

GENERAL INFORMATION

Certificate: BL017
Issue date: 23 December 2022
Ithaka Institute Sulawesi project with University of Muhammadiyah Pare-Pare in Indonesia
of farmers: 5
of biochar activities: 9
of local verifiers: 1
Amount of biochar (DM): 2.98 tonnes
H/C org ratio: 0.26
C-content: 60.00%

EMISSIONS & C-SINK SUMMARY

Total GHG emissions: 0.20 t CO2eq
Per tonne of biochar: 0.07 t CO2eq
Per tonne of biochar: 0.02 t C

C-sink potential: 58.20% of DM

Gross sink (per tonne of biochar): 2.20 t CO2eq
Net sink (per tonne of biochar): 2.13 t CO2eq

Total net sink: 6.35 t CO2eq
Total net sink (c100): 4.70 t CO2eq

BIOMASS

Type of biomass: Corn cob and stalk
Estimated amount of biomass: 15 tonnes
Emissions due to ferlization: 0.00 t CO2eq
Transportation of biomass to pyrolysis site: 0.00 t CO2eq
Preparation of feedstock: 0.00 t CO2eq
Emissions for drying of feedstock: 0.00 t CO2eq
Feedstock storage emissions: 0.00 t CO2eq
Total biomass related GHG emissions: 0.00 t CO2eq

PYROLYSIS

Equipment: low tech (kon-tiki, trench, trough, TLUD)
Electricity consumption for entire pyrolysis plant: 0.00 t CO2eq
LPG and other external fuel for reactor heating: 0.00 t CO2eq
Carrier gas emissions: 0.00 t CO2eq
CH4 emissions: 89 t CO2eq (30.00 kg CH4 / t biochar)
Amount of compensated methane emissions: 100%
Total pyrolysis related GHG emissions: 0.00 t CO2eq

POST-PYROLYSIS

Prep of BC-based fertilizer (milling, mixing) or feed: 0.00 t CO2eq
Transport emissions from kiln to field: 0.00 t CO2eq
Emissions from soil application of biochar: 0.00 t CO2eq
Compensated CO2eq from soil application: 0.00 t CO2eq
Total post-pyrolysis GHG emissions: 0.00 t CO2eq

Detailed data of the farmer biochar activities can be accessed via the Biochar Life portal.

SOCIAL IMPACT

The present certificate provides record of the social impact of engaging smallholder farmers and communities in the production and usage of biochar. A majority of the proceeds from the purchase of the present certificate is directly distributed to the farmer and local community personnel used to support the training of farmers, production of biochar and data gathering.

The prevention of open field burning has significant benefits to the health of the farmer and surrounding communities by the reduction of PM2.5 and other particulates released in the atmosphere.

NOTES AND COMMENTS

The production (i.e., making) and usage of the biochar occurred on or near the farmer sites. Therefore, minimal emissions occurred for preparation and storage of the biomass. There was minimal moving or transportation of the biomass or biochar. Additionally, a security margin of 3% of Carbon content was deducted to account for any minor emissions that may occur during the production process.

The carbon sink potential provides the percentage of a mass unit of biochar that, on a dry matter base, can be considered as a long-term (> 100 years) carbon sink. The C-sink potential is calculated using the Carbon content provided by the EBC database less any emissions and security margin. The total net sink is determined by adding up the total quantity of dry matter biochar applied to the soil for all the associated records of this certificate in tonnes. The total tonnes of biochar is multiplied by the C-sink potential.

The CH4 emissions caused by the production in farm scale equipment (e.g., Kon-Tiki, TLUD, etc.) correspond to a global warming potential over 20 years (GWP20). The GWP20 of these CH4 emissions was entirely compensated by preventing and cessation of open field burning of the crop waste by the farmers or other methods approved under the EBC standard. In the case of cessation of open field burning of crop waste, each farmer signed a declaration to stop crop waste burning, the signed document can be found in each production record.

Every kg of biochar produced and applied has been tracked and recorded. The data is independently reviewed and verified. Additionally, each record includes timestamps, geographical data, images of the production and usage process.

The biochar that is applied to soil or as animal feed which undergoes a slow biological degradation of 26% over the first 100 years. Therefore, the carbon fraction that is persistent after 100 years (Csink100) has been calculated above.

