Natural Carbon Solutions

Natural Carbon Solutions
Organisations Footprinting Protocol

An in-depth explanation of the Natural Carbon Solutions' carbon footprinting methodology, rules of certification and labelling scheme

Version 2.0 - July 2025

www.naturalcarbonsolutions.com

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1. Foreword

In today's business environment, environmental performance and commercial excellence are increasingly interconnected. Leading companies recognise that sustainable growth requires sophisticated carbon management approaches that drive both environmental impact and business value.

Natural Carbon Solutions (NCS) was founded to provide these advanced frameworks. Since launching our first Protocol in 2022, we've witnessed how traditional carbon management approaches often fail to capture the full picture of a company's environmental contribution. Through extensive collaboration with business leaders, environmental specialists, and industry experts, we're pleased to share version 2.0 of the Natural Carbon Solutions Protocol—designed to enable superior environmental performance whilst supporting business growth.

Our protocol advances three fundamental principles:

1. **Comprehensive carbon measurement** aligned with international standards
2. **Intelligent carbon management** that recognises business realities
3. **Rigorous third-party verification** for stakeholder credibility

The distinctive value of Natural Carbon Solutions lies in our sophisticated approach to carbon management. We provide comprehensive third-party verification against multiple international standards, including ISO 14064, GHG Protocol, and ISO 14068, coupled with our proprietary Carbon Efficiency methodology and broader value chain contributions through avoided emissions verification, that enables meaningful environmental progress aligned with business objectives.

NCS certification represents the evolution of carbon management, moving beyond simple compliance to deliver frameworks that enable both environmental leadership and commercial success. When you choose NCS, you're adopting methodologies designed for modern businesses that recognise environmental stewardship and business excellence as complementary objectives.

2. What is Natural Carbon Solutions?

Natural Carbon Solutions (NCS) is a comprehensive carbon management certification and verification scheme designed for modern businesses that recognise environmental leadership and commercial excellence as interconnected objectives. Our platform serves organisations of all sizes and sectors, delivering sophisticated methodologies firmly grounded in international standards whilst addressing real-world business contexts.

NCS provides three core verification services:

1. **Comprehensive Standards Verification:** We provide rigorous third-party verification of carbon footprint data aligned with ISO 14064, GHG Protocol, and other leading international frameworks, ensuring your carbon accounting meets the highest professional standards.
2. **Carbon Efficiency Methodology:** Our proprietary approach to carbon management that measures how effectively organisations use carbon to create value, enabling meaningful environmental progress whilst supporting business growth and innovation.
3. **Scope 4 (Avoided Emissions) Verification:** Quantification and verification of greenhouse gas emissions avoided through your organisation's products, services, or solutions using comparative lifecycle assessment methodologies. This addresses emissions reductions that occur outside your operational boundary (Scopes 1-3) but are enabled by your offerings.

Our approach recognises that whilst absolute reduction targets serve specific contexts, businesses benefit from intelligent carbon management that balances environmental objectives with commercial realities. By participating in the NCS system, organisations demonstrate sophisticated environmental leadership whilst maintaining the flexibility to pursue growth and innovation.

NCS enables companies to move beyond basic compliance toward strategic environmental management that creates both stakeholder value and competitive advantage.

3. The Protocols of Natural Carbon Solutions

The Natural Carbon Solutions certification scheme provides comprehensive frameworks for carbon footprinting, verification, and certification across diverse entities. To address the unique characteristics and requirements of different reporting entities, NCS operates through four distinct protocols:

Protocol Structure

The NCS General Standard encompasses four specific protocols, each tailored to the unique characteristics and requirements of different reporting entities:

1. **Organisations Protocol:** Designed for any company, institution, or association comprising one or more people with a particular business purpose. This protocol addresses the specific needs of organisational carbon accounting across all operational boundaries and emission scopes.

2. **Products Protocol:** Created for objects, systems, or services made available for customer use, defined by a distinct reference unit. This protocol focuses on lifecycle carbon assessment methodology, from raw material extraction through manufacturing, distribution, use, and end-of-life.

3. **Events Protocol:** Tailored for one-off or recurring, planned public or social occasions. This protocol addresses the temporal nature of events and their unique supply chain considerations.

4. **Buildings Protocol:** Divided into two distinct applications:

    - **Building Construction:** For finite projects to construct or refurbish buildings, immobile structures, or external physical infrastructure.

    - **Building Operation:** For the operation of a portfolio, whole building, or part of a building for one calendar year.

About This Document

This document specifically details the **Organisations Protocol** of the Natural Carbon Solutions certification scheme. It provides comprehensive guidance on carbon footprint measurement, verification, and certification specifically for organisational entities.

The other protocols (Products, Events, and Buildings) are detailed in separate documents, each addressing the unique methodological considerations and certification requirements relevant to those specific reporting entities.

Whilst each protocol is tailored to different entity types, all share NCS's core principles of comprehensive measurement, verification-based credibility, and practical accessibility, ensuring a consistent approach to carbon management across diverse applications.

4. How does it work?

The Natural Carbon Solutions certification process provides a comprehensive framework that enables multiple approaches to environmental leadership whilst maintaining rigorous standards and verification protocols.

The Certification Process:

1. **Comprehensive Measurement:** Organisations conduct complete carbon footprint assessments following NCS methodology, which integrates requirements from GHG Protocol, ISO 14064, and other relevant international standards.

2. **Third-Party Verification:** NCS conducts rigorous verification of carbon footprint data through our Vero platform, ensuring compliance with applicable standards and methodological rigour.

3. **Pathway Selection:** Organisations choose their certification pathway based on business strategy, stakeholder requirements, and environmental objectives.

4. **Performance Assessment:** We evaluate environmental performance using the appropriate metrics for each pathway - Carbon Efficiency for Carbon Efficient, neutrality balance for Carbon Neutral, or absolute reductions for Net Zero.

5. **Certification:** Upon successful verification, NCS issues the appropriate certification, enabling organisations to communicate verified environmental achievements to stakeholders.

6. **Annual Recertification:** Certified organisations maintain their status through annual reverification, demonstrating continued compliance and performance improvement.

Certification Pathways Available

NCS offers three distinct pathways to environmental leadership, each designed for different business contexts and strategic objectives:

- **Carbon Efficient Certification:** Built on our proprietary Carbon Efficiency methodology, this certification measures how effectively organisations use carbon to create value, enabling meaningful environmental progress whilst supporting growth and innovation.

- **Carbon Neutral Certification:** For organisations seeking immediate carbon neutrality through verified offsetting, combined with systematic reduction efforts across all emission scopes.

- **Net Zero Carbon Certification:** For organisations committed to absolute emission reductions aligned with science-based targets, culminating in comprehensive Net Zero achievement.

- **Avoided Carbon Emissions Certification:** For organisations seeking to demonstrate and verify the climate benefits enabled by their products, services, or solutions throughout the value chain, providing recognition of their broader contribution to global emissions reduction.

5. The Verification and Certification Process

Natural Carbon Solutions provides robust third-party verification that ensures full compliance with international standards whilst recognising multiple legitimate approaches to carbon management. Our verification methodology aligns with ISO 14065 and ISO 14066, providing assurance that carbon claims meet all regulatory and reporting requirements.

