July 2025
Newsletter
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At the US Biochar Initiative, developing markets for physical biochar has made it clear: standards represent a key foundation for industry growth. They underpin the trust we need — trust in laboratory data for biochar, in the production practices that benefit the environment and sequester carbon, and in the fact that biochar will be effective in different products. Developing these standards has become a central focus of my time at USBI, and they will continue to be a core component of our work for years to come.

First and foremost, US Biochar Initiative is leading an effort to develop an American National Standard (ANSI) for the analysis of biochar, which is critical for the United States biochar industry. Right now, two basic standards have been developed for the analysis of biochar: those developed by the International Biochar Initiative (IBI) and those from Carbon Standards International (CSI), including the European Biochar Certificate and the World Biochar Certificate. IBI's standards, created in 2015, marked the industry's first step toward standardization, but they were never designed with commercial laboratories in mind. As a result, most laboratories in North America struggle to implement them, and often refuse to do so. The CSI standards are based on German laboratory standards, and are a no-go for most laboratories in North America. Because of this situation, very few laboratories in North America offer analysis for biochar, creating backlogs and slowing industry growth

The ANSI standard for the analysis of biochar will address this gap. Developed specifically to simplify the process for commercial laboratories, ANSI follows just two analytical frameworks — EPA methods for those compounds with a regulatory connection, and ISO methods for everything else. USBI, along with a committee of nearly 30 professionals from North America, has worked hard on this for the past year, and we plan to release the public review draft this month.

Analysis standards are just the starting point though, and we are already working on other standards, while thinking about how we can deploy our resources to further advance the biochar sector. Specifically, we are considering the development of "do-no-harm" end-use standards and standards for the production of biochar to strengthen trust in this industry.

If you're interested in these topics, we invite you to join the Standards Development Workshop on Monday, September 15th, 2025 at 12:30 pm at the North American Biochar Conference. The goal of this workshop will be to assess where we are today, build consensus for what comes next, and define how USBI should work to push forward additional standards. We hope to see you there.

Myles Gray
Executive Director

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Building Sustainable Markets and Driving Innovation
Writing Biochar's Next Chapter

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Join industry leaders, researchers, entrepreneurs, and innovators from across North America and beyond as we come together to shape the future of biochar in the 2025 North American Biochar Conference. Hosted by the United States Biochar Initiative, this premier event is your opportunity to help scale the biochar industry.

Secure your spot today and be part of Writing Biochar's Next Chapter.

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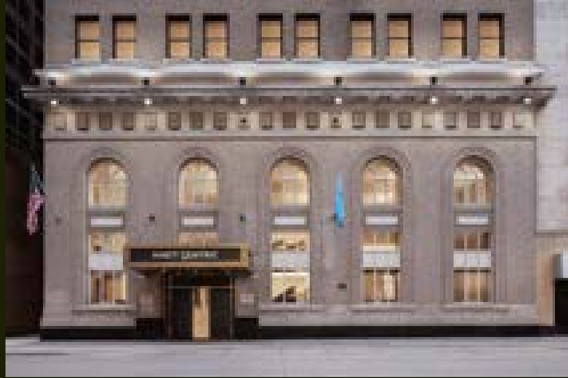
 We have secured **a limited block of discounted hotel rooms** near the conference venue in downtown Minneapolis. With high demand and a busy season in the city, we recommend you book your hotel as soon as possible.

Hyatt Centric - Downtown Minneapolis, 12-15 minute walk to the Convention Center

Royal Sonesta Minneapolis Downtown, approximately 18 minute walk to the Convention Center



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For additional questions, please contact Tina@biochar-us.org.

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Sponsoring or exhibiting at the 2025 North American Biochar Conference offers a direct way to connect with decision-makers, showcase your solutions, and position yourself at the forefront of market development.
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Contact emily@biochar-us.org for more information.

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On the first day of NABC, **Monday, September 15, at 12:30 PM**, we'll kick things off with three powerful, concurrent Deep Dive Sessions:

Biochar Standards – Building the Foundation for an Industry. Go behind the scenes of the soon-to-be released USBI/ANSI standards for biochar and help us identify what comes next.

The Biochar Effect: Advancing Soil Health for a Resilient Future. From the Biochar Atlas, to Northern Minnesota farms, to designing on-farm biochar demonstration trials — this session brings together farmers, leaders, and specialists to share lessons learned.

Biochar On Site. Hear from field innovators using mobile kilns and air-curtain and forestry-based systems to bring biochar production directly to the source.

More topics and the full schedule coming soon!

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Biochar is already being put to use in agriculture, construction, and horticulture — and not just as a carbon sink, but as a practical material. In a new article for Biomass Magazine, Myles Gray explores how it's helping turn waste into useful products across sectors.

Credit: MASH Makes

Farmers are improving yields and soil health, Holcim is adding it to concrete mixes, and companies like Sun Gro and Rosy Soil are replacing peat and perlite in gardening products.

