# VERIFICATION REPORT

*American Carbon Registry*

## *ACR375: Anew – Hawk Mountain Forestry Project*

**Reporting Period:**
**17 March 2021 to 16 March 2022**

**Prepared for:**

**Anew (formerly Blue source)**

**5 April 2023**

AMERICAN CARBON REGISTRY

*Prepared by:*
**Kevin Boston** | **Lead Auditor**
Greenhouse Gas Verification Program
+1.510.452.8000
dbaldwin@scsglobalservices.com

SCS global 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** | Anew– Hawk Mountain Forestry Project |
| **Client** | Anew (formerly Blue source) |
| **Prepared By** | SCS Global Services |
| **Date of Issue** | 5 April 2023 |
| **Contact** | 2000 Powell Street, Suite 600, Emeryville, CA 94608, USA<br>http://www.scsglobalservices.com<br>Email: CPollet-Young@scsglobalservices.com<br>Telephone: +1 (510) 452-8000 |
| **Audit Team** | Lead Auditor: Kevin Boston<br>Auditor: Alexa Dugan<br>Internal Reviewer: Doug Baldwin |

## Executive Summary

This report describes the verification services provided for the Hawk Mountain Forestry project ("the project"), an Improved Forest Management project located in Berks and Schuylkill counties in eastern Pennsylvania, USA, 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 for the reporting period from 17 March 2021 to 16 March 2022 against relevant ACR standards and the approved methodology. The verification engagement was done through a document review and interviews with relevant personnel. As part of the verification engagement, one finding were raised: 2 Non-Conformity Reports, 0 New Information Requests, and 2 Observations. The project complies with the verification criteria, and SCS holds no restrictions or uncertainties for the project's compliance with the verification criteria.

# Table of Contents

# 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, SCS's 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 verified carbon offsets since 2008. It has verified over 290 million tonnes of CO2e, providing GHG verification services to various 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 practices. 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.
- Since the last verification, any significant changes in the GHG project's baseline emissions and emission reductions/removal enhancements.

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

- That the reported emissions reductions or removal enhancements are real.
- The degree of confidence in and completeness of the GHG assertion.
- That project implementation was consistent with the GHG project plan.
- Sources and magnitude of potential errors, omissions, and misrepresentations, including the following:
    - The inherent risk of material misstatement.
    - The risk is that the GHG project's existing controls would not have prevented or detected a material misstatement.

## 1.3 Scope

Verification included examination of some or all 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
- Methods and calculations are used to estimate 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 about emissions quantification. Calculation and error checks, interviews with project participants, an iterative risk assessment, a sampling plan, and an 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:

- ACR Standard, Version 5.0
- 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”)
- 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 Errata & Clarifications
- 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 ±5%, as calculated according to the equation in the ACR Standard.

## 1.7 Summary Description of the Project

The project is in Berks and Schuylkill County in eastern Pennsylvania, USA, and is aimed at long-term conservation and sustainable management of the forest. The Hawk Mountain Sanctuary Association, project proponent, intends to ensure the forest's long-term conservation and sustainable management, promote healthy wildlife habitats, and prevent future compromise of the forest carbon stocks. By committing to maintaining forest CO2 stocks above the regional common practice, the project will provide significant climate benefits through carbon sequestration. The project aligns with and contributes to the UN Sustainable Development Goals *(13) Climate Action* by reducing emissions that may have been incurred through industrial forestry practices within the project area and providing credits to offset emissions, and *(15) Life on Land* by preserving the forest ecosystems within the project area.

# 2 Assessment Process

## 2.1 Method and Criteria

The verification services were provided through document review and 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”—where there existed a risk of a material misstatement (see Section 1.6 above) that was not prevented or detected by the project's controls. Sampling and data testing activities were planned to address areas of residual risk. The audit team then created a verification plan that considered the sampling plan. This work began on 18 August 2022.

## 2.2 Document Review

The monitoring report (dated 15 March 2023; “MR”) was carefully reviewed for conformance to the verification criteria. The following provides a list of additional documentation provided by project personnel to support the abovementioned documents reviewed by the audit team.

| Documentation Reviewed During Verification Activities | | |
|---|---|---|
| **Document** | **File Name** | **Ref.** |
| Calculations workbook | HawkMountain_RP5_ERT_HWP_03_30_22.xlsx | 1 |
| Calculations workbook | HawkMountain_CO2_RP5_3_21_22.xlsx | 2 |
| Monitoring Report | HawkMtn_RP5_MonitoringReport_03_15_2023 -SS signed | 3 |
| GHG Plan | HawkMountain_GHG_Plan_11_06_18.pdf | 4 |