Why Verification Matters

- **Standards Compliance:** Third-party verification ensures carbon claims comply with international standards whilst recognising that progress can take multiple forms.
- **Methodological Rigour:** Our verification process maintains alignment with GHG Protocol, ISO standards, and other reporting frameworks without sacrificing recognition of diverse approaches.
- **Business Insights:** Verification provides valuable insights that balance environmental objectives with operational realities, all within the context of international best practices.
- **Stakeholder Confidence:** Verified carbon performance metrics demonstrate meaningful progress to stakeholders in a way that reflects business context whilst meeting increasing demands for standardised reporting.
- **Market Differentiation:** NCS certification distinguishes organisations as both environmentally ambitious and fully compliant with international standards.

Verification Components

- **Standards-Aligned Data Assessment:** Entities submit carbon footprint data through our Vero platform, enabling efficient verification against all relevant international frameworks.
- **Performance Analysis:** We evaluate environmental performance using appropriate metrics for each certification pathway, recognising different forms of legitimate progress within established standards.
- **Scope 4 Assessment:** For organisations providing enabling technologies or low-carbon solutions, we evaluate avoided emissions using comparative lifecycle methodologies that quantify GHG reductions enabled in customers' operations or value chains.
- **Comprehensive Verification Report:** Independent verification confirms environmental achievements and compliance with international standards, providing credible credentials that satisfy all reporting requirements.

The Vero Platform

NCS verification is conducted through Vero, our proprietary carbon footprint verification platform designed to ensure efficiency, transparency, and rigour:

- **Structured Verification Workflow:** Clearly defined stages with automated notifications and progress tracking for all parties.
- **Real-Time Collaboration:** Time-stamped comments and feedback systems enable clear communication between organisations and verifiers.
- **Dynamic Data Visualisation:** Interactive dashboards displaying carbon footprint data with ability to examine specific emission sources and calculations.
- **Document Management:** Centralised storage for all supporting documentation with version control and easy referencing.
- **Quality Assurance:** Built-in validation checks identify potential errors before formal verification begins, streamlining the process.

The Vero platform typically reduces verification administrative time by up to 40% compared to traditional methods whilst maintaining comprehensive rigour and transparency.

6. Compliance with International Standards

Natural Carbon Solutions advances carbon management by integrating best practices from leading international frameworks. Rather than creating competing standards, NCS harmonises and enhances existing methodologies to provide comprehensive, accessible carbon management solutions for every entity across the economy.

By achieving Natural Carbon Solutions certification, organisations demonstrate compliance with requirements from multiple international standards, including:

- **GHG Protocol:** International accounting and reporting framework for greenhouse gas emissions
- **ISO 14064:** International standard for quantifying and reporting greenhouse gas emissions and removals
- **ISO 14068:** Guidelines for carbon neutrality and Net Zero management (replacing PAS 2060)
- **Science Based Targets initiative (SBTi):** Framework for setting science-based reduction targets

Standards Integration Approach

- **Methodological Harmonisation:** NCS provides clear methodological solutions where international standards may have conflicting requirements or gaps in guidance.
- **Comprehensive Coverage:** Where reporting entities lack sufficient footprinting guidance or verification schemes, NCS provides proprietary methodologies within the international standards framework, including verification of avoided emissions enabled through products and services using GHG Protocol Product Standard and ISO lifecycle assessment principles
- **Practical Implementation:** NCS methodologies work within real business contexts whilst maintaining environmental integrity and international standards compliance.

Continuous Standards Alignment

NCS maintains leadership in carbon management through:

- **Active Standards Participation:** NCS maintains active participation in standards development organisations and working groups, including ISO technical committees and GHG Protocol update working groups.
- **Annual Protocol Review:** The NCS Protocol undergoes formal annual review to incorporate newly published standards, updated emission factors, and emerging best practices.
- **Structured Transitions:** When significant standards updates occur, NCS implements structured transition provisions with adequate notice periods, guidance documentation, and phased adoption where appropriate.

Relationship with Science Based Targets Initiative

NCS certifications are fully compatible with science-based targets. Organisations pursuing SBTi validation can use NCS verification to demonstrate progress against their targets, whilst those choosing alternative pathways benefit from equally rigorous environmental frameworks aligned with international standards.

The choice of pathway depends on business strategy, stakeholder requirements, and operational context—all represent legitimate approaches to environmental leadership when implemented with appropriate rigour and transparency within the international standards framework.

7. Natural Carbon Solutions Certification for Organisations

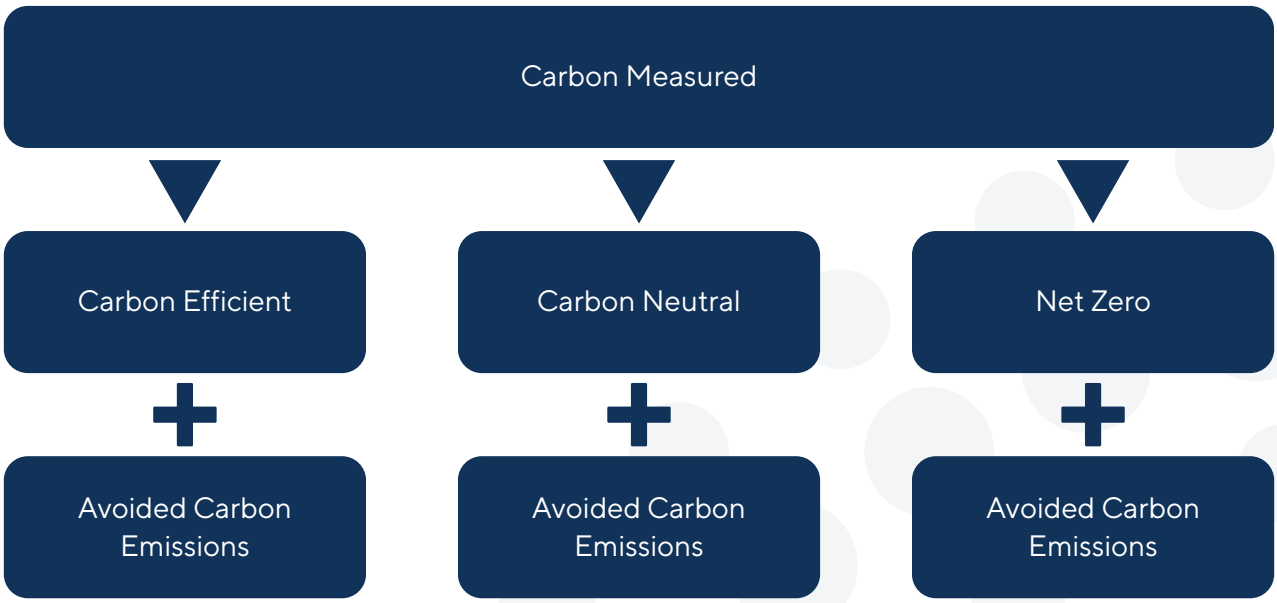
Definition of an Organisation:

For the purposes of this protocol, an organisation is defined as any company, institution, or association comprising one or more people that has a particular business purpose.

Natural Carbon Solutions Certification Journey for Organisations:

NCS certification for organisations is sequential in nature, with organisations advised to follow the requirements of each certification in turn. Each certification builds upon the previous level's requirements whilst providing progressively more sophisticated environmental recognition.

Certification



Carbon Measured is the first step for all organisations. After completing Carbon Measured, organisations choose one of three pathways based on their strategy and capabilities.

- **Carbon Efficient:** based on annual improvements in Carbon Efficiency
- **Carbon Neutral:** systematic reductions and carbon offsetting
- **Net Zero Carbon Committed → Net Zero Carbon:** Science-based absolute reductions

Avoided Carbon Emissions is an additional certification that can be pursued alongside any of the three main pathways to demonstrate an Organisation's avoided emissions ("Scope 4").

