

Biochar carbon removal with smallholder farmers



biochar.life Highland Park, NJ



Service

Agriculture & Agtech

Sustainability

Highlights

- 1 5x revenue growth in the last 12 months - \$150,000 to \$800,000.
- 2 Sizeable environmental impact to date with the removal of more than 10,000 tonnes of CO₂.
- 3 Closed \$150,000 investment from Ground Up Investing in December, 2023.
- 4 More than 750 smallholder farmers in Africa are currently benefiting from being part of our program.

- 5 Increased social equality with more than 60% of our farmer teams being female.
- 6 We have a healthy pipeline of buyers for the next two years - including \$800k in committed orders.
- 7 Developed verification standards with Carbon Standards Intl. and European Biochar Certificate.
- 8 Impact in number of areas with alignment to many of the Sustainable Development Goals (SDGs).

Featured Investors



Ground Up Investing LLC

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Ground Up Investing funds high-impact enterprises that deliver social, economic and environmental benefits for local communities
groundup-investing.com

""Our investment in Biochar Life is more than just a financial commitment. It's a testament to our belief in the potential of innovative solutions being built by young companies to drive tangible social and environmental impact. Biochar Life's mission aligns seamlessly with GUI's goal of supporting ventures that create sustainable, positive impacts at the grassroots level."

Jeremy Bauman, Executive Director of Ground Up Investing"



Jim Greenberg 

Follow

Jim Greenberg is a West Point alum with 30 years in international business, primarily in the Middle East and India. He's a former Chairman at Grameen Foundation and now serves as Board Chairman for Biochar Life.

"As someone deeply involved in international business and non-profit sectors, I've seen firsthand the challenges faced by developing countries. Investing in Biochar Life is not just a financial decision for me; it's a commitment to a sustainable future, socially, economically and environmentally. I firmly believe that biochar has the potential to revolutionize agricultural practices, improve soil health, and significantly reduce poverty for over two billion people while simultaneously reducing the impact of climate change. By supporting this innovative social and environmental enterprise, we're not just investing in a product; we're investing in a healthier, more prosperous world for generations to come."

Our Team



Jason Highberger Co-Founder & CEO

Jason brings 20 years of building socially minded startups and a passion for community development to help the company deliver significant environmental impact while improving the lives of smallholder farmers and their families.



Aom Kwanpiromtara Co-Founder, Global Head of Development & Compliance

Aom leads in community growth and change, excelling in resource management and policy implementation. An expert in resource life cycles, Aom innovates in sustainable reuse, enhancing development and eco-balance.



Evelind Schechter Co-Founder & CFO

Following an international career in business, Evelind founded Warm Heart focused on community development. It was there she initiated the Biochar Program helping smallholder farmers to create biochar and improve their food security and livelihoods.



Matt Rickard COO

Matt combines his extensive startup experience with a commitment to social and environmental impact. As COO, he oversees the running of operations as well as managing buyer relationships, ensuring the company continues to scale effectively.



Sylvetsre G Chiweza Country Manager, Malawi

Sylvester has spent five years building a network to train farmers in making biochar from waste rather than burning their crop waste, helping to enhance soils and yields, and reducing harmful emissions.



Mercy Ogembo County Manager, Kenya

Leading Biochar Life's initiatives in sustainable agriculture, Mercy manages verifiers, ensures biochar quality, and drives significant carbon sequestration. Her strategic leadership is instrumental in Biochar Life's commitment to environmental impact.



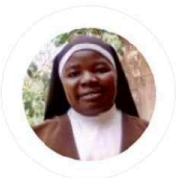
Mona Singh Data Integrity and Communications Lead

Former Apple engineer and Business analyst at JP Morgan. Currently at BioChar Life, spearheading data integrity and communications to empower global farmers in biochar initiatives.



Pimpanit (Som) Puttiseth Marketing Executive

Graphic designer and digital illustrator with 10 years experience working with start ups and early stage businesses.



Sr. Miriam Paulette Strategic Advisor & Africa Liaison

Sister Miriam, serving as a Strategic Advisor and Africa Liaison, expertly bridges global strategies with local African insights, fostering meaningful partnerships and initiatives for sustainable impact.

Environmental impact with smallholder farmers

Check out a short introductory [message from our COO](#), Matt Rickard.

You can also watch our CEO, Jason Highberger, running through some of the key slides in our proposition: [Click for Pitch Video](#).

Thanks for checking out the pitch and please reach out if you have any questions.



Empowering Smallholder Farmers.
Healing Our Planet.





PROBLEM

According to the Intergovernmental Panel on Climate Change (IPCC) we need to remove 10 Gt per year of carbon dioxide to slow climate change.



