

VERIFICATION REPORT

American Carbon Registry

Bluesource – Greenleaf Improved Forest Management Project

Reporting Period:

RP3: 11 April 2021 – 10 April 2022

Prepared for:

Anew Climate, LLC

6 January 2023



AMERICAN CARBON REGISTRY

Prepared by:

James Cwiklik | Verification Forester
Greenhouse Gas Verification Program
+1.510.452.9092
jcwiklik@scsglobalservices.com

SCSglobal
SERVICES
Setting the standard for sustainability™

2000 Powell Street, Ste. 600, Emeryville, CA 94608 USA
+1.510.452.8000 main | +1.510.452.8001 fax
www.SCSglobalServices.com

Project Title	Bluesource – Greenleaf Improved Forest Management Project
Client	Anew Climate, LLC
Prepared By	SCS Global Services
Date of Issue	6 January 2023
Contact	2000 Powell Street, Suite 600, Emeryville, CA 94608, USA http://www.scsglobalservices.com Email: CPollet-Young@scsglobalservices.com Telephone: +1 (510) 452-8000
Audit Team	Lead Auditor: James Cwiklik Verifier: Francis Eaton Verifier: Doug Baldwin Internal Reviewer: Erynn Maynard-Bean

Executive Summary

This report describes the verification services provided for the Bluesource – Greenleaf Improved Forest Management Project (“the project”), located across the upper peninsula of Michigan with some parcels in northern Wisconsin, that was conducted by SCS Global Services. The overall goal of the verification engagement was to review impartially and objectively the claimed GHG emission reductions/removal enhancements, claimed by the project proponent, Greenleaf Timber Holding, Inc., for the reporting periods from 11 April 2021 to 10 April 2022 against relevant ACR standards and the approved methodology. The verification engagement was carried out through a combination of document review, interviews with relevant personnel and on-site inspections. As part of the verification engagement 1 finding was raised: 0 Observations, 1 New Information Request, and 0 Non-Conformity Reports. This finding is described in Appendix A of this report. The project complies with the verification criteria, and SCS holds no restrictions or uncertainties with respect to the compliance of the project with the verification criteria.

Table of Contents

1	Introduction	1
1.1	About SCS Global Services	1
1.2	Objectives.....	1
1.3	Scope.....	2
1.4	Verification Criteria	2
1.5	Level of Assurance	2
1.6	Treatment of Materiality	3
1.7	Summary Description of the Project.....	3
2	Assessment Process.....	3
2.1	Method and Criteria.....	3
2.2	Document Review	3
2.3	Interviews.....	4
2.4	Site Inspections	4
2.5	Resolution of Findings.....	5
2.6	Techniques and Processes Used to Test the GHG Information and GHG Assertion	5
3	Verification Findings.....	6
3.1	Results of Quantitative Uncertainty Assessment	6
3.2	Analysis of the Quantification Methodologies and Applicable Data Sets and Sources	7
3.3	Basis of Data and Information Supporting the GHG Assertion.....	7
3.4	Leakage Assessment	8
3.5	Risk Assessment	8
4	Conclusion.....	9
	Appendix A: List of Findings	11

1 Introduction

1.1 About SCS Global Services

SCS Global Services (SCS) is a global leader in third-party certification, auditing, testing services, and standards. Established as an independent third-party certification firm in 1984, our goal is to recognize the highest levels of performance in environmental protection and social responsibility in the private and public sectors, and to stimulate continuous improvement in sustainable development. In 2012, Scientific Certification Systems, Inc. began doing business as SCS Global Services, communicating its global position with offices and representatives in over 20 countries.

SCS' Greenhouse Gas (GHG) Verification Program has been verifying carbon offsets since 2008 and to date has verified over 296 million tonnes of CO₂e, providing GHG verification services to a wide array of industries including manufacturing, transportation, municipalities, and non-profit organizations. The GHG Verification Program draws upon SCS's established expertise to serve the global carbon market.

1.2 Objectives

The overall goal of third-party verification was to review impartially and objectively the claimed GHG emission reductions/removal enhancements against relevant ACR standards and the approved methodology. SCS independently evaluated the GHG assertion, based on supporting evidence and GHG verification best practice. The objectives of verification were to evaluate

- Reported GHG baseline, project emissions and emission reductions/removal enhancements, leakage assessment, and impermanence risk assessment and mitigation (if applicable).
- Any significant changes to the project procedures or criteria since the last verification.
- Any significant changes in the GHG project's baseline emissions and emission reductions/removal enhancements since the last verification.