PURCHASE AGREEMENT

between

Biochar Life, PBC

A registered Public Benefit Corporation in the state of Delaware, USA under EIN 88-0610638, 434 Cedar Avenue, Highland Park, New Jersey 08904.

hereinafter referred to as **“Buyer”** or **“Biochar Life”**,

and

Ithaka Institute Indonesia

In partnership with the University of Muhammadiyah Parepare, Jl. Jend. Ahmad Yani No.Km. 6, Bukit Harapan, Soreang, City of Parepare, South Sulawesi 91112, Indonesia.

hereinafter referred to as **“Supplier”**.

– Supplier and Buyer are also referred to individually as a **“Party”** and collectively as **“Parties”**

Preamble

Under this C-sink certificate purchase agreement (hereinafter: “Contract” or “Agreement”), the Supplier agrees to sell C-sink certificates (hereinafter: “Certificates”) and the Buyer agrees to purchase Certificates, subject to and in accordance with the terms of this Agreement. As part of this process, the Supplier provides the required and defined data to the buyer, who, based on this, creates the Certificates for and in the name of the Supplier, which are then sold and transferred by the Supplier to the Buyer.

These Certificates are based on the creation of C-sinks through the production of biochar for application in agriculture or other areas. C-sinks are created by removing carbon from the atmosphere, transforming the carbon into a form that can be stored stably, and storing it safely in the ground or in materials for the long term, e.g. by incorporating the biochar into soil as a soil conditioner or through other carbon-preserving applications.

These C-sinks are calculated and issued according to the regulations of a standard suitable for C-sinks (hereinafter: “Standard”). Currently, this is done according to the European Biochar Certificate (hereinafter: “EBC”) administered by Carbon Standards International AG, Frick (Switzerland), through which the Certificates subject to the Contract are issued.

The Certificates have to be delivered via an electronic registry, which enables and tracks the transfer and retirement of the Certificates (hereinafter: “Registry”).

In consideration of the above, the Parties enter into the following Agreement, which consists of Part I, containing information regarding the Effective Date and Term, Part II, containing the Transaction Provisions, and all other annexes attached to this Agreement.

I. Effective Date and Term

This Agreement will be effective as of the “Effective Date” for a duration equal to the “Term”, as specified hereafter:

Effective Date of the Agreement	1 November 2022
Term of the Agreement	3 months starting at the Effective Date
Notice Period	Not applicable - pilot project
Extension of the term	Not applicable - pilot project

II. Transaction Provisions

The Parties agree to the following terms for the purchase of C-sink certificates (“Transaction”):

Supplier	Ithaka Institute Indonesia, in partnership with the University of Muhammadiyah Parepare as outlined in the Memorandum of Understanding reference number: 929/II.3.AU/F/2022.					
Buyer	Biochar Life					
Project Type	Carbon-preserving use of biochar produced by a pilot group in Sulawesi, Indonesia. (hereinafter: “Project”)					
Subject of the Contract	1) The subject matter of the Contract is the transfer of a certain number of Certificates from the carbon-preserving use of biochar. 2) The Project will achieve a reduction of carbon dioxide. This reduction will be quantified through the creation of voluntary Certificates in the unit of tons of CO₂ equivalent (hereinafter: “tCO₂e”). 3) Certificates are registered by the Buyer in accordance with the requirements of the standard (currently those for the EBC).					
Purchase Quantity, Issuance of Certificates and Delivery Conditions	Exclusive delivery of any Certificates from the project to the Buyer. The issuance and distribution of the resulting Certificates shall take place in partial deliveries as follows: <table><tr><td>Period from</td><td>to</td><td>Amount</td></tr></table>			Period from	to	Amount
Period from	to	Amount				

	1.11.2022	1.2.2023	25 tCO ₂ e
	Supplier will provide exclusive delivery of Certificates from the project to the Buyer that meet the delivery schedule outlined above. The Supplier will provide any Certificates that exceed the schedule outlined below to the Buyer. If the Buyer chooses not to purchase any excess Certificates then the Supplier is permitted to sell such Certificates to other buyers.		
Contract Price	\$75 (in words: one-hundred) USD per tCO ₂ e		
Additional Revenues Participation	Not applicable.		
Method of Delivery of the Certificates	The delivery of the Certificates shall be made to a Certificate account established by the Buyer.		
Payment Conditions	20 calendar days unless advanced payment (see below).		
Binding Milestones	The Supplier has to prove to the Buyer every year by means of appropriate documents, such as production certificates or similar, that the produced biochar was compliant with the applicable quality criteria and that it was applied in a carbon preserving manner.		
Applicable Standard	EBC		
Advance payment	Not applicable		

By signing this document, the Parties acknowledge and agree to the terms contained herein.

