

# VERIFICATION REPORT

## *American Carbon Registry*

### *Bluesource – Hudson Farm Improved Forest Management Project*

**Reporting Period:**

**30 June 2019 to 29 June 2020**

**Prepared for:**

**Bluesource LLC**

**22 February 2021**



AMERICAN CARBON REGISTRY

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## Executive Summary

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This report describes the verification services provided for the Bluesource – Hudson Farm Improved Forest Management Project (“the project”), an improved forest management project located in New Jersey, that was conducted by SCS Global Services. The overall goal of the verification engagement was to review impartially objectively the claimed GHG emission reductions/removal enhancements for the reporting period from 30 June 2019 to 29 June 2020 against relevant ACR standards and the approved methodology. The verification engagement was carried out through a combination of document review and interviews with relevant personnel. As part of the verification engagement no findings were raised. 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.

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# 1 Introduction

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## 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 250 million tonnes of CO<sub>2</sub>e, 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 spread-sheets 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 5.1
- 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”)
- ACR Validation and Verification Standard, version 1.1

### 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 project consists of 3,174 acres of forestland located in northwestern New Jersey and is aimed at sustainable forest management decisions which include natural forest growth and maintenance harvests for essential activities and forest health. The project is aimed at ensuring long-term sustainable management of the forests, which otherwise may be subject to standard practices of the region which include commercial timber harvesting.

# 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 03 February 2021; "MR") were 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.
Monitoring Report	HudsonFarm_MR_RP3_2_3_21.pdf	1
Greenhouse Gas Plan	HudsonFarm_GHG_Plan_2_8_19_v6.pdf	2
Annual Attestation	AnnualAttestationRP3_04_10_20	3
Risk Mitigation Agreement	ACR AFOLU Carbon Project Reversal Risk Mitigation Agreement 2018_signed.pdf	4

Calculations Workbook	HudsonFarm_RP3_CO2_09_24_20.xlsx	5
Calculations Workbook	HudsonFarm_RP3_ERT_HW_2_3_21.xlsx	6
Project Boundary	HudsonFarm_Boundary_7_20_18.shp	7
Project Inventory Plots	HF_Plots_7_20_18.shp	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
Jocelyne Laflamme	Bluesource LLC	Carbon Project Analyst	Throughout audit
Ian Hash	Bluesource LLC	Carbon Project Manager	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
Mike Hart	New Jersey Forest Service	Regional Forester	2 February 2021

## 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.

No findings were issued as part of the audit process.

## **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 the GHG Plan (Ref. 2), MR (Ref. 1), spatial information (Refs. 7-8), and calculation workbooks (Refs. 5-6) 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, including a discussion with project personnel on any harvest activities.
- Review of the sources, sinks and reservoirs of GHG emissions within the project boundary.
- Assessment of eligibility, additionality, GHG emission reduction assertion and underlying monitoring data to determine if either contained material or immaterial misstatements.
- Assessment of the emission reduction calculation inputs and procedures was performed to review the quantitative analyses undertaken by Bluesource to convert the raw inventory data into emission reduction estimates during the reporting period (Refs. 5-6). This included a re-calculation of project emissions, ERTs, and uncertainty using inventory data as described below in section 3.1 and 3.2.
- 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 (Ref. 4) and regulatory compliance (section III.4 of the monitoring report).

## 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<sub>t</sub>) value of 5.85% value reported by the client for 2020 was independently re-quantified by SCS using equation 19 in the methodology. The audit team found this difference reasonable and immaterial.

	SCS Values	Client Values	Difference
Year	UNC <sub>t</sub>	UNC <sub>t</sub>	
2020	5.85%	5.85%	-0.0%

*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.

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

$$\% \text{ Error} = \frac{(42,696 - 43,021)}{43,021} * 100 = \frac{52}{43,021} * 100 = 0.12\%$$

## 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.
- 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 CO<sub>2</sub>e) 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 following table indicates whether the data and information supporting the GHG assertion were based on assumptions and industry defaults, future projections, and/or actual historical records.

Assumptions and Industry Defaults	<input type="checkbox"/>
Future Projections	<input checked="" type="checkbox"/>
Actual Historical Records	<input checked="" type="checkbox"/>

## 3.4 Leakage Assessment

Section E3 of the GHG Plan states: “All actively harvesting forestlands in the project area have been certified by Tree Farm. To prevent activity-shifting leakage, IAT Reinsurance will not conduct harvests on

other lands under its ownership that would offset the harvest reductions attributable to the project. Therefore, leakage is limited to market leakage. We conservatively assume market leakage of 40%.” The audit team has confirmed that no harvests took place during the reporting period under review.

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 that the project is not located on public or tribal lands
B	4%	Confirmation that the project is not located on public or tribal lands
C	2%	Confirmation 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 that the 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.

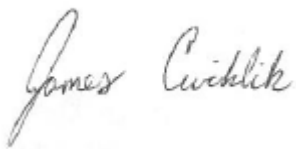

The following provides a summary of the ERT issuance for the current Reporting Period with the Leakage deduction included and the Buffer deductions excluded (Gross ERTs):

Annual Emission Reduction in Metric Tons (tCO <sub>2</sub> e)				
Reporting Period	Vintage	Start Date	End Date	Gross GHG Emission Reductions (tCO <sub>2</sub> e)
3	2019	10 October 2019	31 December 2019	26,487
3	2020	1 January 2020	09 October 2020	25,914
TOTAL				52,401

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 <sub>2</sub> e)					
Reporting Period	Vintage	Start Date	End Date	Net GHG Emission Reductions (tCO <sub>2</sub> e)	Quantity of Buffer Credits (tCO <sub>2</sub> e)
3	2019	10 October 2019	31 December 2019	21,719	4,768
3	2020	1 January 2020	09 October 2020	21,250	4,665
Total				42,969	9,433

*Note: final numbers are rounded for simplicity.*

Lead Auditor Approval	 James Cwiklik, 23 February 2021
Internal Reviewer Approval	 Alexa Dugan, 23 February 2021

## 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.

### **NCR 1 Dated 19 Feb 2021**

**Standard Reference:** ACR Standard v5.1

2.B.6 Managing Data Quality

**Document Reference:** HudsonFarm\_MR\_RP3\_2\_19\_21.pdf

HudsonFarm\_RP3\_ERT\_HW\_2\_8\_21.xlsx

**Finding:** The buffer vintages reported in the monitoring report and calculated in the referenced workbook are not accurate. This is easily checked by totalling Cells G56 and G57 in the ACR\_IFM\_ERT\_Calcs tab. They do not add up to the reported buffer amount in G45. Please update both files to accurately calculate the buffer credits by vintage.

**Project Personnel Response:** The ERT workbook and monitoring report have been corrected so that the buffer vintages sum to the total buffer amount.

**Auditor Response:** The ERT workbook and monitoring report have been updated correctly. This finding is closed.

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

### **NCR 2 Dated 19 Feb 2021**

**Standard Reference:** ACR Standard v5.1

2.B.6 Managing Data Quality

**Document Reference:** HudsonFarm\_MR\_RP3\_2\_19\_21.pdf

**Finding:** The monitoring report states "Estimated total stock in live and dead trees in June 2020, grown from the inventory data, is 560,480 CO2 (= Live Tree CO2 Project + Standing Dead CO2 Project + HWP Project)." However, when this is checked in the calc workbooks provided or other locations in the monitoring report the value is not 560,480. Please update.

**Project Personnel Response:** The monitoring report has been updated to correct the stocking grown to June 2020.

**Auditor Response:** The monitoring report has been updated to fix this stocking reference.

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