SCS reviewed the GHG project plan, GHG assertion, and any additional relevant documentation provided by the client to determine

- That the reported emissions reductions and/or removal enhancements are real.
- Degree of confidence in and completeness of the GHG assertion.
- That project implementation was consistent with the GHG project plan.
- Eligibility for registration on ACR.
- Sources and magnitude of potential errors, omissions, and misrepresentations, including the
 - Inherent risk of material misstatement.
 - Risk that the existing controls of the GHG project would not have prevented or detected a material misstatement.

1.3 Scope

Verification included examination of some or all of the following elements of the GHG project plan:

- Physical infrastructure, activities, technologies, and processes of the GHG project
- GHG SSRs within the project boundary
- Temporal boundary
- Baseline scenarios
- Methods and calculations used to generate estimates of emissions and emission reductions/removal enhancements
- Original underlying data and documentation as relevant and required to evaluate the GHG assertion
- Process information, source identification/counts, and operational details
- Data management systems
- Roles and responsibilities of project participants or client staff
- QA/QC procedures and results
- Processes for and results from uncertainty assessments
- Project-specific conformance to ACR eligibility criteria

SCS examined the reported data, quantification methodologies, calculation spreadsheets or databases, source data, project data management systems, data quality controls in place, measurement and monitoring systems, and records pertaining to emissions quantification. Calculation and error checks, interviews with project participants, an iterative risk assessment, sampling plan, and audit checklist were performed to the extent necessary for SCS to develop an understanding of how data are collected, handled, and stored for a specific project.

1.4 Verification Criteria

The verification criteria were comprised of the following:

- American Carbon Registry Standard, Version 6.0
- Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands, Version 1.3 (“the methodology”)

1.5 Level of Assurance

The level of assurance was reasonable.

1.6 Treatment of Materiality

For verification purposes, it was required that discrepancies between the emission reductions/removal enhancements claimed by the project proponent and estimated by SCS be immaterial, i.e. be less than ACR's materiality threshold of $\pm 5\%$, as calculated according to the equation in the ACR Standard.

1.7 Summary Description of the Project

The Bluesource – Greenleaf Improved Forest Management Project is located on 22,199.07 acres of mixed forestland strewn across the Upper Peninsula, majorly in the state of Michigan and incidentally in the state of Wisconsin. Given the wide geographic footprint, forest types throughout the property are varied. Some more common types are spruce-fir, mixed hardwood, cedar, red pine, and intermediate forest types that are aggregates of these named types. By committing to maintain forest CO₂ stocks through sustainable management, the project will provide significant climate benefits through carbon sequestration.

2 Assessment Process

2.1 Method and Criteria

The verification services were provided through a combination of document review, interviews with relevant personnel, as discussed in Sections 2.2 through 2.4 of this report. At all times, an assessment was made for conformance to the criteria described in Section 1.2 of this report. As discussed in Section 2.5 of this report, findings were issued to ensure conformance to all requirements.

The audit team created a sampling plan following a proprietary sampling plan template developed by SCS. The audit team identified areas of “residual risk”—those areas where there existed risk of a material misstatement (see Section 1.6 above) that was not prevented or detected by the controls of the project. Sampling and data testing activities were planned to address areas of residual risk. The audit team then created a verification plan that took the sampling plan into account.

2.2 Document Review

The monitoring report (dated 30 August 2022; “MR”) was carefully reviewed for conformance to the verification criteria. The following provides a list of additional documentation, provided by project personnel in support of the aforementioned documents, that was reviewed by the audit team.

Documentation Reviewed During the Course of Verification Activities		
Document	File Name	Ref.
RP3 Monitoring Report	DRAFT_Greenleaf_RP3_MonitoringReport_12_15_22.pdf	1
Project boundary	Greenleaf_Boundary_06_07_21.shp	2
Harvest shapefile	Greenleaf_RP3_Harvest_041122.shp	3

Harvest records	Depaz.pdf Halepdf Smaniatto.pdf	4
Calculations workbook	Greenleaf_RP3_CO2_05_03_22.xlsx	5
Calculations workbook	Greenleaf_RP3_ERT_HWP_12_15_22.xlsx	6
Supporting Documentation	SCOE4113C3022120509520.pdf	7
ACR Guidance	Greenleaf_ACR_GHGPlan_SDG_Addendum_12_14_22.pdf	8

2.3 Interviews

2.3.1 Interviews of Project Personnel

The process used in interviewing project personnel was a process wherein the audit team elicited information from project personnel regarding (1) the work products provided to the audit team in support of the MR; (2) actions undertaken to ensure conformance with various requirements and (3) implementation status of the project activities. The following provides a list of personnel associated with the project proponent who were interviewed.