Biochar Life, PBC

Ithaka Institute Indonesia

Jason Highberger 11 / 11 / 2022
Name: Jason Highberger
Title: CEO

Luki Anisa Nurul Fathia 11 / 11 / 2022
Name: Luki Anisa Nurul Fathia
Title: Project Leader

Annex 1 – Terms and Conditions for the Purchase of C-sink certificates

§ 1 Standard and process of certification and auditing

- (1) The Supplier guarantees that the C-sinks, as well as the production and manufacturing process of the biochar, can be certified according to the guidelines of the standard (currently EBC Artisan). The EBC can only be replaced by a comparable standard with the consent of the Buyer.
- (2) The Supplier undertakes to provide the Buyer with all data (in particular gross weight and moisture, or volume, moisture and bulk density based on dry matter), materials and documents (in particular the EBC plant certificate and EBC production certificate, farmer production and application of biochar data which includes location, pyrolysis method, crop waste feedstock, pictures of the feedstock and biochar, pictures of the farmer properly making and applying the biochar, farmer declaration for CH₄ compensation the end-use declaration (form of application) incl. end-user assurances, the assignment of sink performance, the confirmation of no double counting and the data protection waiver,) (hereinafter collectively: "Project Documents") required to meet the criteria of the standard at its expense.
- (3) The Buyer shall check the Project Documents for plausibility and completeness as well as compliance with the guidelines of the standard and shall inform the Supplier of any discrepancies resulting therefrom.
- (4) On the basis of the Project Documents provided, the Buyer shall calculate the expected amount of the resulting reduction of carbon dioxide in tCO₂e. He shall notify the Supplier of the result of the calculation. After confirmation by the Supplier, the Buyer shall, on this basis, issue corresponding Certificates for and in the name of the Supplier which are the subject matter of the Contract and shall make them available to the Supplier.
- (5) The Buyer shall subsequently submit to an auditor all necessary Project Documents for the performance of an audit concerning the Supplier.
- (6) The Supplier shall bear all costs associated with the issuance of the Certificates under this Contract, this concerns in particular costs for external inspections, audits, etc.

§ 2 Duties of the Supplier

- (1) The Supplier undertakes (i) to submit any certifiable biochar produced by it to the certification process described in this Contract and (ii) to deliver the Certificates produced by the Buyer exclusively to the Buyer and to transfer the rights embodied therein to the Buyer. In return, the Buyer undertakes to submit all C-sinks delivered by the Supplier to the certification process and to accept all Certificates certified in accordance with the contractual provisions.
- (2) The Supplier undertakes to fulfill the delivery conditions according to Part I to the best of its ability and to inform the Buyer immediately in the event of any expected deviations. In

the case of contract extensions, the Parties undertake to establish a delivery schedule in accordance with the one regulated for the fixed term in Part I.

- (3) The Supplier undertakes not to enter into contractual performance obligations of the same kind as those provided for in this Contract with third parties during the period of validity of this Contract.
- (4) The Supplier warrants that each Certificate to be transferred by it to the Buyer will be issued, counted and sold only once.
- (5) The Supplier guarantees in the sense of an independent promise of debt, that
 - the sink registration form completed by it and other parties involved has been filled out completely and correctly in terms of content,
 - it has verified the identity of the end user,
 - it has verified the end user's information on the sink address, the quantity as well as the type of application,
 - it has received the assurances specified by the end user and
 - the information in the EBC documents provided by it is complete, correct and accurate.
- (6) The Supplier shall provide evidence of such warranties upon the Buyer's request by submitting appropriate documents.

§ 3 Terms of payment

- (1) The Buyer shall pay to the Supplier the Contract Price as provided in the agreed Transaction Provisions (II.) per Certificate. The Contract Price is calculated on the basis of the verifiably delivered quantity. Unless provided to the Supplier via Advanced Payment in the Transaction Provisions (II.), The the payment shall be due within the timeframe specified in the Transaction Provisions (II.) after delivery of Certificates and subject to receipt by the Buyer of an invoice for each delivery that complies with the statutory requirements, to an account to be specified by the Supplier.
- (2) The payment pursuant to § 3 para. 1 is subject to statutory VAT if and to the extent that the Supplier's services are subject to VAT and provided that the Supplier issues a proper invoice in accordance with the provisions of the VAT laws.
- (3) Subject to each Party's obligations with respect to sales taxes, each Party shall cause to be paid all royalties, taxes, duties and other amounts (including any stamp taxes, other documentary taxes, climate change taxes or other environmental taxes or duties) lawfully payable by such Party in connection with this Agreement.