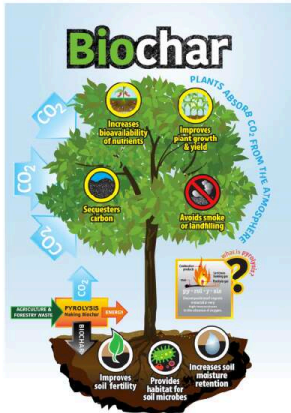
We need to remove thousands of tonnes of carbon to reverse climate change!

What is this biochar that removes CO₂ from the atmosphere [air]?

Biochar is a super charcoal made by heating any biomass without oxygen.

All of the cellulose, lignin and other, non-carbon materials gasify and are burned away.

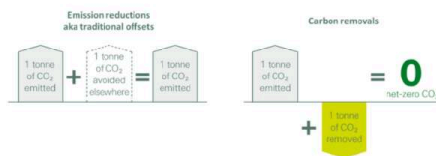
What remains is pure carbon – 40% of the carbon originally contained in the biomass.



Source: University of Nebraska

A carbon offset is a reduction or removal of emissions of carbon dioxide or other greenhouse gases made in order to compensate for emissions made elsewhere. Offsets are measured in tonnes of carbon dioxide-equivalent.

Traditional offsets result in emitted carbon staying in the atmosphere. **Carbon removal offsets** actually take carbon out of the atmosphere.



Source: Swiss Re CTVC added headers

What is biochar and how does it remove carbon?

SMALLHOLDER FARMERS CAN BE THE SOLUTION

Biochar instead of burning = enhanced public health, reduced poverty, & increased employment.

Creating biochar is a highly efficient way of removing carbon.

Access to almost unlimited biomass via smallholder communities.

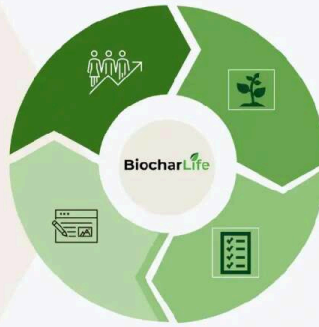
BiocharLife

Smallholder famers are an invaluable resource to help get us there.

OUR PROCESS

Training and compliance at the core

- ✓ We train smallholder farmers to stop harmful open field burning and instead create biochar according to international standards.
- ✓ The farmers use the biochar as a soil enhancement to improve crop yields.
- ✓ Our verifiers gather data and ensure a transparent Measurement, Reporting and Verification (MRV) process.
- ✓ Carbon (C-sink) credits are generated and sold via our sales channels.



BiocharLife

We train farmers to create biochar and through the sale of carbon removal credits, generate the funds needed for scaling far and wide.

Smallholder farmers + biochar = significant impact!

BiocharLife

- | | |
|--|---|
| ✓ Crop waste burning by smallholder farmers generates ~500 million tonnes of GHG each year. | ➔ Making biochar removes 1-2 tonnes of CO ₂ from the atmosphere for every tonne of biochar produced. |
| ✓ Agricultural and industrial chemical residues and heavy metals pollute large areas of the developing world. | ➔ Biochar in the soil locks these up, keeping them out of the water and food chain. |
| ✓ Billions of small farmers, disproportionately women, live in rural poverty. | ➔ Making biochar offers them jobs and new income. |
| ✓ Particulate Matter 2.5 (PM _{2.5}), the killer particulate in the smoke from open field burning, kills millions annually. | ➔ Making biochar is almost completely smokeless. |
| ✓ Carbon offset market is HUGE...\$300 billion and GROWING! | ➔ Customers are shifting more of their emission offset purchases to carbon removal! |

Biochar has many benefits both social and environmental - check them out!

TRANSPARENCY & COMPLIANCE

From biochar training to c-sink credit generation, our process is meticulously tracked, verified, as well as being regularly audited by 3rd parties.



Training & Enablement	Verification Teams	3rd Party Auditing	Credit Generation & Sales
Farmers trained in making and using biochar. We measure and track production volumes.	C-sink credits are generated from the data that's collected by our verification teams.	Biochar is lab tested and we also undergo yearly on-site auditing for all projects.	Data is uploaded to our partner platforms who also provide an additional layer of MRV.

BiocharLife

Transparency and compliance are core components of our business model and essential for developing trust with buyers.

HISTORY

Warm Heart Worldwide, with over a decade of farmer training experience, launched Biochar Life in 2022 to combat climate change, boost public health, and uplift rural communities.

Mar '22

Launched [EBC standard](#) for tropical farmer accreditation audit with Ithaka Institute, advancing certification processes.

Jun '22

Signed a purchase agreement with Carbonfuture for 10k t CO2eq credits over 3 years. Secured **\$200k** loan from a Board investor.

Feb '23

Smallholder farmer teams surpassed expectations, completing a **3k-tonne** carbon sink order one month ahead of schedule.

Mar '23

Introduced Carbon Village model with multi-year, cost-efficient off-take agreements for major buyers, enhancing market presence.

Oct '23

Secured initial **\$150k** from Ground Up Investing, facilitating capacity building and forming a long-term strategic partnership.