Each pathway represents a different approach to demonstrating environmental leadership and climate action. All certifications require annual recertification and third-party verification through NCS.

General requirements for all certifications:

Emissions Scope Definition Defines the boundaries of greenhouse gas emissions measurement and reporting.	**Requirements for All Certifications:** • Measure all Scope 1 and Scope 2 emissions using physical datasets where possible (e.g., energy consumption data) • Conduct an initial GHG screening calculation to determine significant Scope 3 elements • Include at least 95% of your organisation's total Scope 3 emissions from the screening calculation in the final carbon footprint and baseline • Ensure that any excluded Scope 3 category does not exceed 1% of the total carbon footprint • Clearly document and justify any exclusions with quantified reasoning *Note: The quality of Scope 3 data requirements increase progressively with higher certification levels.*
Data Quality Standards Standards for data collection, management, and quality assurance.	**Requirements for All Certifications:** • Prioritise the use of primary data (physical datasets) for all calculations • Where primary data is not available, clearly document and justify the use of secondary data (e.g., benchmark and spend-based data) • Exclude VAT from any financial data used in calculations • Implement processes to continuously improve data quality over time • Document data collection methodologies for all emission sources *Note: Higher certification levels require progressively higher proportions of primary data, particularly for significant emission sources.*
Emission Factors Sources and application of emission factors used in calculations.	**Requirements for All Certifications:** • Use the most recent, relevant, and reliable emission factors for all calculations • Clearly define all databases and associated emission factors used • If using out-dated databases or emission factors, make reasonable corrections (e.g., adjusting for inflation if using older financial databases) • Apply emission factors consistently across reporting periods • Document the source and publication date of all emission factors *Note: Requirements for emission factor recency and specificity become more stringent at higher certification levels.*

Renewable Energy Approach to accounting for renewable energy procurement and generation.	**Requirements for All Certifications:** • For purchased electricity, report emissions using both 'location-based' and 'market-based' emission factors • If using specific contractual agreements for renewable electricity (e.g., Power Purchase Agreements or REGOs), reflect this using the appropriate 'market-based' emission factor • Provide transparent documentation of all renewable energy procurement claims • Ensure no double-counting of renewable attributes
Uncertainty Analysis Assessment of data reliability and accuracy.	**Requirements for All Certifications:** • Conduct and report on the quantitative uncertainty of all datasets used in the emissions inventory • Use the NCS Uncertainty Analysis Tool within Vero to quantify uncertainty • Document how uncertainty results will guide data quality improvements in subsequent years • Prioritise improvement of data sources with high uncertainty values • Quantify and report the overall uncertainty of the carbon footprint *Note: Advanced certifications require demonstrable year-on-year reductions in calculation uncertainty.*
Compliance with Standards Alignment with international standards and protocols.	**Requirements for All Certifications:** • Ensure all organisational carbon footprints are calculated in accordance with ISO 14064 and the GHG Protocol • Apply the standards' principles of relevance, completeness, consistency, transparency, and accuracy • Clearly reference adherence to each standard's relevant clauses • Maintain awareness of and adaptation to evolving standards *Note: Different certification levels align with different combinations of standards; for example, Carbon Neutral certification specifically requires alignment with ISO 14068-1.*

Reporting Requirements Formal documentation and disclosure of carbon footprint information.	**Requirements for All Certifications:** • Provide a detailed breakdown of emissions by scope and category • Clearly document and justify any exclusions from the assessment • Use NCS's provided standardised reporting templates in Vero • Include visual representations (graphs/charts) alongside tabular data *Note: Public disclosure requirements vary by certification level, with higher levels requiring more comprehensive public reporting.*
Carbon Management Plan Definition: Strategic approach to emissions reduction over time.	**Requirements for Higher-Level Certifications:** • Develop a comprehensive Carbon Management Plan outlining the baseline year, annual interim reduction targets, and timelines • Set specific short-term and long-term reduction targets documenting alignment with the targeted standard • Implement emissions reduction measures meeting documented technological and economic feasibility criteria • Review and update the carbon management plan every 3-5 years *Note: Carbon Efficient certification allows intensity-based targets, while Net Zero certifications require absolute reduction targets for Scopes 1 and 2, with specific requirements for Scope 3 varying between intensity and absolute metrics.*
Emission Reductions Demonstration of actual emissions reductions achieved.	**Requirements for Higher-Level Certifications:** • Demonstrate reductions across Scope 1, 2, and 3 emissions for the reporting year • Implement reduction measures across the organisation as outlined in the carbon management plan • Ensure that carbon reductions are achieved within the boundary of the subject • Document and justify calculation methods and any external influencing factors *Note: Required reduction percentages vary by certification level, with Net Zero Carbon requiring the most substantial reductions (minimum 90% for Scopes 1 and 2 in absolute terms by 2050 or sooner).*

Avoided Carbon Emissions (Scope 4) Assessment Quantification and verification of greenhouse gas emissions avoided through the organisation's products, services, or solutions beyond Scopes 1-3 boundaries.	**Requirements for Avoided Carbon Emissions Certification:** • Conduct comparative lifecycle assessment for at least 75% of the organisation's products or services by revenue or appropriate metric • Establish baseline scenarios representing conventional technologies or practices that would occur without the organisation's solution • Apply functional equivalence between baseline and comparative scenarios using consistent system boundaries • Document all key assumptions with supporting evidence and apply conservative estimation methods where data gaps exist • Quantify avoided emissions using GHG Protocol Product Standard and ISO 14040/14044 lifecycle assessment principles • Prevent double counting through transparent value chain attribution methodologies • Base calculations on actual market uptake and use patterns rather than theoretical potentials • Conduct uncertainty analysis using NCS Uncertainty Analysis Tool for all avoided emissions datasets • Provide separate reporting of avoided emissions alongside Scopes 1-3 carbon footprint using NCS standardised templates *Note: Avoided Carbon Emissions Certification can be pursued alongside any primary certification pathway (Carbon Efficient, Carbon Neutral, or Net Zero Carbon) to provide comprehensive recognition of the organisation's total climate contribution.*
Offsetting Requirements Use of carbon credits to address residual emissions.	**Requirements for Applicable Certifications:** • If residual emissions remain after reduction efforts, offset these using only carbon credits that meet NCS requirements • Ensure all purchased carbon credits meet the NCS carbon credit requirements • Develop a carbon offsetting plan for addressing residual carbon emissions • Provide evidence of the retirement of carbon credits • Publicly report carbon credits that have been used *Note: Carbon Neutral certification allows various types of credits, while Net Zero Carbon certification specifically requires high-quality carbon removal credits for residual emissions (<10% only).*

Certification Process Formal recognition of achievement of certification requirements.	**Requirements for All Certifications:** • Upon successful verification of all applicable requirements, NCS will issue the appropriate certification • All certifications are valid for one year from the date of issuance • Recertification requires demonstration of continued adherence to all requirements • All verification findings must be addressed prior to certification issuance *Note: all certifications are subject to NCS's terms of use, and certification necessitates the addition to the NCS Alumni Network.*

Carbon Offsetting Framework:

Carbon offsetting is available for Carbon Neutral and Net Zero certifications and serves important functions:

- **Immediate Climate Action:** Offsetting enables organisations to address their carbon impact whilst implementing longer-term reduction strategies, providing immediate environmental benefit during transition periods.
- **Addressing Unavoidable Emissions:** Certain emissions remain challenging to eliminate entirely, particularly in sectors such as aviation, agriculture, and specific industrial processes. Quality offsetting provides a mechanism to address these residual emissions.
- **Supporting Climate Solutions:** Offset purchases generate funding for emission reduction and removal projects, accelerating deployment of clean technologies whilst organisations develop internal capabilities.
- **Demonstrating Broader Impact:** While offsetting addresses residual emissions, **Avoided Carbon Emissions Certification** enables organisations to demonstrate the positive climate contributions their products and services deliver beyond their operational boundaries.