## 2.3 Interviews

### 2.3.1 Interviews of Project Personnel

The process used included 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 was interviewed.

| Interview Log: Individuals Associated with Project Proponent | | | |
|---|---|---|---|
| **Individual** | **Affiliation** | **Role** | **Date(s) Interviewed** |
| Megan Finley | Anew | Forest Carbon Analyst | Throughout audit |

### 2.3.2 Interviews of Other Individuals

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

| Interview Log: Individuals Not Associated with Project Proponent | | | |
|---|---|---|---|
| **Individual** | **Affiliation** | **Role** | **Date(s) Interviewed** |
| Steve Ziegler | Pennsylvania Dept of Conservation and Natural Resources | Schuylkill County Forester was contacted but did not return calls or emails. | 8/5/2021, 8/10/2021 |

## 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:

As part of the audit process, 2 NCRs, 0 NIRs, and 2 OBS were issued. All findings issued by the audit team during the audit process have been closed.

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

- Review project documentation, including the MR (Ref 3) and calculation workbooks (Refs. 1-2), to check for project-specific conformance to ACR standards and methodology, appropriateness of methods and tools applied, the 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.
- Review of the application of the project scenario during the reporting period.
- Review the sources, sinks, and reservoirs of GHG emissions within the project boundary (Refs. 1-2).
- 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. These tasks included recalculating project emissions, ERTs, and uncertainty using inventory data described below in sections 3.1 and 3.2 (Refs. 1-2).
- Communicate with project personnel and proponent via interviews, emails, and meetings to better understand the project team's methodologies.
- Examine the data management and quality control processes and their 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 personnel 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 project uncertainty of 5.64% (Ref. 1) was verified via independent re-quantification (see table below).

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 5.64% was independently re-quantified by SCS using equation 19 in the methodology. No issues were found (see table below). The audit team found the difference reasonable and immaterial.

| | SCS Values | Client Values | Difference |
|---|---|---|---|
| Reporting Period | **UNCt** | **UNCt** | |
| 5 | 5.64 | 5.64 | 0.00% |

**Materiality**

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

$$\%\ Error = \frac{(30{,}286 - 30{,}286)}{30{,}286} * 100 = \frac{0}{30{,}286} * 100 = \ 0.0\%$$

## 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 the emissions reduction by conducting the following analysis:

- Recalculate the live aboveground, live belowground, and standing dead carbon pools using Jenkins equations and decay class information (Ref. 2).
- Calculate the change in project carbon stock stored in above and belowground live trees using equation 11 in the methodology (Ref. 1).
- Calculate the change in project carbon stock stored 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 (Ref. 1).
- Calculate the project carbon stock change 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 each annual vintage using equation 20 in the methodology.

**Emission Reductions**

The audit team verified that the project personnel used the appropriate emissions factors and GWP's to calculate total emission reductions, which adheres to the ACR Methodology. The team recalculated the final emission reductions and confirmed they were without material discrepancies.

The ERTs associated with the fifth reporting period were reported in the ERT workbook and were verified by the verification team as follows:

**The ERT's associated with the fifth reporting periods from the ERT workbook and are verified by the verification team are as follows:**

- 30,286 $tCO_2$ (Emissions reductions at end of the current reporting period without risk buffer deductions)
- 24,531 $tCO_2$ (Emissions reductions at the end of the current reporting period including risk buffer reductions)
- 5,755 $tCO_2$ Risk buffer contributions
- 20,187 $tCO_2$ Leakage deduction

**Variances or Deviations**

For this reporting period, there were no variances and no deviations.

**Uncertainty**

See section 3.1.1 above.

## 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, or actual historical records.

| | |
|---|---|
| **Assumptions and Industry Defaults** | ☒ |

| | |
|---|---|
| Future Projections | ☐ |
| Actual Historical Records | ☒ |

## 3.4 Leakage Assessment

Section E3 of the GHG Plan (Ref. 4) states: "All forestlands owned by Hawk Mountain Sanctuary Association have been certified by the Forest Stewardship Council (FSC). To prevent activity-shifting leakage, Hawk Mountain Sanctuary Association 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%."

