waste is released; all waste is treated according to EPA guidelines.
h. Chemical pesticides and fertilizers
No chemical pesticides and fertilizers are used in the operations that lay withing the project scope as defined by the LCA.

Requirement: Biodiversity conservation and sustainable management of natural resources, including avoiding or minimizing negative impacts on terrestrial and marine biodiversity and ecosystems; protecting the habitats of rare, threatened, and endangered species, including areas needed for habitat connectivity.	**Rule** 6.4.1.1.viii

Is the activity taking place in or near environmentally sensitive areas, including protected areas (e.g. nature reserve or national park), or other areas included in a conservation plan? Describe where the nearest such areas are.
Truecoco's activity is not taking place near any protected areas or other areas included conservation plan. Truecoco situated more than 35kms from Ankasa Game Reserve. Truecoco's project does take place in a region that is densely forested and is the largest coconut farming region in Africa (more than 50k hectares).
Describe impacts and risks that you have identified
Truecoco's project has minimal risks to the terrestrial and marine biodiversity and ecosystems.
Describe the measures undertaken to minimize and address the impacts and the risks.
Truecoco has engaged local stakeholders through the stakeholder engagement, and provided farmer training to ensure that any impacts are addressed and risks from the project are minimised.

Requirement: Minimizing soil degradation and soil erosion.	**Rule 6.4.1.1.viii**
Describe impacts and risks to soil that you have identified.	
Truecoco has identified two risks to soil degradation and soil erosion. 1. Over-application of biochar: High rates of raw biochar application can significantly alter pH, and interfere with natural soil structure. 2. Misapplication of biochar: If applied without appropriate integration, biochar can disrupt natural soil structures and have long term impacts on the soil.	
Describe the measures undertaken to minimize and address the impacts and the risks.	

To minimize and address potential impacts and risks associated with over-application or misapplication of biochar, Truecoco has implemented the following measures to prevent soil degradation and erosion:

1. Farmer Lists and Application Limits

When distributing biochar to local cooperatives, Truecoco compiles detailed farmer lists and collects information on farm size. Based on this data, Truecoco limits distribution to a maximum of 5 metric tonnes per hectare per year. This cap is designed to prevent over-application and ensure soil health is maintained.

2. Farmer Training

To ensure proper and consistent application, Truecoco delivers tailored training sessions to each cooperative receiving biochar. Participation in these sessions is mandatory for cooperative members. The training covers safe handling, optimal application rates, and the agronomic benefits of biochar, thereby reducing risks of soil degradation.

3. Intermittent Farmer Monitoring

Truecoco's supply team conducts periodic field visits and follow-ups with its farmer network. Their role is to monitor application practices and ensure compliance with recommended techniques and dosage. Any deviations are flagged and corrected in collaboration with local cooperatives.

4. Stakeholder Engagement and Expert Input

Truecoco integrates environmental safeguards into its broader stakeholder engagement process. During Truecoco's stakeholder engagement, Dr. Dugan from the Council for Scientific and Industrial Research (CSIR) Ghana presented on the importance of accurate biochar application for long-term soil health and erosion prevention. The data presented is available in Truecoco's stakeholder presentation.

Requirement: Minimizing water consumption and stress.	**Rule** 6.4.1.1.viii
Are you located in an area impacted with water stress?	☐ Yes ☒ No
If yes, describe local conditions in terms of water stress and any risk analysis done on the impacts of the CO_2 removal activity on water stress	
N.a	
Describe any agreements and/or regulations relating to water sourcing.	
All water is obtained from bore holes that are situated onsite.	
Describe the measures undertaken to minimize water consumption.	

Water is used during the production process to ensure quenching and temperature control of the carboniser. Water is sourced from a bore hole on site. Truecoco use a closed-loop cooling system that is designed to minimise water consumption and recycle process water wherever possible. Any water losses that take place due to evaporation are replaced by recycled water from stored water tanks. This enables Truecoco to successfully monitor its water consumption whilst reducing the need for new fresh water.