Interview Log: Individuals Associated with Project Proponent			
Individual	Affiliation	Role	Date(s) Interviewed
Katie Krejsa	Throughout audit	Forest Carbon Analyst	Throughout audit

2.3.2 Interviews of Other Individuals

The process used in interviewing individuals other than project personnel was a process wherein the audit team made inquiries to confirm the validity of the information provided to the audit team. The following personnel not associated with the project proponent. The following provides a list of individuals not associated with the project proponent who were interviewed.

Interview Log: Individuals Not Associated with Project Proponent			
Individual	Affiliation	Role	Date(s) Interviewed
Gary Willis	Michigan Department of Natural Resources	Service Forester	11/11/2022

2.4 Site Inspections

No on-site inspections were conducted as part of the verification services.

2.5 Resolution of Findings

Any potential or actual discrepancies identified during the audit process were resolved through the issuance of findings. The types of findings typically issued by SCS during this type of verification engagement are characterized as follows:

- **Non-Conformity Report (NCR):** An NCR signified a discrepancy with respect to a specific requirement. This type of finding could only be closed upon receipt by SCS of evidence indicating that the identified discrepancy had been corrected. Resolution of all open NCRs was a prerequisite for issuance of a verification statement.
- **New Information Request (NIR):** An NIR signified a need for supplementary information in order to determine whether a material discrepancy existed with respect to a specific requirement. Receipt of an NIR did not necessarily indicate that the project was not in compliance with a specific requirement. However, resolution of all open NIRs was a prerequisite for issuance of a verification statement.
- **Observation (OBS):** An OBS indicates an area where immaterial discrepancies exist between the observations, data testing results or professional judgment of the audit team and the information reported or utilized (or the methods used to acquire such information) within the GHG assertion. A root cause analysis and corrective action plan are not required, but highly recommended. Observations are considered by the audit team to be closed upon issuance, and a response to this type of finding is not necessary.

As part of the audit process, 0 NCR, 1 NIRs and 0 OBS were issued. All findings issued by the audit team during the audit process have been closed. All findings issued during the audit process, and the impetus for the closure of each such finding, are described in Appendix A of this report.

2.6 Techniques and Processes Used to Test the GHG Information and GHG Assertion

The audit team applied various techniques and processes to test the GHG information and the GHG assertion over the course of the audit, listed below:

- Review of project documentation including calculation workbooks (Refs. 5-6), the MR (Ref. 1), information related to this reporting period's harvest activity (Refs. 3-7), and information regarding the project boundary (Ref. 2) to check for project-specific conformance to ACR standard and methodology, appropriateness of methodologies and tools applied, accuracy of GHG information and assertion.
- Assessment of any disturbances or forest management activities that took place in the project area during the reporting period (Refs. 3-7).
- Review of the application of project scenario during the reporting period.
- Review of the sources, sinks and reservoirs of GHG emissions within the project boundary (Refs. 5-6).

- Assessment of the emission reduction calculation inputs and procedures was performed to review the quantitative analyses undertaken by Anew to convert the raw inventory data into emission reduction estimates during the reporting period. This included a re-calculation of project emissions, ERTs, and uncertainty using inventory data as described below in section 3.1 and 3.2 (Refs. 5-6).
- Communicate with project personnel and project proponent via interviews, emails, and meetings to gain a better understanding of the project team's methodologies.
- Examine the data management and quality control processes and its controls for sources of potential errors and omissions.
- Review of project documentation including risk assessment and regulatory compliance.

3 Verification Findings

3.1 Results of Quantitative Uncertainty Assessment

SCS devoted a portion of the verification assessment to the review of the manner and propriety by which the project proponent quantified uncertainty associated with the individual GHGs in the project, in addition to the uncertainty of the calculation of GHG emission reductions and removals.

The audit team also calculated the total materiality of the GHG reduction and removal assertion.

3.1.1 Project Uncertainty

The reported total Project Uncertainty (UNC_t) value of 6.38% value reported by the client for 2021 was independently re-quantified by SCS using equation 19 in the methodology.

