

American BioCarbon

Price 0 € / CORC

ITEM

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DEALER

American Biocarbon

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DESCRIPTION

American BioCarbon (ABC) is a leading manufacturer of the next great advancement in carbon technologies: biochar. ABC uses an agricultural waste product in a unique way to eliminate legacy environmental impacts while helping customers meet environmental, social, and governance goals.

American BioCarbon uses patented biomass separation technology along with other specialized equipment to make premium biochar from sugar cane bagasse. By harnessing the unique properties of bagasse, an agricultural waste product that would otherwise be burned or left to decay and create greenhouse gases (GHG), ABC produces a valuable product and helps sugar mills and local sugar growers. It's a prime demonstration of value creation in a circular economy, a system where materials never become waste and nature is regenerated.

The unique honeycomb carbon structure of bagasse makes it more effective than other wood-based products on the market. The porous elements within bagasse make it superior for use as a soil amendment. A highly advantageous attribute of bagasse is carbon sequestration. American BioCarbon's bagasse biochar permanently captures carbon in the soil, presenting a tremendous opportunity to advance multiple Sustainable Development Goals (SDG):

SDG Goal 13: Climate Action – Take Urgent Action to Combat Climate Change and its Impacts

ABC's source material, bagasse, is a waste product that is normally burned – creating significant air emissions. ABC removes this source of GHG from the atmosphere by beneficially using bagasse and reduces particulate pollution in largely low-income areas. Emissions from the transportation of raw materials are eradicated by our sugar cane plant co-location strategy.

When incorporated into soils, biochar is up to 100 times more stable than the feedstock from which it was produced, and a substantial amount of biochar's organic carbon will persist in soil for decades to millennia.

ABC operates a net-negative process resulting in premium CO2 Removal Certificates (CORCs). We've aligned with the Puro.earth Standard because we believe in a carbon removal credit market for net negative processes resulting in measurable, truly verified, long-term carbon removal products. Our current production volume will grow from over 2,000 CORCs available annually to over 200,000 CORCs available annually with the addition of our new facility, the largest commercial biochar plant in the US currently in construction. ABC's expansion will be the largest non-gas/oil carbon removal project in the US.

SDG Goal 2: Zero Hunger – Promote Sustainable Agriculture

Used as a soil amendment, ABC biochar reduces water used for irrigation by improving water retention, helps retain nutrients and fertilizer, and supports plant growth, making land more productive. Biochar further improves soil health through increased aeration and microbial activity. It can be combined with compost or serve as a carrier for fertilizer. Used as an additive for farm animal feed, biochar leads to larger weight gains and lower methane emissions.

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SDG Goal 6: Clean Water – Ensure Sustainable Management of Water

ABC biochar provides an innovative way to address many water management and quality challenges. It may be used to filter stormwater and wastewater by removing pollutants and heavy metals. When incorporated into land management strategies, it has the added benefit of helping prevent harmful nutrients from leaching into surrounding water sources.

SDG Goal 7: Affordable and Clean Energy

ABC generates much of its electrical and thermal energy from biomass syngas, reducing demand for system gas and grid electrical power.

SDG Goal 8: Promote Sustained, Inclusive and Sustainable Economic Growth, Full and Productive Employment and Decent Work for All

ABC’s sourcing, production and distribution operations are located in rural Louisiana, an economically underserved area in the Southeast US.

SDG Goal 9: Build Resilient Infrastructure, Promote Inclusive and Sustainable Industrialization and Foster Innovation

American BioCarbon’s Biomass Separation Unit (BSU) is patented technology developed by ABC to separate “trash” (leaves and tops that do not contain sugar but provide useful fiber to ABC) from sugar cane processed through the sugar mill during the grinding season. The BSU’s innovative design occupies a small footprint capable of integrating into a vast majority of sugar mills. ABC provides patented technology to the host mill, reducing incoming waste material and improving the mill’s efficiency.