Requirement: The CO_2 Removal Supplier shall not convert **natural forests or high conservation value habitats.**	**Rule** 6.4.1.1.viii
Do you comply with the requirement?	☒ Yes ☐ No
If not, how and why do you not comply? If yes, how do you know that you comply with the requirement?	
Site: The site is eligible for industrial use as indicated by the EPA given for the planned operations. See EPA. Biomass: The biomass used is non-forestry biomass from existing coconut farming operations. See the biomass types and origins list.	
Identify any documents or other records that you rely upon to verify compliance.	
Truecoco has identified the following documents that can be verified for compliance. 1. Environmental Permit 2. EIA	

18 Social impact and community relations

Requirement: Avoiding or minimizing adverse impacts **to community health and safety**.	**Rule** 6.4.1.1.vii
Describe potential sources of impact, taking into account all relevant factors in the given context. Consider both routine and non-routine circumstances.	
Truecoco is not close to any residential areas that could be impact the project activities. However, Truecoco has taken steps to ensure that any potential impacts to the community health and safety can be avoided.	
Describe the measures undertaken to minimize and address the impacts and the risks.	
See section 3 to see how Truecoco have analysed and mitigated the risks that include pollutants emissions to air, water, and soil as well as noise and vibration, and generation of waste and release of hazardous materials, chemical pesticides and fertilisers.	

Requirement: Preserves and protects **cultural heritage** and cultural and religious sites.	**Rule** 6.4.1.1.ix
Describe the impacts and the risks to cultural heritage and cultural and religious sites that you have identified.	
There were no risks to cultural heritage or cultural and religious sites identified by Truecoco. This has been confirmed through the stakeholder engagement process which did not result in any issues regarding such impacts or risks being raised.	
Describe the measures undertaken to minimize and address the impacts and the risks.	
N/A	

Requirement: Avoiding **forced physical** and/or **economic displacement**. If avoidance is not feasible, CO_2 Removal Suppliers shall minimize physical and/or economic displacement. This applies also to any access restrictions to lands, territories, or resources, and any customary rights of local right holders.	**Rule** 6.4.1.1.x
Did/does the activity result either in forced physical or economic displacement?	☐ Yes ☒ No
If yes, describe the impact to local communities and how it was assessed?	
N.a	
Provide a comprehensive description of the process that was undertaken, compensation arrangements and measures to mitigate the negative impacts.	
N.a	
Also describe in detail how you minimized forced physical or economic displacement.	
N.a	

Requirement: 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).	**Rule** 6.4.2
Is the CO_2 removal activity taking place in an area inhabited by or claimed by indigenous people, or does it influence such an area?	☐ Yes ☒ No

If yes: does the activity directly or indirectly impact indigenous peoples or their livelihoods, ancestral knowledge or cultural heritage? How was that determined?
N.a
If there is a direct or indirect impact:
a. Provide a description of the impact and the measures that were taken to minimize the impact.
N.a
b. Describe how and when the indigenous communities were identified and approached for the FPIC process.
N.a
c. Describe the mutually agreed process for the negotiations.
N.a
d. Describe how the indigenous communities were informed about the potential impacts of the activity on their livelihoods, ancestral knowledge, or cultural heritage.
N.a
e. Describe the outcome of the negotiations.
N.a
f. Describe how the ongoing consent process is managed to ensure that the indigenous communities continue to agree with the activity as it progresses.
N.a
g. Describe grievance mechanisms that are in place for the indigenous communities.

N.a
h. Describe how the impacts on the indigenous communities are monitored and addressed during the operation of the Production Facility.
N.a

19 Biomass sustainability

Puro methodologies require that whenever biomass feedstock is used in the carbon removal activity, it must be sourced in a sustainable manner.	
Is your carbon removal activity based on using biomass feedstock?	☒ Yes ☐ No
Describe how you ensure that it is sourced sustainably.	
According to the Puro Biomass Sourcing Criteria, coconut husk falls under category L (Non-field agricultural residues). Therefore, the following sustainability criteria apply: - Legal operations: operators and operations are legal in the jurisdiction of sourcing. - Working conditions: operators have measures in place to ensure safe working conditions during processing of the residues. As Truecoco utilizes feedstock from their own operations, the provided company documents and health and safety documentation act as the primary evidence from the biomass supplier that the criteria are fulfilled.	

Note that additional evidence will be required to demonstrate adequate biomass sourcing as per the Puro Biomass Sourcing Criteria, where applicable.