With work underway on an American National Standard (ANSI) and an American Society for Testing and Materials standard (ASTM), biochar is quickly becoming a recognized tool for sustainability. No longer just a byproduct, but a cornerstone of circular industry practices.

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Credit: MASH Makes

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Circle Forestry and its sister company, Circle Soil, are showcasing how biochar can reshape forest management. They are "flipping the script on wildfire mitigation and soil health and turning forest waste into a powerful soil amendment — biochar."

The founder, Alan Spadafora, who's worked in forest management, laid out the facts about how biochar improves soil moisture and structure, which is critical in Western forests facing prolonged drought.

> "Our forests are drier than they've ever been because we don't have that carbon in the soil to increase the moisture content."

Using portable kilns to convert low-value forest waste into biochar, their model offers an alternative to open pile burning—cutting emissions, reducing wildfire risk, and returning carbon to the soil. It's a strong example of how biochar is moving into field-ready use in forest restoration.

Spadafora isn't just targeting land managers — he's also building local markets! Circle Soil's new potting mix combines regionally sourced ingredients and charged biochar, bridging forestry, gardening, and climate solutions.

As efforts to scale biochar expand nationally, small producers like Circle Forestry are actively helping prove what's possible on the ground. We love to see it!

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The United States Forest Service announced grants of over $5.55 million for 11 biochar projects through its Wood Innovations and Community Wood Programs. These projects will advance forest management, reduce wildfire risks, and turn low-value forest biomass into valuable products for energy, construction, and soil health.

A few highlights:

- Big Sky Bioenergy will build a wood energy facility and biochar plant in Montana to reduce wildfire risk and utilize forest residuals.
- Metzler Forest Products will expand biochar and lump charcoal production with cutting-edge pyrolysis technology and new kilns.
- Evergreen Recycling will install advanced pyrolysis technology to transform locally sourced wood waste into biochar.
- Western Michigan University will develop biochar asphalt additives from forest biomass to support active forest management and infrastructure innovation.
- Hartree Partners will install advanced biochar production equipment at three biomass facilities which will enhance feedstock processing and biochar collection and reduce forest fuel loads.

The grants show growing federal support for biochar as it scales up to deliver climate benefits, healthier forests, and stronger rural economies.

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Connect and collaborate at in-person or online events!

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July 24th, 10 a.m. ET
12th Green Carbon Webinar Series:
Development of an American National Standard (ANSI) for the analysis of biochar, presented by Myles Gray (USBI).
Virtual

August 6, 12:00 – 1:30pm ET
BiocharOnSite Monthly Video Meet Up: Join BiocharOnSite on the first Wednesday of each month to learn about the updates and progress in site-based biochar practices.
Virtual

~~August 12–14~~ RESCHEDULED to October 28–30
IBI Biochar Study Tour: Join the International Biochar Initiative (IBI) and Qualterra for an immersive Biochar Study Tour. The tour includes site visits, networking, and sessions led by biochar experts. Discover how Washington State is integrating biochar into agriculture, energy systems, and beyond.
Spokane, WA

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Modular Pyrolysis, Massive Impact: Experts Predict Bio-Oil Will Beat the Cost Curve, Deliver durable <$200 CDR
Recent analysis from researchers at Iowa State University found that biomass-fed modular fast pyrolysis processing units paired with permanent bio-oil sequestration can drive significant climate impact at a low cost.

Researchers Explore Biochar from Agricultural Waste as a Sustainable Cement Alternative in UHPC
Researchers have found that incorporating small amounts of biochar from

agricultural waste into ultra-high-performance concrete (UHPC) can enhance its strength, reduce shrinkage, and improve durability, offering a more sustainable alternative to traditional cement.

'Biochar' Can Naturally Clean the Pollution that Rain Washes Off Georgia's Roads
A new study shows how the material made from leaves and branches that collect on forest floors can be mixed with local soil to filter out road grime before it reaches waterways.

Beyond storing carbon, biochar's co-benefits give it early customers and revenues
"Biochar is having a moment": As carbon removal gains urgency, biochar startups are turning waste into climate solutions and quality carbon credits.

SAP Secures 37,000 Tons of Carbon Removals Through Climeworks Partnership
SAP has entered a strategic partnership with carbon removal pioneer Climeworks to secure 37,000 tons of high-integrity carbon removal credits by 2034. The agreement supports SAP's net-zero commitments and embeds carbon drawdown into its long-term decarbonization strategy using Direct Air Capture, Biochar, and Enhanced Rock Weathering.

Image credit: Agricultural Utilization Research Institute, Smita Sharma via The Nature Conservancy

Stay connected!

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USBI thanks the USDA Forest Service, Wood Innovations Program for continued partnership for its activities and publications. USDA is an equal opportunity provider, employer, and lender.

USBI is supported in part by The United States Endowment for Forestry and Communities, Inc. The Endowment is a not-for-profit corporation that works collaboratively with partners in the public and private sectors to advance systemic, transformative, and sustainable change for the health and vitality of the nation's working forests and forest-reliant communities.