§ 4 Distribution of the Certificates

- (1) The issuance and distribution of the resulting Certificates shall take place corresponding to the delivery terms enlisted in the Transaction Provisions (II.). The Supplier may also make deliveries ahead of time on condition the deliveries do not exceed the total quantity

provided for the calendar year. Upon issuance or delivery, the Supplier assigns the rights embodied in the Certificates to the Buyer accepting the same.

- (2) The delivery of the Certificates shall be made according to the Delivery Method specified in the Transaction Provisions (II.). After transfer of the Certificates to which the Buyer is entitled to the Certificate account to be determined by the Buyer, the obligations of the Supplier under this Agreement shall be finally fulfilled.

§ 5 Confidentiality, disclosure and compliance

- (1) Both Parties are obliged to treat the information obtained from the other Party in the course of the business relationship as confidential.

- (2) Both Parties shall not disclose such confidential information to any third party, except in cases where disclosure is required to comply with laws or regulations.

“Confidential Information” within the meaning of the preceding sentence means all information about the Project made available to the Buyer. The form of the information is irrelevant. Included are all written, oral and/or electronically transmitted information or data. Information shall not be deemed to be confidential if it was already publicly known at the time the Buyer became aware of the information. Likewise, such information shall not be considered confidential which has become publicly known or has been made publicly known at a later date with the consent of the Supplier.

- (3) The disclosure of confidential information by the Party receiving the information to employees, representatives or consultants professionally bound to secrecy and to third parties for the purpose of sale, financing or the like is excluded from this. In this case, this Party shall ensure that the recipients of the confidential information also undertake to maintain confidentiality to the same extent.

- (4) The Parties may refer to the business connections with each other and the project in their advertising material, brochures, on their homepage, etc., if the other Party has given its prior written consent to this.

Consent shall be deemed to have been granted if the other Party does not refuse its consent to the publication of certain information in text form within one week of the request for consent. Consent may only be refused for good cause.

- (5) The Parties undertake to comply with the respective applicable legal standards and, in particular, money laundering laws.
- (6) The Parties undertake not to accept any financial or other favors if an unjustified advantage is expected or rewarded by the giver. They also undertake to observe the OECD Convention of 17 December 1997 on Combating Bribery of Foreign Public Officials in International Business Transactions by analogy in private business transactions.

§ 6 Term, termination and notice

- (1) The contractual relationship shall commence on the Effective Date (in accordance with the provision in Part I) and shall end upon expiry of the Term specified in Part I ("Fixed Term"), unless it is extended in accordance with the following provisions.
- (2) After expiry of the Fixed Term, the Term of the Contract shall be extended in each case by the period specified under I ("Extension of the Term"), unless the Contract is terminated in writing by one Party in compliance with the Notice Period specified under I. The date of receipt of the declaration by the respective other Party shall be decisive in this respect.
- (3) An extraordinary right of termination for this Contract exists in the event of good cause. Good cause shall be deemed to exist if the terminating Party, taking into account all circumstances of the individual case and weighing the interests of both Parties, cannot reasonably be expected to continue the contractual relationship until the agreed termination. This includes, in particular, the opening of insolvency proceedings against the assets of a Party or its rejection for lack of assets or the filing of an insolvency petition by a Party or breach of the obligations under this Contract.
- (4) Any notice to terminate the Agreement must be in text form. The timeliness of the termination is not determined by the date of dispatch but by the date of receipt of the termination.

§ 7 Liability, right of withdrawal and contractual penalty

- (1) Neither Party shall be liable for any loss or damage suffered by the other Party as a result of its failure to perform due to war, riot, insurrection, civil disturbance, martial law, national general strike, fire, insect infestation, plant disease outbreak, flood, earthquake, landslide, storm, drought, heat, accumulation of snow or ice, epidemic, quarantine, radiation or radioactive contamination, or other circumstances beyond the control of the Parties (including a change in law) (each a "Force Majeure Event"), provided that the non-performing Party demonstrates that:
 - i. all non-excused obligations have been substantially fulfilled;
 - ii. the other Party has been timely informed of the actual occurrence of the Force Majeure Event.
- (2) Liability in these cases is limited to typical contractual and foreseeable damages. The exclusion of liability shall not apply to claims for damages of any kind if the Supplier violates its obligations stipulated herein with gross negligence or intent as well as to claims for damages in case of injury to body, life or health.
- (3) The agreed delivery dates are binding.