Carbon offsetting complements rather than substitutes for direct emission reductions, with NCS requiring systematic reduction efforts alongside any offsetting activities.

Reporting Standards

When reporting emissions and reductions, entities must:

- Clearly specify whether absolute emissions or emissions intensity is being used for each reported figure and target
- If using intensity metrics, also report absolute emissions to ensure transparency
- When setting targets, specify whether these are absolute or intensity-based with necessary context
- Ensure chosen intensity metrics are relevant to organisational activities and consistent with business model

Organisations providing enabling technologies may report increasing absolute emissions with decreasing intensity metrics when appropriately justified.

NCS assesses the appropriateness of chosen metrics and justifications as part of the verification process.

Understanding Avoided Emissions (Scope 4)

What Are Avoided Emissions?

Avoided emissions represent greenhouse gas reductions that occur outside an organisation's direct operational boundaries (Scopes 1-3) but are enabled by the organisation's products, services, or activities. Sometimes referred to as "Scope 4", these emissions quantify an organisation's broader contribution to global decarbonisation through the solutions they provide to customers and markets.

Core Principle

Avoided emissions are quantified through comparative lifecycle assessment, measuring the difference between:

- **Baseline scenario:** Conventional technology/practice that would occur without the organisation's solution
- **Comparative scenario:** The organisation's actual solution
- **Difference = avoided emissions**

Why This Matters

For organisations providing enabling technologies, renewable energy solutions, efficiency products, or digital services that substitute higher-carbon alternatives, Avoided Carbon Emissions Certification provides essential recognition of their contribution to global climate action beyond their operational footprint.

Practical Examples

- Video conferencing software: Avoided emissions from reduced business travel
- Renewable energy equipment: Avoided emissions from clean energy generation vs. grid electricity
- Building management systems: Avoided emissions from optimised energy consumption

Relationship to Traditional Carbon Footprinting

Avoided emissions are separate from and additional to traditional carbon footprint measurement:

- Cannot be used to offset an organisation's own Scopes 1-3 emissions
- Reported alongside, not instead of, organisational carbon footprint
- Use product-focused rather than organisational carbon accounting standards
- Represent broader economic and environmental system effects

Avoided Carbon Emissions Certification can be pursued alongside any primary certification pathway (Carbon Efficient, Carbon Neutral, or Net Zero Carbon) to provide comprehensive recognition of an organisation's total climate contribution.

Natural Carbon Solutions

Carbon Measured Organisation

Natural Carbon Solutions **Carbon Measured** Organisation

7.1 Carbon Measured

About this Certification

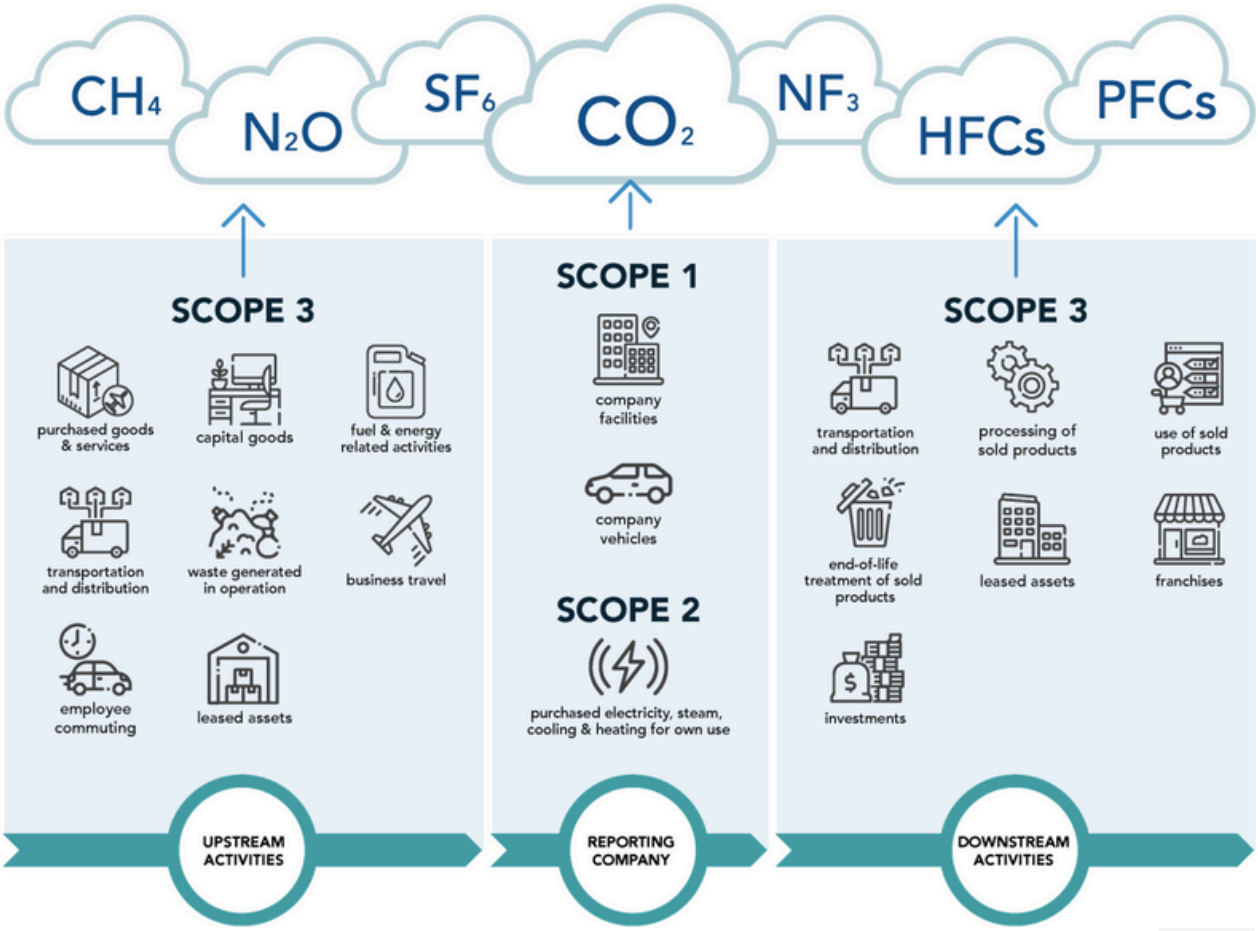
The Carbon Measured certification is the foundational step in the Natural Carbon Solutions (NCS) certification journey for organisations. This certification demonstrates your organisation's commitment to accurately measuring its operational carbon footprint using a methodology that harmonises international best-practice guidance.

This certification can be complemented by **Avoided Carbon Emissions Certification** to provide comprehensive recognition of your organisation's total climate contribution—both reducing your own footprint and enabling reductions for others.

Certification Requirements:

1. **Emissions Scope:**

    - Measure all Scope 1 and Scope 2 emissions using physical datasets where possible (e.g., energy consumption data).
    - Conduct an initial GHG screening calculation using GHG Protocol's Corporate Value Chain (Scope 3) Standard to determine significant Scope 3 elements.
    - Conduct a documented materiality assessment to demonstrate that at least 95% of Scope 3 emissions are included.
    - Explicitly justify exclusions with quantified reasoning, ensuring that no single excluded category exceeds 1% of total emissions.



