

Dark Earth Carbon – Advisor Information Package

H1 2025

Introduction and Overview

Dark Earth Carbon is dedicated to removing carbon from the atmosphere and restoring soil health. Our innovative process turns agricultural and forestry residues into biochar, a stable form of carbon that improves soil fertility while generating high-quality carbon credits.

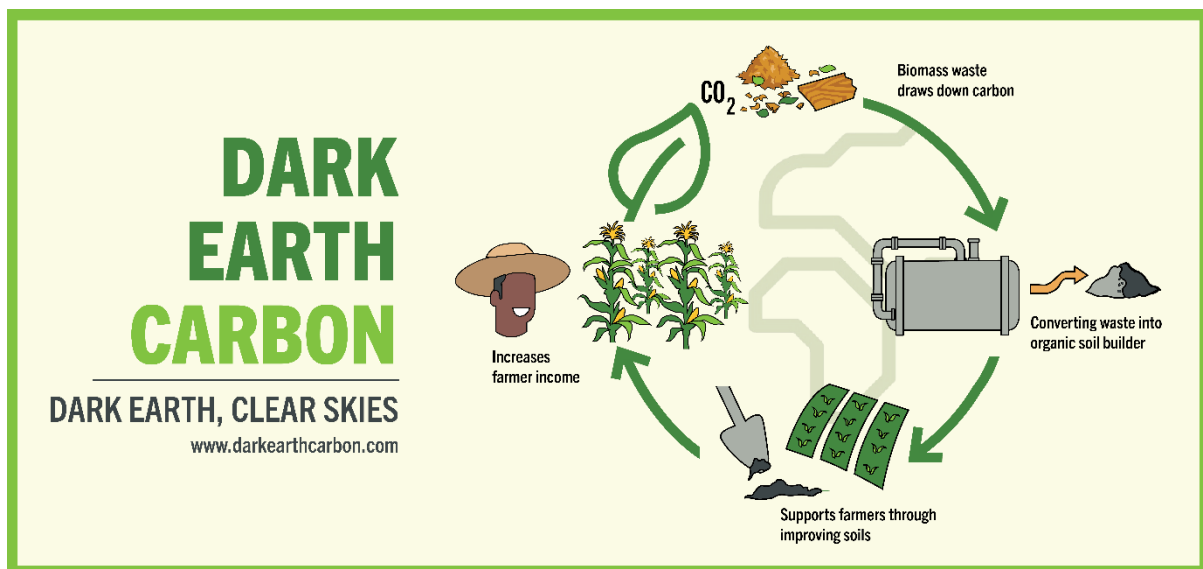
Using advanced rotary kiln pyrolysis reactors, we convert agricultural and forestry waste into biochar, permanently sequestering carbon that would otherwise be released into the atmosphere. Our reactors precisely measure the total carbon captured, ensuring transparency and reliability for carbon credit generation. These credits are then purchased by companies seeking Net Zero solutions when direct emissions reduction or avoidance measures are insufficient.

Our modular business model allows us to replicate our proprietary processes efficiently while tailoring each new site to local conditions. This scalable approach ensures sustainable, cost-effective expansion, producing high-integrity carbon credits at competitive prices.



What is Biochar?

Biochar is a carbon-rich material that looks and feels like charcoal, but its key difference lies in how it is made. It is produced through pyrolysis, a process where biomass—such as agricultural and forestry residues—is heated in a low-oxygen environment. This converts the material into biochar, a stable form of carbon that locks away CO₂ for centuries. Whilst the biochar is a valuable, organic soil additive in itself, waste heat that can be used for industrial processes is also provided in our operations.



Key Benefits of Biochar:

- **Carbon Sequestration:** Permanently locks CO₂ in soil, preventing emissions.
- **Soil Health Improvement:** Enhances nutrient and water retention, reduces acidity, and fosters beneficial microorganisms like mycorrhizal fungi.
- **Agricultural Productivity:** Reduces reliance on synthetic fertilizers and mitigates soil degradation.

Although now produced commercially, biochar has ancient roots. Indigenous Amazonian communities created terra preta or “dark earth” by enriching soils with charred biomass, dramatically improving fertility. Today, biochar remains a powerful tool for long-term carbon sequestration and sustainable agriculture.

Our Business

Transporting agricultural waste is costly and counterproductive to our mission. Instead, we establish small-footprint, independently operated biochar production sites near abundant waste sources. This reduces emissions, minimises costs, and ensures efficiency. Our business model allows:

- **Rapid Deployment:** Once land and permits are secured, each reactor can be operational within three months.
- **Scalability & Risk Mitigation:** Multiple units can be deployed in parallel, ensuring continuous expansion and revenue generation.
- **Centralised Administration:** While operations are decentralized, administration remains centralized to optimize efficiency, reduce overhead, and apply lessons learned across sites.

In early 2024, our first Pilot Program site became operations, with some metrics including:

- 80 tons of CO₂e/month sequestered since December 2024.
- Carbon Removals verified under Carbon Standards International Premium WBC standards.
- Carbon Credits sold to climate-focused purchasers
- Key Partnerships with organizations like Yara International (fertilizer integration) and One Acre Fund (smallholder outreach), supported by local governments and research institutes.
- 40T/month of our biochar compound fertilizer applied to soils.

