

# PRODUCTION FACILITY & OUTPUT AUDIT STATEMENT

350Solutions, Inc. has verified the CO<sub>2</sub> removal capability and eligibility for CO<sub>2</sub> Removal Credits (CORCs) under the Puro.Earth Puro Standard General Rules v 2.4.1 for the following company:

Technology & Company Information		
CO <sub>2</sub> Removal Supplier & Facility Operator	Production Facility Location	CO <sub>2</sub> Removal Method
V-Grid Energy Systems	Site 1: South Corner Dairy 8150 Ave 360, Visalia, CA 93291 Site 2: V-Grid Energy 513 Calle San Pablo, Camarillo, CA 93012	Biochar

350Solutions affirms that the organization has the appropriate equipment, procedures, and protocols in place and documented to quantify CO<sub>2</sub> 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	Waste biomass feedstock
<i>Biochar Use</i>	Eligible	Primarily soil amendments. 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	None used for process heat
<i>Negligible Methane Emissions</i>	Eligible	Methane emissions minimal
<i>Molar H:C Ratio</i>	Eligible	H:C ratio < 0.7
<i>Safe Environment and Biochar Handling</i>	Eligible	Biochar properly and safely handled
<i>Environmental &amp; Social Safeguards</i>	Eligible	Facility properly permitted
<i>Additionality</i>	Eligible	Project not required by any regulation
<i>Biochar Quantification</i>	Eligible	Biochar quantified for all batches
<i>Production Facility Data</i>	Eligible	Production facility data matches Puro.Earth Registry
<b>OVERALL ELIGIBILITY</b>	<b>ELIGIBLE</b>	

350Solutions has audited and verified eligible CO<sub>2</sub> removals for the period 03/24/2021 to 06/01/2022. CO<sub>2</sub> 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 – V-Grid Energy Systems (Document ID 350VR-VG-PU2202).

Verifier Information		
Verification Body	Lead Verifier	Verification ID No.
350Solutions, Inc.	Tim Hansen, P.E.	VS-VG-PU2202

Signed: Tim Hansen (Lead Verifier)



Kevin McCabe (Peer Reviewer)

Issue Date:  
**July 27, 2022**  
 Valid for 5 years  
 from date of issue

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## Additional Information

### TECHNOLOGY DESCRIPTION

V-Grid Energy utilizes small scale downdraft gasifiers operating on waste agricultural residue to produce biochar, electricity, wood vinegar, and a bio-oil product. V-Grid currently operates two facilities in California:

- a gasification facility consisting of three gasifier units and one engine generator (V-Grid Bioservers) operating at South Corner Dairy in Visalia, California. The facility utilizes waste pistachio shells from a local supplier to produce raw biochar, wood vinegar, and bio-oil, as well as syngas which is used to operate an engine generator and produce electricity for use on-site by the dairy farm.
- a research, development, and production facility in Camarillo, California which operates one gasifier and generator (V-Grid Bioserver) on pistachio shells, producing biochar, wood vinegar, bio-oil, and electricity, which is exported to the grid. The Camarillo facility also performs raw biochar processing, including biochar grinding, sizing, packaging, and shipping of final product.

Biochar is currently sold primarily to agricultural users and golf courses for soil amendment, and has been utilized for wetland restoration projects, research, and consumer products, such as cat litter deodorizer.

### VERIFICATION DESCRIPTION

Verification activities were conducted by 350Solutions to independently verify the production facility, operations, data, and CORC claims. The verification was conducted following the specifications of Puro General Rules and the Annex A Biochar Methodology. The Production Facility Audit was completed via an in-person site visit on June 22 and 23, 2022. Output data was reviewed and verified remotely based on observation of 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 & Outputs 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 V-Grid Energy Systems 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: Technology and project verifications and audits conducted by 350Solutions are based on an evaluation of technology performance claims and CO<sub>2</sub> removal claims via on site visit observations and utilizing data submitted by the audited company. Validation and verification are completed in accordance with guidelines of interest and utilizing the appropriate quality assurance procedures. However, 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.