



VM0044 Methodology for Biochar Utilization in Soil and Non-Soil Applications

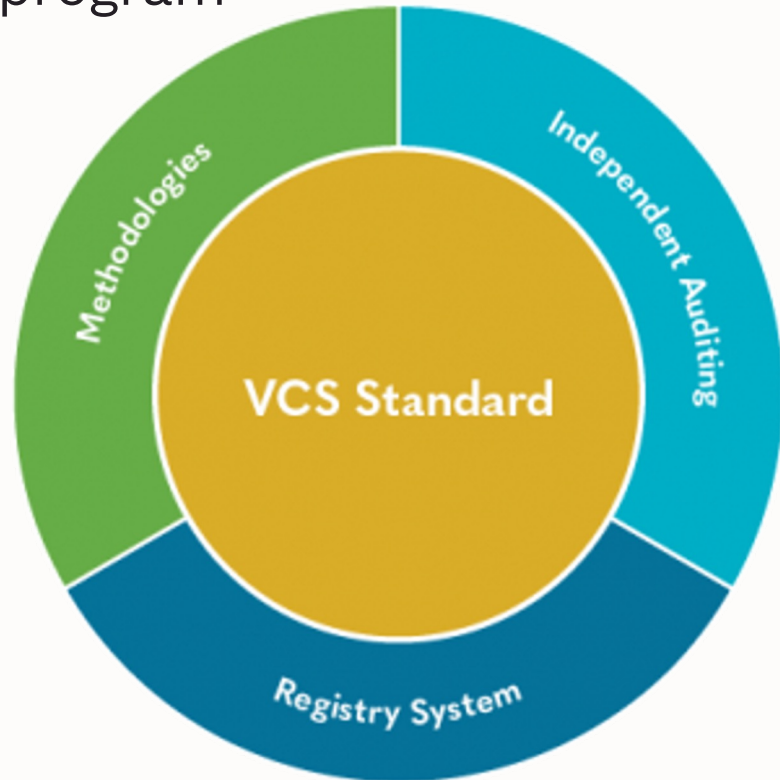
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Verra

Verified Carbon Standard (VCS) Program

The world's leading
voluntary GHG crediting
program



Verified Carbon Standard

- Rigorous set of rules and requirements
- Sound accounting methodologies
- Qualified independent assessment
- Central & transparent system to track projects and Verified Carbon Units (VCUs)



VM0044 development history

- Version 1.0

- Published October 2022

- Developed by **BIOCHAR WORKS**



- Version 1.1

- Published July 2023

- Corrections & clarifications

- Version 2.0

- Late 2024 / early 2025



VM0044 scope and key features

- Globally applicable – projects anywhere in the world
- Feedstocks
 - Waste biomass (e.g., forestry, agriculture, food processing)
 - Must demonstrate sustainable sourcing
- New biochar production facilities
 - High- and low-tech
- Biochar used in eligible soil and non-soil applications
- Monitoring – chain-of-custody reversal risk



VMoo44 project development cycle

- Current projects in the pipeline in India, Indonesia
- 6-12 months to validate and register a project
 - Verra and VVB (auditor) review
- Verification and credit issuance
 - Ongoing monitoring
 - VVB verifies removals
 - VCUs issued into registry account



VMoo44 version 2.0 updates

- Planned
 - Expansion/retrofitting of existing facilities
 - Embodied emissions for facility construction
 - Invasive species and new biomass (not purpose-grown)
 - MRV procedures for high- and low-tech
 - Transportation and storage emissions and safety
 - Simplified MRV for biochar mixes
- Possible
 - Spectrum of tech production types?
 - Biochar carbon permanence quantification?
 - Purpose grown biomass?
 - Avoided baseline emissions?