Year	UNC _t Client Values	UNC _t SCS Values	Difference
2021	6.38%	6.38%	0.00%

Note: final numbers are rounded for simplicity.

3.1.2 Materiality

The total materiality of the GHG reduction and removal assertion was also calculated for the reporting period.

$$\% \text{ Error} = \frac{(\text{Project Emission Reduction Assertion} - \text{Verifier Emission Reduction Recalculation})}{\text{Verifier Emission Reduction Recalculation}} * 100$$

$$\% \text{ Error} = \frac{(155,342 - 155,342)}{155,342} * 100 = \frac{0}{155,342} * 100 = 0.00\%$$

3.2 Analysis of the Quantification Methodologies and Applicable Data Sets and Sources

The audit team re-quantified project emissions, emissions reductions, and project uncertainty from the raw inventory data provided by the client. This process entailed verifying that the methods detailed in the MR were applied as indicated. The team confirmed that the emissions reduction by conducting the following analysis:

- Calculate the end of reporting period diameter of individual trees from the raw inventory by adding three seasons of growth.
- Calculate the harvested wood products of actual trees harvested during the reporting following section 3.2 of the methodology.
- Recalculate the live aboveground, live belowground, and standing dead carbon pools using Jenkins equations and decay class information.
- Calculate the change in project carbon stock stored in above and below ground live trees using equation 11 in the methodology
- Calculate the change in project carbon stock stored in above ground dead trees using equation 12 in the methodology
- Calculate any greenhouse gas emission resulting from the implementation of the project in the reporting period using equation 13 in the methodology
- Calculate the change in the project carbon stock and GHG emissions during the reporting period using equation 14 in the methodology.
- Calculate the percentage uncertainty in the combined carbon stocks in the project during the reporting period using equation 18 in the methodology
- Calculate the total project uncertainty (percentage) during the reporting period using equation 19 in the methodology.
- Calculate the net greenhouse gas emission reductions (in metric tons CO₂e) during the reporting period and during each annual vintage using equation 20 in the methodology.

3.3 Basis of Data and Information Supporting the GHG Assertion

The data and information supporting the GHG assertion were based on industry defaults, future projections, and actual historical records. The future projections are a result of a combination of tree inventory data, site index data, and other data modelled over time. Industry defaults are used in the harvested wood products as well as growth rates for the region. Actual historical records are used to assess stumpage prices, common practice, and boundary assessment.

3.4 Leakage Assessment

Section E3 of the GHG Plan (Ref. 4) states: “Quantification of leakage is limited to market leakage, as no activity-shifting leakage is allowed by the methodology beyond de minimis levels. All forestland owned by Greenleaf Timber Holding, Inc. is certified under the Tree Farm certification program, therefore there is no activity-shifting leakage.”

SCS confirmed that the applicable market leakage factor of 0.4 was applied.

3.5 Risk Assessment

The reported value of the total risk score, as determined based on the risk analysis documented in the PP and MR, was 18%. The audit team performed a complete review of the risk assessment against the requirements of the ACR Tool for Risk Analysis and Buffer Determination. The audit team concludes that the assignment of risk scores is appropriate and in conformance to the ACR Tool for Risk Analysis and Buffer Determination. A more detailed review of the audit team’s conclusions may be found below.

Actions Undertaken to Evaluate Whether the Risk Assessment Has Been Conducted Correctly		
Risk Category	Value Selected	Verification Activities
A	4%	Confirmation, through independent review of documentation, that project is not located on public or tribal lands
B	4%	Confirmation, through independent review of documentation, that project is not located on public or tribal lands
C	2%	Confirmation, through independent review of documentation, that the project is not located outside the United States
D	0%	Confirmation, through independent review of documentation, that the project area is not covered under a conservation easement
E	2%	Confirmation, through independent review of documentation, that project is located in low fire risk region.
F	4%	Confirmation, through independent review of documentation, that epidemic disease or infestation is not present within the project areas, or within a 30 mile radius of the project area.
G	0%	Confirmation, through independent review of documentation, that project is not a wetland project or a forest project where more than 60% of the project area is not a forested wetland.
H	2%	Confirmation that default value has been applied in the risk assessment calculation.

4 Conclusion

The audit team asserts, with no qualifications or limitations, that the quantification of GHG emission reductions and/or removal enhancements, as reported in the MR, conforms to the verification criteria and is without material discrepancy.