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 19%. The audit team performed a complete review of the risk assessment against the ACR Tool for Risk Analysis and Buffer Determination requirements. The audit team concludes that the assignment of risk scores is appropriate and in conformance with 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 documentation review, that project is not located on public or tribal lands. |
| B | 4% | Confirmation, through independent document review, 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 | -3% | Confirmation, through independent review of documentation, that the full project area is covered under a conservation easement and regular on-site monitoring activities are taking place. |
| E | 2% | Confirmation, through independent review of documentation, that project is located in a low fire-risk region. |
| F | 8% | Confirmation, through independent review of documentation, that the project area is within a gypsy moth infestation 'hot spot'. NOTE: An attempt to interview a local forester confirmed that no disturbances due to diseases/pests occurred during the reporting period but did not return emails. |
| G | 0% | Confirmation, through independent review of documentation, is that the project is not a wetland 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

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

Based on the information made available to 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 monitoring period of 17 March 2021 to 16 March 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 deduction excluded:

| Annual Emission Reductions and Removals in Metric Tons ($tCO_2e$) during Reporting Period 5 | | | | |
|---|---|---|---|---|
| **Vintage** | **Start Date** | **End Date** | **Gross GHG Emission Removals ($tCO_2e$)** | **Gross ERT Reductions/Removals ($tCO_2e$)** |
| 2021 | 17 March 2021 | 31 December 2021 | 6,458 | 24,063 |
| 2022 | 1 January 2022 | 16 March 2022 | 1,670 | 6,223 |
| | | Total | 8,128 | 30,286 |

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 ($tCO_2e$) during Report Period 5 | | | | |
|---|---|---|---|---|
| **Vintage** | **Start Date** | **End Date** | **Net GHG Emission Reductions/Removals ($tCO_2e$)** | **Quantity of Buffer Credits ($tCO_2e$)** |
| 2021 | 17 March 2021 | 31 December 2021 | 19,491 | 4,572 |
| 2022 | 1 January 2022 | 16 March 20222 | 5,040 | 1,183 |
| | | Total | 24,531 | 5,755 |

| | |
|---|---|
| **Lead Auditor Approval** | Kevin Boston<br>Kevin Boston, 5 April 2023 |
| **Internal Reviewer Approval** |  <br>Doug Baldwin, 5 April 2023 |

## Appendix A: List of Findings

**NCR 1 Dated 13 Nov 2022**
**Standard Reference**: ACR Monitoring Report Template v3.0
**Document Reference**: Hawk Mountain Monitoring Report_03_31_2021_Signed.pdf
**Finding**: The latest version of the monitoring report is a draft and has not been signed. The client must submit a final version of the report that is signed before the verification can be completed.
**Project Personnel Response**: Anew will have the Monitoring Report when all issues are closed and ACR has completed their review.
**Auditor Response**: Agree with reasoning will close this finding and open an observation.
**Bearing on Material Misstatement or Conformance (M/C/NA):**

**OBS 2 Dated 5 Dec 2022**
**Standard Reference**: ACR Monitoring Report Template v3.0
**Document Reference**: Hawk Mountain Monitoring Report_03_31_2021_Signed.pdf
**Finding**: Monitoring report will be signed when completed the review.
**Project Personnel Response**: Anew will have the Monitoring Report when all issues are closed and ACR has completed their review.
**Auditor Response**: Agree with reasoning will close this finding
**Bearing on Material Misstatement or Conformance (M/C/NA):**

**OBS 3 Dated 5 Dec 2022**
**Standard Reference**: ACR Monitoring Report Template v3.0
**Document Reference**: Hawk Mountain Monitoring Report_03_31_2021_Signed.pdf
**Finding**: Section VII GHG: Previous reporting. In reporting period 5, tress per acres were adjusted in the onsite volume calculations to be the measured TPA. Formally, trees growing to the large tree plot were given an adjusted TPA. The wording is awkward and does not easily describe what occurs when trees reach the threshold diameter to use the expansion factor for the larger plot.
**Project Personnel Response**: Language was updated to "In reporting period 5, trees per acre (TPA) values were adjusted in the onsite volume calculations to be the measured TPA, regardless of if they cross the 5" diameter threshold into the larger subplot. Formally, trees that grew over the 5" threshold were given an adjusted TPA equal to the size of the larger subplot."
**Auditor Response**: Language is clear about how TPA calculations were transitioning to the larger plot expansion factor
**Bearing on Material Misstatement or Conformance (M/C/NA):**

**NCR 4 Dated 5 Dec 2022**
**Standard Reference**: ACR Monitoring Report Template v3.0
**Document Reference**: Hawk Mountain Monitoring Report_03_31_2021_Signed.pdf
**Finding**: Section VI GHG Emission Reductions/Removals Part 5. Table appears to have data entries appear to be one row below the proper heading.
**Project Personnel Response**: Anew has corrected the error in the table so that the values are in the proper rows.
**Auditor Response**: Table has been corrected.
**Bearing on Material Misstatement or Conformance (M/C/NA):**