

PRODUCTION FACILITY & OUTPUT AUDIT STATEMENT

350Solutions, Inc. has verified the CO₂ removal capability and eligibility for CO₂ Removal Credits (CORCs) under the Puro.Earth Puro Standard General Rules v3.1 and the associated Biochar Methodology Edition 2022 v3 for the following company:

Technology & Company Information		
CO ₂ Removal Supplier & Facility Operator	Production Facility Location	CO ₂ Removal Method
Himalayan Sustainable Energy Solutions Pvt. Ltd. (dba Takachar)	Novato, 3900 Sears Point Road 94945, United States	Biochar

350Solutions affirms that the organization has the appropriate equipment, procedures, and protocols in place and documented to quantify CO₂ removal through the production of biochar, via measurement of biochar output and quality, and appropriate lifecycle analysis in accordance with the requirements of the Puro.Earth General Rules and Biochar Methodology. Eligibility criteria are verified as follows:

Eligibility Criteria		
Criteria	Verified Eligibility Status	Rationale
<i>Sustainable Feedstock</i>	Eligible	Forest waste biomass feedstock
<i>Biochar Use</i>	Eligible	Soil application, livestock feed additive. Not used for energy.
<i>Net Negative LCA</i>	Eligible	Documented according to Puro Biochar Methodology
<i>No Fossil Fuels for Process Heat</i>	Eligible	Used only for onsite vehicles and generator.
<i>Negligible Methane Emissions</i>	Eligible	Methane emissions minimal
<i>Molar H:C Ratio</i>	Eligible	H:C ratio = 0.55
<i>Safe Environment and Biochar Handling</i>	Eligible	Biochar properly and safely handled
<i>Environmental & Social Safeguards</i>	Eligible	Facility properly permitted
<i>Additionality</i>	Eligible	Project not required by any regulation and requires carbon finance
<i>Biochar Quantification</i>	Eligible	Biochar quantified during operations
<i>Production Facility Data</i>	Eligible	Production facility data matches Puro.Earth Registry
OVERALL ELIGIBILITY	ELIGIBLE	
Total Verified CORCs	117.42	

350Solutions has audited and verified eligible CO₂ removals for the period 01Nov2023 to 31Jan2025. CO₂ removal credits have been calculated in accordance with the Puro.Earth Standard Rules and Biochar Methodology. Additional details regarding the Production Facility and Output Audits can be found in the Production Facility & Output Audit Report – Takachar Novato (Document ID 350VRPU2408).

Verifier Information		
Verification Body	Lead Verifier	Verification ID No.
350Solutions, Inc.	Guy Ingram-Hardwick	VS--PU2408

Signed: Guy Ingram-Hardwick (Lead Verifier)

Tim Hansen (Peer Reviewer)

PRODUCTION FACILITY & OUTPUT AUDIT STATEMENT:

Takachar, Novato

TECHNOLOGY DESCRIPTION

The Takachar Novato facility leverages mobile pyrolysis technology to transform agricultural and forest residues into biochar. The biochar from this facility is used for soil applications at local vineyards and farmland. The use of biochar from waste biomass reduces carbon emissions and provides potential benefits such as improved soil health and water retention and associated environmental and agricultural benefits. At the core of Takachar's approach is the deployment of small-scale, mobile pyrolysis units that can be operated directly in rural communities. This decentralized model reduces the need for transporting biomass over long distances, thereby lowering emissions.

The biochar production process used by Takachar for carbon removal, with respect to the Cradle-to-Grave LCA system boundaries of the Puro Standard General Rules, are shown below.



Figure 1: Takachar Novato Facility showing reactor and source biomass.

VERIFICATION DESCRIPTION

Audit activities were conducted by 350Solutions to independently verify the production facility, operations, data, and CORC claims for the Takachar Novato facility. The verification was conducted following the specifications of Puro General Rules 3.1 and the Biochar Methodology (v3). The Production Facility Audit was completed via an in-person site visit to the Takachar facility in Novato, CA on February 5th, 2025. Facility standing and production output data was reviewed and verified remotely and during on-site activities during the site visit.

DATA QUALITY & LEVEL OF ASSURANCE

350Solutions is an ANAB-accredited ISO/IEC 17020:2012 independent inspection body for ISO 14034:2016 Environmental Technology Verification. 350Solutions Quality Management Plan and Quality Systems Procedures

generally apply to activities associated with the Production Facility Audit and Output Audit performed in accordance with the Puro Standard. 350Solutions utilized a reasonable level of assurance in performance of the Production Facility & Output Audits. The data quality assessment includes, but is not limited to:

- Data quality assessment for the specified performance and CORC claims;
- Assessment of ancillary data quality (operations, relevance, and representativeness);
- Performer competence (testing and analytical providers);
- Sampling and analytical procedures (repeatability, accuracy, measurement equipment calibration and quality checks); and,
- Data management and processing.

In broad terms, the data provided by Takachar to verify the Production Facility and its output in accordance with the Puro Standard was found to be acceptable for verification of initial CORC claims. Requirements and recommendations for improvement of data quality are provided in the Verification Report. All findings of the data quality review support verification of the performance claims and conform to the requirements of the standards.

Notice: 350Solutions, Inc. declares that we are an impartial auditor, free from any conflicts of interest, capable, and qualified to complete this audit according to Puro Standard and related Validation and Verification Body Requirements. Verifications and audits conducted by 350Solutions are based on an evaluation of technology performance and CO₂ removal claims via site visit observations and review of data submitted by the audited company. Audits are completed in accordance with rules and methodologies specified by Puro and utilizing the appropriate quality assurance procedures. 350Solutions makes no expressed or implied warranties as to the performance of the technology and does not certify that a technology will always operate at the levels verified, nor that it meets all state, local, or federal legal requirements.