BiocharLife

Since our inception in March 2022 we have shown consistent growth and expansion that has been marked by major milestones.

MARKET SIZE - 2023 to 2028

- The voluntary carbon market size is based on carbon removal forecasts for the next 5 years to 2028, using conservative estimations.
- Today Biochar Life is responsible for 80% of all the Artisan biochar that has been produced.
- The SAM is the proportion of the removals market that biochar, all industrial and artisan, is expected to take up.
- The SOM is our 5-year business plan - Biochar Life is forecast to hit \$10.5m in revenue by 2028.

+17.73% CAGR

\$1.3B

Total Addressable Market (TAM)

- CAGR of 17.73 % from 2023 to 2031
- Revenue in 2031 est. USD 2,073m

\$500m

2028 Serviceable Addressable Market (SAM)

\$10.5m

2028 Serviceable Obtainable Market (SOM)

The voluntary carbon market has huge potential and we are only at the beginning with carbon removal set to lead the pace in the years to

come.

Forward-looking projections are not guaranteed.

TRACTION & IMPACT

Our mission focuses on addressing climate change and supporting smallholder farmers. Our approach has led to measurable outcomes in carbon reduction, agricultural enhancement, community development, with both impact and financial returns delivered for our stakeholders.

9,769	712	\$479k
† CO2R (net sink)	# of farmers	Farmer & verifier earnings
\$746k	41	5
Sales to date	Team members	Countries

BiocharLife

Our sales revenues have grown 5x in the past 12 months!



We have a solid pipeline and growth plan for the term of the payback period.

Forward-looking projections are not guaranteed.

OUR TEAM

We have a diverse and dynamic team of leaders helping the business to scale effectively.
For the full team please visit: <https://www.biochar.life/our-people>

Jason Highberger
CEO & Co-Founder

Mercy Awuor Ogembo
County Manager,
Kenya

Sylvester G. Chiweza
County Manager,
Malawi

Evelind Schecter
CFO & Co-Founder

Matt Rickard
COO

Aom Kwanpiromtara
Co-Founder, Global Head of
Development & Compliance

BOARD & ADVISORS

James Greenberg
Chairman,
Former Grameen
Board

Dr. Dana Brown
Strategic
Advisor,
Education &
Training
Development

Sister Miriam
Strategic
Advisor &
Africa Liaison

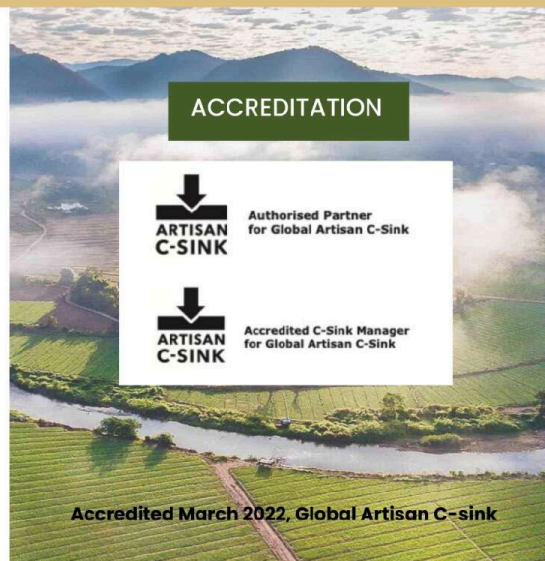
Dr. Michael Shafer
Co-founder &
Director Biochar &
Science
Methodologies

Dr. David Hughes
Director, Chief
Scientist &
Regenerative
Agriculture
Expert

Nelson Mattos
Director, Former
Google &
Grameen

We have extensive experience and diversity within our leadership team and board including female founders and proximity leadership in East Africa.

PARTNERSHIPS



Partner networks help to extend our sales and operational prowess.

CUSTOMERS & PROSPECTS

We have a growing base of customers and a healthy pipeline of prospects.



We have closed significant sales during 2023 with more to come as we scale.

INVESTMENT

Fundraising round to support our scale to a \$10m+ operation:

Raising
\$500,000

\$150,000
committed from
Lead Investor

USE OF FUNDS

- Grow the leadership team in Africa
- Expand working capital for biochar production capacity
- Increase marketing and business development activities
- Invest in Africa based biochar testing laboratories
- Strengthen technical & compliance team capability

OFFERING

REVENUE SHARE

1.75X RETURN ON
CAPITAL INVESTED

BiocharLife

Investors who join within the first \$200k will receive 2x ROI. Re-payments start as soon as the campaign closes.

THANK YOU!

For more information or to arrange a call
with one of our founding team, get in touch:

hello@biochar.life

Biochar.life

A US REGISTERED PUBLIC BENEFIT CORPORATION
FOUNDED BY WARM HEART WORLDWIDE, INC 501(c)(3).

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Downloads



[Biochar Life Revenue Share Projections.pdf](#)