ABC continues to innovate new products such as High Seas, a bagasse biochar soil amendment with ocean byproduct. High Seas is a blend of our pure bagasse biochar and seaplant extracts and is intended for use in indoor agriculture operations (i.e., Controlled Environment Agriculture). It is used to increase soil carbon levels and nutrient availability, as a soil inoculant for improved soil health and nutrient cycling, and to support root growth, and stress tolerance.

SDG Goal 12: Ensure Sustainable Consumption and Production Patterns

Louisiana, home to ABC’s demonstration and first commercial-scale facilities, produces about 20% of the sugar grown in the US. In Louisiana alone, 4.9M tons of bagasse are produced. This stream of waste is captured, providing ABC a long-term source of raw material supply. ABC’s intellectual property and waste material handling process provides a competitive advantage in co-locating with other sugar mills in the area. Our facilities are near several large international shipping ports (situated approximately 2,000 feet south of the Mississippi River).

SDG Goal 15: Protect, Restore and Promote Sustainable Use of Terrestrial Ecosystems, Sustainably Manage Forests, Combat Desertification, and Halt and Reverse Land Degradation and Halt Biodiversity Loss

ABC biochar makes a significant contribution to conservation and remediation initiatives starting with our supply chain and continuing through the application of our product. The unique use of sugar cane bagasse as a source material eliminates the need for wood byproducts or clearcutting. Beyond the agricultural and water benefits outlined above, industrial and civil uses of biochar include concrete production, environmental contamination remediation, mine tailing remediation, and dredging waste filtration, to name a few. And biochar’s ability to improve soil health is demonstrated well beyond agriculture, by promoting the formation of humus, for example.

Contact us now to discuss how you and American BioCarbon can work together towards carbon net negative emissions. Let’s do our part to save the world together.

CARBON REMOVAL INFORMATION

Carbon removal method :	Biochar
Capture of CO2:	Photosynthesis
Stabilization of CO2:	Pyrolysis
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Permanence: Over 100 years

Status of production: Audited

Unit of product volume: tonne

Year of first issuance: 2022

Avoided emissions (mention avoided emissions in tonnes):

Each American Biocarbon plant there will be a minimum of 230,000 metric tonnes of avoided emissions.

Examples of usage:

- Carbon capture
- Soil amendment
- Land and soil remediation
- Fertilizer use reduction
- Animal feed additive
- Water filtration
- Abandoned mine remediation

Co-benefits:

American BioCarbon’s work advances multiple Sustainable Development Goals:

Goal 2: Zero Hunger – Promote Sustainable Agriculture

Goal 6: Clean Water – Ensure Sustainable Management of Water

Goal 7: Affordable and Clean Energy

Goal 8: Promote Sustained, Inclusive and Sustainable Economic Growth, Full and Productive Employment and Decent Work for All

Goal 9: Build Resilient Infrastructure, Promote Inclusive and Sustainable Industrialization and Foster Innovation

Goal 12: Ensure Sustainable Consumption and Production Patterns

Goal 13: Climate Action – Take Urgent Action to Combat Climate Change and its Impacts

Goal 15: Protect, Restore and Promote Sustainable Use of Terrestrial Ecosystems, Sustainably Manage Forests, Combat Desertification, and Halt and Reverse Land Degradation and Halt Biodiversity Loss

Explanation of avoided emissions:

Biochar carbon remains sequestered over multiple centuries, with mean residence times (MRT) between 500 and 1000 years. At 101 years biochar carbon is not released all at once. For biochar’s that are not mixed in soil but rather in any other mineral matrix (such as concrete), there is no microbial respiration, and the durability is longer.

Economic acceleration impact:

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The economic acceleration from CORC revenue will allow American BioCarbon to expand our commercial-scale development beyond a single facility. By purchasing CORCs from American BioCarbon, you are investing in our plans to operate three commercial-scale facilities in Louisiana, thereby tripling the amount of both biochar and CORCs we can produce – and sequestering three times the carbon.

AUDIT INFORMATION

Facility ID:

643002406801000602

Independently verified by:

Energy Link Services Pty Ltd