2. Data Quality:

- Prioritise the use of primary data (physical datasets) for all calculations.
- Where primary data is not available, clearly document and justify the use of any secondary data sources, referencing accepted databases such as Defra, EcoInvent, or nationally recognised emission factor datasets secondary data (e.g., spend-based data).
- Exclude VAT from any financial data used in calculations.

3. Emission Factors:

- Use the most recent, relevant, and reliable emission factors for all calculations. Data older than 3 years should be explicitly justified. Document clearly any deviations and adjustments applied, ensuring transparency and auditability.
- Clearly define all databases and associated emission factors used in the NCS Lower Carbon Pathway tool.
- If using outdated databases or emission factors, make reasonable corrections (e.g., adjusting for inflation if using older financial databases).

4. **Renewable Energy:**

   - For purchased electricity, report emissions using both 'location-based' and 'market-based' emission factors.

   - Clearly document renewable electricity procurement agreements (PPAs, REGOs, Guarantees of Origin) alongside emissions reported using both 'location-based' and 'market-based' approaches.

5. **Uncertainty Analysis:**

   - Conduct and report on the quantitative uncertainty of all datasets used in the emissions inventory.

   - Quantify uncertainty using the NCS Uncertainty Analysis Tool within Vero, which is aligned with the GHG Protocol's parameter uncertainty methodology.

   - Document clearly how uncertainty results will guide data quality improvements in subsequent years.

6. **Compliance with Standards:**

   - Calculate and report organisational carbon footprints strictly in accordance with ISO 14064-1:2018 and the GHG Protocol Corporate Standard (2004). Clearly reference adherence to each standard's relevant clauses.

7. **Reporting:**

   - Use NCS's provided standardised reporting template, clearly detailing emissions by scope, category, and exclusion justifications. Visual representations (graphs/charts) should accompany tabular data for clarity.

8. **Certification:**

   - Upon successful verification, NCS will issue the Carbon Measured certification.

Technical Standards:

This certification aligns with and incorporates the requirements from the following internationally recognised standards and protocols:

- ISO 14064: International standard for quantifying and reporting greenhouse gas emissions and removals.

- GHG Protocol: international accounting and reporting framework for greenhouse gas emissions.

By adhering to these standards, your organisation ensures that its carbon footprint measurement is robust, credible, and internationally recognised.

Emissions Measurement, Reporting, and Reduction:

When reporting emissions and reductions, the entity must:

- Clearly specify whether absolute emissions or emissions intensity is being used for each reported figure and target.
- If using intensity metrics, also report the absolute emissions to ensure transparency.
- When setting targets, specify whether these are absolute or intensity-based, and provide the necessary context for interpretation.
- The chosen intensity metric, if used, must be relevant to the organisation's activities and consistent with its business model.

NCS will assess the appropriateness of the chosen metrics and the justification provided as part of the verification process.

Validity and Recertification:

The Carbon Measured certification is valid for one year from the date of issuance. To maintain certification, organisations must recalculate and reverify their carbon footprint annually, demonstrating continual improvement in data quality and completeness.

Next Steps:

Upon achieving the Carbon Measured certification, Organisations are encouraged to proceed to the next level of certification, which focuses on carbon reduction strategies. The data and insights gained from this process will serve as a foundation for setting meaningful reduction targets and implementing effective carbon management strategies.

While this certification focuses on Scopes 1-3 measurement, organisations providing low-carbon products or services may separately pursue **Avoided Carbon Emissions Certification** to quantify and verify the GHG reductions their offerings enable elsewhere in the economy through comparative analysis against baseline technologies or practices.

Natural Carbon Solutions

Carbon Efficient Organisation

Natural Carbon Solutions
Carbon Efficient
Organisation

7.2 Carbon Efficient

About this Certification

The Carbon Efficient certification demonstrates that an organisation is actively reducing its carbon footprint across all scopes of emissions. This certification provides organisations with the opportunity to show they are aligned with science-based reduction pathways and are continually reducing the carbon intensity of their operations through comprehensive measures. It serves Organisations with high decarbonisation ambitions who also require flexibility in how they approach emissions reduction.

The certification is built on the concept of Carbon Efficiency; measuring how effectively an organisation uses carbon to create value. This approach follows a straightforward principle: when efficiency improvements outpace growth, environmental impact decreases relative to output or value creation, allowing businesses to demonstrate meaningful progress while accommodating their operational realities.

This certification can be complemented by **Avoided Carbon Emissions Certification** to provide comprehensive recognition of your organisation's total climate contribution—both reducing your own footprint and enabling reductions for others.

Certification Requirements:

1. **Carbon Footprint Measurement:**

    - Complete a full Scope 1-3 footprint measurement complying explicitly with all Carbon Measured certification requirements, aligned strictly with ISO 14064-1:2018 and the GHG Protocol Corporate Standard.

2. **Carbon Management Plan and Reduction Pathway:**

    - Develop a comprehensive Carbon Management Plan explicitly outlining the baseline year, annual interim reduction targets, and timelines for achieving emissions reductions.
    - Set specific short-term and long-term reduction targets clearly documenting alignment with UN Stocktake targets:
        - 43% reduction by 2030
        - 60% reduction by 2035
        - 90% reduction by 2050
    - Implement emissions reduction measures meeting clearly documented technological and economic feasibility criteria, explicitly defined in your Carbon Management Plan. Provide documented rationale or examples of feasibility assessments. All feasibility claims are subject to verification by NCS.
    - The carbon management plan and reduction pathway shall be reviewed and updated every 3-5 years to reflect advancement in technology and organisational changes.

3. **Emissions Reduction:**

- Clearly demonstrate year-on-year reductions using emissions intensity metrics as the primary measure, with absolute emissions reported for transparency purposes.

- Clearly document and justify calculation methods and any external influencing factors (e.g., organisational changes) within your verified submission.

4. **Transparency and Reporting:**

- Clearly communicate the organisation's Carbon Efficient commitment, including the scope and boundaries of the reduction efforts.

- Publicly disclose full Scope 1-3 carbon footprint data, clearly reporting reduction targets, actual emissions achievements. Organisations will use NCS's provided disclosure template and standardised infographic for consistency and transparency.

5. **Monitoring and Verification:**

- Implement a system for ongoing monitoring and reporting of GHG emissions across all scopes.

- Engage NCS to verify the carbon footprint and reduction achievements, submitting comprehensive evidence such as detailed reduction action logs, invoices/procurement evidence for renewable energy or efficiency measures, and clearly documented explanations for emission changes.

6. **Continual Improvement:**

- Demonstrate year-on-year improvements in carbon reduction efforts across all scopes.
- Regularly review and update the carbon management plan to reflect new opportunities and technologies.

7. **Certification:**

- Upon successful verification of all requirements, NCS will issue the Carbon Efficient certification.

Technical Standards:

This certification aligns with and incorporates the requirements from the following internationally recognised standards and protocols:

- ISO 14064: Quantification and reporting of greenhouse gas emissions and removals.

- GHG Protocol: International accounting and reporting framework for greenhouse gas emissions.

- ISO Net Zero definition (date of issue to be determined), ISO IWA 42:2022.

By adhering to these standards, your organisation ensures that its Carbon Efficient claim is robust, credible, and internationally recognised.