On the basis of the information made available SCS and the analyses completed during the verification, SCS was able to reach a positive opinion, with a reasonable level of assurance, that the emission reductions represented by the Project Proponent during the reporting periods from 11 April 2021 to 10 April 2022 are free from material misstatement and in conformance with the assessment criteria.

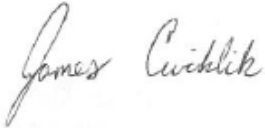

The following provides a summary of the ERT issuance for the current Reporting Period with the Leakage deduction included and the Buffer deductions excluded (Gross ERTs):

Annual Emission Reductions and Removals in Metric Tons (tCO ₂ e) during Reporting Period 3				
Vintage	Start Date	End Date	Gross GHG Emission Removals (tCO ₂ e)	Gross GHG Emission Reductions (tCO ₂ e)
2021	11 April 2021	31 December 2021	27,444	110,096
2022	1 January 2022	10 April 2022	10,356	41,546
Total			37,800	151,642

The following provides a summary of the ERT issuance for the current Reporting Period with the Leakage and the Buffer deduction included (Buffer credits shown separately):

Annual Emission Reduction in Metric Tons (tCO ₂ e) during Report Period 3				
Vintage	Start Date	End Date	Net GHG Emission Reductions/Removals (tCO ₂ e)	Quantity of Buffer Credits (tCO ₂ e)
2021	11 April 2021	31 December 2021	112,783	24,758
2022	1 January 2022	10 April 2022	42,559	9,342
Total			155,342	34,100

Note: final numbers are rounded for simplicity.

Lead Auditor Approval	 James Cwiklik, 6 January 2023
Internal Reviewer Approval	 Erynn Maynard-Bean, 6 January 2023

Appendix A: List of Findings

Please see Section 2.5 above for a description of the findings issuance process and the categories of findings issued. It should be noted that all language under “Project Personnel Response” is a verbatim transcription of responses provided to the findings by project personnel.

NIR 1 Dated 17 Nov 2022

Standard Reference: Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands Version 1.3

Document Reference: Greenleaf_ACR_GHGPlan_03_08_21.pdf

Greenleaf_RP3_Harvest_041122.shp

Greenleaf_CF_plan_2019_Revision.pdf

Michigan Forestry Best Management Practices for Soil and Water Quality

Finding: The GHG plan states: "The landowner is committed to following state Best Management Practices so as not to impact water quality in the area."

During the review of the harvests reported for the third reporting period it was noticed that one section, Hale, harvested into the SMZ area designated at the project start date.

The provided management plan states "To comply with Commercial Forest requirements all guidelines found in the Sustainable Soil and Water Quality Practices on Forest Land manual (BMP manual) must be followed."

According to the Michigan BMPs for soil and water quality "A RMZ occurs on both sides of perennial or intermittent streams and around the perimeter of bodies of open water (e.g. lakes, ponds, or open water bodies such as open water wetlands) where extra precaution is used in carrying out forest management practices including timber harvesting activities."

This finding is to inquire if the PP is aware of the harvesting within SMZ areas, and if so, more information as to why this decision was made. Currently it appears contradictory with the statement in the GHG plan above.

Please provide more information on how these harvests meet the state forestry BMPs, specifically if "extra precaution" was used in carrying out the forest management practices, and if the Michigan DNR was alerted before harvesting occurred (note that the management plan states that a "cutting notice" will be filed prior to the start of any timber harvesting on Commercial Forest Lands).

Project Personnel Response: The SMZ was created by Anew using publicly available hydrological data. In this particular area by the Hale harvest, the hydrology is sourced from the National Wetlands Inventory data and is classified in that dataset as a forested wetland. According to Michigan BMPs for soil and water quality, an SMZ "occurs on both sides of perennial or intermittent streams and around the perimeter of bodies of open water (e.g. lakes, ponds, or open water bodies such as open water wetlands)." As mentioned, the water feature near this harvest is categorized as a forested wetland, not a stream or other body of open water, so an SMZ is not technically necessary in this location. Forested wetlands were included in the SMZ by Anew for conservatism.

The project proponent signs annual attestations via Section IX: Required Attestations of the Monitoring Report, which demonstrates that the project is in compliance with applicable laws.

DNR was properly notified prior to commencing the Hale harvest. The cutting notice for the Hale harvest, has been added to the project verification folder in the "Supporting_Docs" folder.

Auditor Response: SCS reviewed the cutting notice and appreciates the transparency. No issues remain. Finding closed.

Bearing on Material Misstatement or Conformance (M/C/NA): C