

U.S. and Canada Biochar Protocol V1.0

Protocol Summary

Project Definition

Biochar is the carbon-rich solid material created when biomass is subject to high heat in an oxygen-limited environment. A biochar project refers to the diversion of biomass from "business as usual" uses, its conversion into biochar, and its application to a durable use that results in long-term carbon storage.

Project Requirements

Location: Projects may be in the United States and Canada, their territories, and on tribal/First Nation lands within each country. All project phases (biomass sourcing, production and end use of the biochar) must occur in eligible jurisdictions.

Start Date: The project start date may be based on either the date that the project is submitted or the date that biochar is first produced using the technology employed under the project, with both options subject to additional considerations.

Crediting Period: Ten years, renewable up to two times, for a total potential project length of 30 years.

Performance Standard Test: Biomass feedstocks and biochar end uses must be on designated "positive lists" and meet additional environmental safeguards and other constraints where applicable.

Legal Requirement Test: The production of biochar and its application in an eligible end use must not be legally mandated.

Permanence of carbon storage: The permanence of the biochar is based on the end use(s) of the biochar and the amount of carbon that is expected to remain sequestered relative to a 100-year period.

Regulatory Compliance: Project activities—including feedstock acquisition, biochar production, and end use application—must be in material compliance with applicable laws.

Project Monitoring: Chain of custody tracking, sampling, and laboratory analysis are the key components of project monitoring.

Environmental safeguards: Biomass feedstocks must meet certain conditions that prevent adverse ecological impacts. Laboratory analysis of biochar is required to confirm that allowable thresholds for contaminants, such as heavy metals, are not exceeded.

Reporting and Verification Schedule: A reporting period may be up to twelve months long. A full verification is required for a project's initial reporting period and at a minimum every two years thereafter. Optional desktop verifications may be conducted for crediting between required verifications.