Emissions Measurement, Reporting, and Reduction:

The entity shall plan, implement, and achieve a reduction of GHG emissions with intensity metrics as the primary approach before claiming any certification level. The following requirements apply:

1. Emissions intensity metrics are explicitly endorsed as the preferred means for meeting UN reduction targets. The entity shall justify how the selected intensity metrics demonstrate meaningful progress towards long-term emissions reduction goals.

2. The entity shall always quantify and report the absolute emissions alongside intensity metrics for full transparency and shall apply the selected approach consistently.

3. The entity shall assess significant adverse impacts of the subject's GHG emission reduction activities on the environment and society. The entity should take appropriate measures to minimise significant adverse impacts.

4. The methodology chosen to calculate GHG emission reductions shall be used consistently for each reporting period.

5. GHG emission reductions should meet or exceed the reduction targets in the entity's carbon management plan.

6. When reporting emissions and reductions, the entity must:

    - Clearly specify the intensity metrics being used for each reported figure and target.
    - Always report the absolute emissions alongside intensity metrics to ensure transparency.
    - When setting targets, provide the necessary context for interpretation of intensity-based targets.

7. The chosen intensity metric must be relevant to the organisation's activities and consistent with its business model.

8. Carbon offsets are not included in the Carbon Efficient certification framework, as these are addressed under the Carbon Neutral certification.

NCS will assess the appropriateness of the chosen metrics, and the justification provided as part of the verification process.

Validity and Recertification:

The Carbon Efficient certification is valid for one year from the date of issuance. To maintain certification, organisations must annually:

- Recalculate their full Scope 1-3 carbon footprint
- Demonstrate continued emissions reductions using the approved intensity metrics, aligned with the UN Stocktake reduction targets
- Update their carbon management plan and reduction pathway every 3-5 years
- Verify all data and claims with NCS

Next Steps:

The Carbon Efficient certification represents an ambitious approach to emissions management, particularly for organisations experiencing growth or operating in evolving sectors. By focusing on Carbon Efficiency, this certification recognises that economic growth and climate progress can be compatible when organisations continuously improve how effectively they use carbon to create value.

For fast-growing companies and SMEs, Carbon Efficient certification provides a pragmatic yet ambitious framework that acknowledges business realities while maintaining environmental commitment. This approach is especially valuable for:

- Growing businesses where absolute metrics would penalise success
- Companies delivering low-carbon solutions that increase their own emissions but reduce emissions elsewhere in the economy
- Organisations transitioning toward more comprehensive approaches to decarbonisation
- SMEs implementing their first structured carbon reduction initiatives

Organisations may choose to maintain Carbon Efficient as their primary environmental target, or they may explore other certification pathways such as Carbon Neutral is they are able to achieve absolute emissions reductions. Each pathway offers organisations the opportunity to demonstrate meaningful climate action appropriate to their specific context and growth stage.

Organisations achieving intensity-based reductions may also qualify for **Avoided Carbon Emissions Certification** to verify Scope 4 emissions; emissions avoided by customers through adoption of the organisation's solutions, quantified using comparative lifecycle assessment against conventional alternatives.

Natural Carbon Solutions

Carbon Neutral Organisation

Natural Carbon Solutions
Carbon Neutral
Organisation

7.3 Carbon Neutral

About this Certification

The Carbon Neutral certification demonstrates that an organisation is moving beyond measuring its emissions, has started making reductions along a science-based pathway and is actively investing in carbon credits to neutralise its residual emissions.

This certification provides organisations with the opportunity to show they are certified to ISO 14068-1 standards (which replaces PAS 2060) and are continually reducing the carbon footprint of their operations through a combination of on-site measures and carbon credits. It acts as a framework to support the transition to Net Zero.

This certification can be complemented by **Avoided Carbon Emissions Certification** to provide comprehensive recognition of your organisation's total climate contribution, both reducing your own footprint and enabling reductions for others.

Certification Requirements:

1. **Carbon Footprint Measurement:**

    - Comply with all requirements of the Carbon Measured certification for Organisations: Conduct a full Scope 1-3 footprint measurement for all relevant emissions categories in accordance with ISO 14064 and the GHG Protocol.

2. **Carbon Management Plan and Neutrality Pathway:**

    - Develop a comprehensive carbon management plan and carbon neutrality pathway.
    - Demonstrate future emissions reductions in line with commonly accepted science-based pathways and sectoral pathways.
    - Include all technologically and economically feasible measures for emissions reduction, note that the threshold for feasible measures will change over time as technology improves and economics change.
    - Set specific short-term and long-term targets for carbon footprint reductions.

3. **Emissions Reduction:**

    - Demonstrate actual reductions across Scope 1, 2, and 3 emissions for the chosen reporting year.
    - Implement reduction measures across the organisation as outlined in the carbon management plan.
    - Ensure that carbon reductions are achieved within the boundary of the subject (i.e., across Scope 1-3 emissions).

4. **Carbon Offsetting:**

- If residual emissions remain after reduction efforts, offset these using only carbon credits.
- Ensure all purchased carbon credits meet the NCS carbon credit requirements.
- Develop a carbon offsetting plan for addressing residual carbon emissions.

5. **Transparency and Reporting:**

- Clearly communicate the organisation's Carbon Neutral commitment, including the scope and boundaries of neutrality.
- Provide a public disclosure of the full Scope 1-3 carbon footprint, reduction achievements, and offsetting strategy.
- Report carbon credits that have been used.

6. **Monitoring and Verification:**

- Implement a system for ongoing monitoring and reporting of GHG emissions across all scopes.
- Engage an independent third party (NCS) to verify the carbon footprint, reduction achievements, and offsetting claims.

7. **Continual Improvement:**

- Demonstrate year-on-year improvements in carbon reduction efforts across all scopes.
- Regularly review and update the carbon management plan to reflect new opportunities and technologies.

8. **Certification:**

- Upon successful verification of all requirements, NCS will issue the Carbon Neutral certification.

Technical Standards:

This certification aligns with and incorporates the requirements from the following internationally recognised standards and protocols:

- ISO 14068-1: Greenhouse gas management and related activities — Carbon neutrality.
- ISO 14064: Quantification and reporting of greenhouse gas emissions and removals.
- GHG Protocol: International accounting and reporting framework for greenhouse gas emissions.

By adhering to these standards, your organisation ensures that its Carbon Neutral claim is robust, credible, and internationally recognised.

Emissions Measurement, Reporting, and Reduction:

The entity shall plan, implement, and achieve a reduction of GHG emissions in either absolute or intensity terms before claiming any certification level. The following requirements apply:

1. If calculated in intensity terms, the entity shall justify how the subject reduces absolute global GHG emissions in the long term. The GHG emission reductions shall be in accordance with a relevant sector pathway, if available.

2. The entity shall always quantify the absolute emissions reductions of the subject, whichever approach is applied and shall apply the selected approach consistently.

3. The entity shall assess significant adverse impacts of the subject's GHG emission reduction activities on the environment and society. The entity should take appropriate measures to minimise significant adverse impacts.

4. The decision to base GHG emission reductions on an intensity metric or absolute metric shall be justified and documented. The methodology chosen to calculate GHG emission reductions shall be used consistently for each reporting period.

5. GHG emission reductions should meet or exceed the reduction targets in the entity's carbon management plan.

6. When reporting emissions and reductions, the entity must:

    - Clearly specify whether absolute emissions or emissions intensity is being used for each reported figure and target.

    - If using intensity metrics, also report the absolute emissions to ensure transparency.

    - When setting targets, specify whether these are absolute or intensity-based, and provide the necessary context for interpretation.

7. The chosen intensity metric, if used, must be relevant to the organisation's activities and consistent with its business model.