If the Supplier has to assume that the performance cannot be effected on time in whole or in part, Supplier shall notify the Buyer thereof in writing without undue delay, stating the reasons and the expected duration of the delay.

If Supplier is in default, Buyer shall serve written notice of default to Supplier. If Supplier fails to cure the default within 30 calendar days after receiving of such written notice, Buyer may proceed to impose a contractual penalty of 0.25% for each month of delay since the

occurrence of the default, but in total not more than 1% of the net price of the delayed (partial) delivery.

- (4) In the event that the Supplier culpably violates the exclusivity provision, it shall be obliged to pay the Buyer a contractual penalty in the amount of twice the purchase price stipulated in Part I per tCO₂e for each tCO₂e sold to a third party, which shall be offset against the actual damage. The Buyer's right to claim damages in excess thereof shall remain unaffected.
- (5) In all other respects, the rights of the Supplier – in particular to withdraw from the Contract and to claim damages – shall be determined in accordance with the statutory provisions. This contractual penalty payment shall not release the Supplier from the other contractual obligations, but it shall be offset against any damages to be paid.
- (6) The Buyer has the right to withdraw from the Contract if the Supplier does not achieve the Binding Milestones as specified in the Transaction Provisions (II.). The withdrawal must be made in text form within a period of 30 days after the expiry of the Binding Milestones period without results.
- (7) The Supplier shall regularly inform the Buyer of the current status of the production of the biochar.

§ 8 Other

- (1) All out-of-pocket expenses, costs, fees and charges in connection with the transactions contemplated by this Agreement, including the cost of legal advice, shall be borne by the Party that has commissioned the activities underlying the respective costs, fees and charges.
- (2) Claims arising from this Contract may only be assigned with the prior written consent of the other Party.
- (3) Claims of third parties shall only be created by this Contract if and to the extent that this is expressly stipulated in this Contract (no contract in favor of third parties). Insofar as a Party other than the Buyer is to be indemnified by the Supplier under this Agreement, this shall not entitle the other Party to assert indemnification claims directly against the Supplier.
- (4) In accordance with applicable data protection regulations, the Buyer is informed that his data will be stored and processed by the Supplier. The processing of the data is carried out in compliance with the legally applicable regulations.
- (5) Text form means a simple written declaration, e.g. via e-mail, or fax. Written form, in turn, means a declaration in text form, supplemented by an individual signature and the requirement that this declaration is received by the other Party in original.

§ 9 Previous communications and written form requirement

- (1) This Agreement supersedes all previous communications, representations or understandings, either oral or written, between the Parties relating to the subject matter hereof.
- (2) Amendments, supplements and the cancellation of this Contract must be made in writing to be effective. This shall also apply to the amendment of this written form clause itself.
- (3) This Contract and its annexes contain all agreements between the Parties with regard to the subject matter of the Contract and take precedence over all oral and written declarations of intent made by the Parties in connection with the contract negotiations. There are no verbal collateral agreements.

§ 10 Severability clause

Should any provisions of this Contract or a future amendment be wholly or partially invalid or unenforceable or subsequently lose their legal validity or enforceability, this shall not affect the validity of the remaining provisions of the Contract. The same shall apply if it should turn out that the Contract contains a loophole. In place of the invalid or unenforceable provisions or in order to fill the gap, an appropriate provision shall apply which, as far as legally possible, comes as close as possible to what the Parties intended or would have intended in accordance with the meaning and purpose of the Contract if they had considered the point when concluding this Contract or when subsequently including the provision.

§ 11 Choice of law and place of jurisdiction

- (1) This Contract shall be governed by the laws of the state of Delaware, USA to the exclusion of international private law and the UN Convention on Contracts for the International Sale of Goods. The provisions of private international law (conflict of laws) shall not apply.
- (2) The exclusive place of jurisdiction for all disputes arising out of or in connection with this Contract shall be, to the extent permitted by law, the court having jurisdiction over the registered office of the Buyer.

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(fathia@ithaka-institut.org) from jason.highberger@gmail.com
IP: 155.69.184.58



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(fathia@ithaka-institut.org)
IP: 125.162.213.3



SIGNED

11 / 11 / 2022

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