Our USP

At DEC we see ourselves as differentiated from many of the other biochar companies that are working towards reducing carbon dioxide in the atmosphere. In particular:

- We are an engineering first organisation, focused on solving the operational issues involved in creating biochar.
- Scaling through JVs and synergistic partnerships, we see that working with partners and giving them upside in the operations is a key way to ensure we can scale rapidly. Working closely with biomass sourcing partners will allow us to increase our footprint and ensure biomass supply availability is key to our operations.

- In-house carbon, operations and engineering. We do everything ourselves, this allows higher quality control and deeper understanding of the processes so that we can get more efficient as we learn more.

Looking Forward

We are scaling up with two additional reactor sites planned for 2025 and due diligence underway for three to five more in 2026. Future carbon credit sales have been a popular way to finance new sites, as purchasers are motivated to secure and budget their offset requirements in order to meet their Net Zero commitments in coming years.

Environmental and Social Impact

Co-benefits in carbon projects are often opaque and difficult to measure. Whilst we consider the social and environmental benefits important, we have made efforts to keep the social and environmental benefits separate, so that they can be audited in their own right.

Community

Access to agricultural waste is a key consideration when deciding locations for our biochar sites.

We also engage with local, subsistence farmers who typically live in poor, remote locations and have no alternative but to burn off their agricultural waste. These farmers have the additional challenge of relying on expensive fertilisers to maintain yields in increasingly poor soils. We buy their agricultural waste which we use to turn into biochar, and return it to their soils. The farmers benefit from an additional income stream, reduces their reliance on fertilisers and provides a more stable growing season in drought-prone regions.

We consider the social impact will have on local communities. Our production sites benefit the wider community to, by providing jobs in areas where there is little opportunities, and improve local air quality by reducing the agricultural burn off.

Soil Restoration and Climate Change Mitigation

Globally, there are approximately 950 gigatonnes of excess CO₂ in the atmosphere, while agricultural soils lack 133 gigatonnes of carbon. Our goal is to rebalance this through biochar application.

Soil Restoration

Many tropical soils suffer from nutrient depletion and erosion. Biochar helps restore these degraded soils by improving their physical structure and biochemical properties. Its high porosity enhances the soil's ability to retain water and essential nutrients, reducing runoff and minimizing the need for chemical fertilizers. Biochar also fosters a healthy microbial environment, supporting beneficial fungi and bacteria that enhance nutrient cycling and suppress soil-borne diseases. Additionally, it reduces soil acidity, making conditions more suitable for plant growth, particularly in areas impacted by

over-farming. Because biochar is incredibly stable, it remains in the soil for decades, continuously improving fertility and providing a long-term solution for land restoration.

Climate Change Mitigation

Biochar is a powerful climate solution because it permanently locks carbon in the soil, preventing it from returning to the atmosphere as CO₂. Unlike organic matter that decomposes and releases emissions, biochar remains stable for centuries, making it an effective tool for long-term carbon sequestration. Additionally, it reduces methane and nitrous oxide emissions from soils, both of which are far more potent greenhouse gases than CO₂. By improving soil health and reducing reliance on synthetic fertilizers, biochar also lowers agricultural emissions, creating a more sustainable and climate-resilient food system.

Advisor Engagement and Next Steps

Role of Advisors

Advisors play a key role in connecting carbon credit developers with buyers seeking Net Zero solutions. Dark Earth Carbon offers a high-integrity, scalable sequestration method backed by verified credits and measurable impact. Advisors gain access to a pioneering carbon removal initiative with strong social and environmental co-benefits, aligning with global sustainability goals.

Next Steps

- Express Interest – Contact us at .
- Initial Meeting – Learn how your client, and DEC's vision align
- Meet your Client – Understand your client's objectives, timelines and requirements. Deep dive into current projects, documents, and team introductions.
- Draft Proposal – DEC will provide a draft proposal on how we can work together.
- Ongoing Development – Define key milestones and what's required to move a project from the theoretical, to breaking ground.

Engagement Process

1. Express Interest – Contact us at .
2. Initial Meeting – Align on vision, discuss how your expertise fits.
3. Define Scope/Terms – Agree on advisory areas, time commitments, and compensation.
4. Onboarding – Deep dive into current projects, documents, and team introductions.
5. Regular Engagement – Periodic check-ins, strategic sessions, and feedback loops.
6. Ongoing Evolution – Adjust focus as the company grows.

Next Steps

- Express Interest – Contact us at advisors@darkearthcarbon.com
- Schedule a Meeting – Meet our leadership to explore alignment.
- Formal Onboarding – Join as an advisor and help shape our expansion.



Dark Earth Carbon Ltd
651 N Broad St, Suite 206,
Middletown, 19709,
Delaware, USA

Join the Mission

We look forward to working with Advisors and their clients, who share our dedication to sustainable innovation.