8. An entity that provides a product or service that supports a wider transition to a low carbon economy (e.g. an enabling technology) can occasionally report increasing absolute emissions but decreasing emissions on an intensity basis. An example of an enabling technology is a provider of renewable energy services which significantly reduce GHG emissions per unit of energy generated or comprise avoided emissions.

NCS will assess the appropriateness of the chosen metrics and the justification provided as part of the verification process.

Validity and Recertification:

The Carbon Neutral certification is valid for one year from the date of issuance. To maintain certification, organisations must annually:

- Recalculate their full Scope 1-3 carbon footprint
- Demonstrate continued emissions reductions across all scopes
- Update their carbon management plan and neutrality pathway
- Offset residual emissions with carbon removal credits
- Verify all data and claims with NCS

Next Steps:

The Carbon Neutral certification acts as a framework to support the transition to Net Zero.

Beyond neutralising Scopes 1-3 emissions, organisations may pursue **Avoided Carbon Emissions Certification** to verify the additional GHG reductions their products enable in customers' operations through establishing baseline scenarios and applying comparative analysis methodologies per GHG Protocol Product Standard guidance.

Natural Carbon Solutions

Net Zero Carbon Committed Organisation

Natural Carbon Solutions
Net Zero Carbon Committed Organisation

7.4 Net Zero Carbon Committed

About this Certification

The Net Zero Carbon Committed certification demonstrates that an organisation is working towards achieving Net Zero emissions across their value chain and has set a verified, long-term Net Zero target. This certification provides organisations with the opportunity to show they are aligned with science-based reduction pathways and are actively implementing innovative strategies to reduce emissions across their entire value chain.

This certification can be complemented by **Avoided Carbon Emissions Certification** to provide comprehensive recognition of your organisation's total climate contribution—both reducing your own footprint and enabling reductions for others.
Certification Requirements:

Certification Requirements:

1. **Carbon Footprint Measurement:**

   - Comply with all requirements of the Carbon Measured certification for Organisations.
   - Conduct a full Scope 1-3 footprint measurement for all relevant emissions categories in accordance with ISO 14064 and the GHG Protocol.

2. **Net Zero Target and Reduction Pathway:**

   - Set a publicly available long-term Net Zero target which aims to reduce absolute Scope 1 and 2 emissions by a minimum of 90% by 2050 or sooner, against a measured baseline.
   - Develop a comprehensive Net Zero strategy and science-based reduction pathway. Commonly accepted science-based pathways are the Intergovernmental Panel on Climate Change (IPCC), the International Energy Agency (IEA), the Assessing lo-Carbon Transition (ACT) and the Science Based Targets Initiative (SBTi).
   - For Scope 3 emissions, if aligned with SBTi, the Organisation must choose one of the following approaches:
     - Reduce the intensity of Scope 3 emissions across the organisation by a minimum of 97% by 2050 or sooner, against a measured baseline.
     - Reduce the absolute Scope 3 emissions of the organisation by a minimum of 90% by 2050 or sooner, against a measured baseline.

3. **Emissions Reduction Plan:**

   - Develop a publicly available detailed Net Zero Carbon Action Plan outlining how the organisation intends to achieve its Net Zero targets.
   - Include all technologically and economically feasible measures for emissions reduction across Scope 1, 2, and 3.
   - Set specific short-term and long-term targets for carbon footprint reductions.

4. **Value Chain Innovation:**

   - Demonstrate pursuit of additional innovation across the value chain that will contribute to ongoing Science-Based Target aligned Scope 3 emissions reductions.

   - Detail these innovative measures in the Net Zero Carbon Action Plan.

5. **Transparency and Reporting:**

   - Clearly communicate the organisation's Net Zero commitment, including the scope and boundaries of the reduction efforts.

   - Provide a public disclosure of the full Scope 1-3 carbon footprint, reduction achievements, and the Net Zero Carbon Action Plan.

6. **Monitoring and Verification:**

   - Implement a system for ongoing monitoring and reporting of GHG emissions across all scopes. Engage an independent third party (NCS) to verify the carbon footprint, reduction achievements, and Net Zero strategy.

7. **Continual Improvement:**

   - Demonstrate year-on-year improvements in carbon reduction across all scopes.

   - Regularly review and update the Net Zero Carbon Action Plan to reflect new opportunities and technologies.

8. **Certification:**

   - Upon successful verification of all requirements, NCS will issue the Net Zero Carbon Committed certification.

Technical Standards:

This certification aligns with and incorporates the requirements from the following internationally recognised standards and protocols:

- ISO 14064: Quantification and reporting of greenhouse gas emissions and removals.

- GHG Protocol: International accounting and reporting framework for greenhouse gas emissions.

- Science Based Targets initiative (SBTi): Provides a clearly defined pathway for companies to reduce GHG emissions.

- ISO 14068: Guidelines for carbon neutrality

Emissions Measurement, Reporting, and Reduction:

The entity shall plan, implement, and achieve a reduction of GHG emissions in either absolute or intensity (for Scope 3 only) terms before claiming any certification level. The following requirements apply:

1. If Scope 3 is calculated in intensity terms, the entity shall justify how the subject reduces absolute global GHG emissions in the long term. The GHG emission reductions shall be in accordance with a relevant sector pathway, if available.

2. The entity shall always quantify the absolute emissions reductions of the subject, whichever approach is applied and shall apply the selected approach consistently.

3. The entity shall assess significant adverse impacts of the subject's GHG emission reduction activities on the environment and society. The entity should take appropriate measures to minimise significant adverse impacts.

4. The decision to base GHG emission reductions on an intensity metric or absolute metric shall be justified and documented. The methodology chosen to calculate GHG emission reductions shall be used consistently for each reporting period.

5. GHG emission reductions should meet or exceed the reduction targets in the entity's carbon management plan.

6. When reporting emissions and reductions, the entity must:

    - Clearly specify whether absolute emissions or emissions intensity is being used for each Scope.

    - If using intensity metrics, also report the absolute emissions to ensure transparency.

    - When setting targets, specify whether these are absolute or intensity-based, and provide the necessary context for interpretation.

7. Scope 3 intensity metric, if used, must be relevant to the organisation's activities and consistent with its business model.

NCS will assess the appropriateness of the chosen metrics and the justification provided as part of the verification process.

Validity and Recertification:

The Net Zero Carbon Committed certification is valid for one year from the date of issuance. To maintain certification, organisations must annually:

- Recalculate their full Scope 1-3 carbon footprint
- Demonstrate continued emissions reductions across all scopes, aligned with the science-based reduction pathway
- Make their Net Zero commitment public
- Update their Net Zero Carbon Action Plan
- Verify all data and claims with NCS

Next Steps:

The Net Zero Carbon Committed certification is a significant step towards achieving Net Zero emissions. Upon achieving this certification, organisations should focus on implementing their Net Zero strategy and transitioning towards the Net Zero Carbon certification, which requires achieving the set reduction targets and offsetting any residual emissions.

Having committed to achieving a 90% reduction across Scopes 1-3, organisations may add **Avoided Carbon Emissions Certification** to verify Scope 4 (avoided) emissions, quantifying how their solutions reduce emissions in customers' value chains through substitution of higher-carbon alternatives or enabling efficiency improvements."

Natural Carbon Solutions

Net Zero Carbon Organisation

Natural Carbon Solutions
Net Zero Carbon
Organisation

7.5 Net Zero Carbon

About this Certification

The Net Zero Carbon certification demonstrates that an organisation has successfully achieved its Net Zero emissions targets across its entire value chain. This certification provides recognition that an organisation has significantly reduced emissions across their Scope 1, 2, and 3 emissions from their measured baseline and has offset all residual emissions during the chosen reporting year using high-quality carbon removal credits.

This certification can be complemented by **Avoided Carbon Emissions Certification** to provide comprehensive recognition of your organisation's total climate contribution—both reducing your own footprint and enabling reductions for others.

Certification Requirements:

1. **Carbon Footprint Measurement:**

    - Comply with all requirements of the Carbon Measured certification for Organisations: conduct a full Scope 1-3 footprint measurement for all relevant emissions categories in accordance with ISO 14064 and the GHG Protocol.

2. **Achievement of Net Zero Targets:**

    - Demonstrate that absolute Scope 1 and 2 emissions have been reduced by a minimum of 90% against the measured baseline.

    - Achieve reductions in line with a science-based reduction pathway. Commonly accepted science-based pathways are the Intergovernmental Panel on Climate Change (IPCC), the International Energy Agency (IEA), the Assessing lo-Carbon Transition (ACT) and the Science Based Targets Initiative (SBTi).

    - For Scope 3 emissions, if aligned with SBTi, the Organisation must demonstrate achievement of one of the following Scope 3 reduction targets:

        - Reduction of Scope 3 emissions intensity across the organisation by a minimum of 97% against the measured baseline.

        - Reduction of absolute Scope 3 emissions of the organisation by a minimum of 90% against the measured baseline.

3. **Implementation of Net Zero Strategy:**

    - Provide evidence of successful implementation of the Net Zero Carbon Action Plan developed during the Net Zero Carbon Committed phase.

    - Demonstrate that all technologically and economically feasible measures for emissions reduction across Scope 1, 2, and 3 have been implemented.

4. **Value Chain Innovation:**

   - Provide evidence of implemented innovative measures across the value chain that have contributed to Scope 3 emissions reductions.
   - Quantify the impact of these innovative measures on overall emissions reductions.

5. **Residual Emissions Offsetting:**

   - Offset any residual Scope 1, 2, and 3 emissions using high-quality carbon removal credits.
   - Ensure all purchased carbon credits meet the NCS carbon credit requirements
   - Provide evidence of the retirement of these credits.

6. **Transparency and Reporting:**

   - Clearly communicate the organisation's achievement of Net Zero status, including the scope and boundaries.
   - Provide a public disclosure of the full Scope 1-3 carbon footprint, reduction achievements, implemented strategies, and offsetting details.

7. **Monitoring and Verification:**

   - Demonstrate ongoing monitoring and reporting of GHG emissions across all scopes.
   - Engage NCS to verify the carbon footprint, reduction achievements, implemented strategies, and offsetting claims.

8. **Continual Improvement:**

   - Present a forward-looking plan for maintaining Net Zero status and further reducing any residual emissions.

9. **Certification:**

   - Upon successful verification of all requirements, NCS will issue the Net Zero Carbon certification.

Technical Standards:

This certification aligns with and incorporates the requirements from the following internationally recognised standards and protocols:

- ISO 14064: Quantification and reporting of greenhouse gas emissions and removals.
- GHG Protocol: International accounting and reporting framework for greenhouse gas emissions.
- Science Based Targets initiative (SBTi): Provides a clearly defined pathway for companies to reduce GHG emissions.
- ISO 14068: Guidelines for carbon neutrality

Emissions Measurement, Reporting, and Reduction:

To achieve Net Zero certification, the entity has demonstrated that it has implemented and achieved significant reductions in GHG emissions across all scopes. The following requirements have been met:

1. Scope 1 and 2 Emissions have been reduced in absolute terms by a minimum of 90% compared to the baseline year. Absolute emissions and reductions have been clearly reported and verified.

2. Scope 3 Emissions have been reduced using either absolute or intensity-based metrics, by either:

    - 97% in intensity terms, or,

    - 90% in absolute terms, compared to the baseline year.

    If intensity metrics were used for Scope 3:

    - The entity has justified how this approach led to a reduction in absolute global GHG emissions in the long term.

    - The chosen intensity metric was relevant to the organisation's activities and consistent with its business model.

    - Reductions aligned with relevant sector pathways, where available.

    Regardless of the approach used, the entity has quantified and reported absolute Scope 3 emissions and reductions.

3. The chosen methodology (absolute or intensity-based for Scope 3) was applied consistently across reporting periods. The entity has clearly specified which metric was used for each scope when reporting emissions and reductions. All emissions data, both absolute and intensity-based (if applicable), have been reported for full transparency. The achieved GHG emission reductions have met or exceeded the targets set in the entity's carbon management plan.

4. Any residual emissions across all scopes have been offset using high-quality carbon removal credits that meet NCS requirements.

NCS will assess the appropriateness of the chosen metrics and the justification provided as part of the verification process.

Validity and Recertification:

The Net Zero Carbon certification is valid for one year from the date of issuance. To maintain certification, organisations must annually:

- Recalculate their full Scope 1-3 carbon footprint
- Demonstrate maintenance of Net Zero status or further reductions in residual emissions
- Update their Net Zero maintenance strategy
- Offset any residual emissions with high-quality carbon removal credits
- Verify all data and claims with NCS

Next Steps:

Having achieved Net Zero Carbon status, organisations are encouraged to focus on maintaining this status, further reducing any residual emissions. Organisations should also play a leadership role in their industry, sharing best practices and encouraging others to pursue Net Zero targets.

Having achieved 90% absolute reductions across Scopes 1-3, organisations may add **Avoided Carbon Emissions Certification** to verify Scope 4 (avoided) emissions, quantifying how their solutions reduce emissions in customers' value chains through substitution of higher-carbon alternatives or enabling efficiency improvements.

Natural Carbon Solutions

Avoided Carbon Emissions Organisation

Natural Carbon Solutions **Avoided Carbon Emissions** Organisation

7.6 Avoided Carbon Emissions

About this Certification

The Avoided Carbon Emissions (Scope 4) Certification demonstrates that an organisation has accurately assessed, measured, and verified the Scope 4 (avoided) emissions through its products, services, or solutions. This certification provides organisations with the opportunity to showcase the positive climate impacts enabled beyond their own Scopes 1-3 operational boundaries, verifying their broader contribution to global decarbonisation efforts in accordance with international standards.

This certification is particularly valuable for organisations providing enabling technologies, renewable energy solutions, efficiency products, digital services, or any offerings that substitute higher-carbon alternatives. It recognises that many organisations contribute to global climate action not only through reducing their own operational footprint but by enabling emission reductions across their customers' value chains.

The certification employs rigorous comparative lifecycle assessment methodologies to quantify the difference between conventional baseline scenarios and the organisation's solutions, providing stakeholders with verified evidence of broader climate contributions that complement traditional Scopes 1-3 carbon management with comprehensive Scope 4 assessment.

Certification Requirements:

1. **Carbon Footprint Measurement:**
   - Comply with all requirements of the Carbon Measured certification for Organisations
   - Conduct a full Scope 1-3 footprint measurement in accordance with ISO 14064 and the GHG Protocol
   - Maintain clear separation between operational footprint (Scopes 1-3) and Scope 4 avoided emissions assessment

2. **Avoided Emissions Assessment:**
   - Conduct comprehensive Scope 4 assessment of emissions avoided through the organisation's products, services, or solutions
   - Apply the GHG Protocol's "Estimating and Reporting the Comparative Emissions Impacts of Products" as the primary methodological framework
   - Document complete lifecycle comparative reference scenarios for each product or service category
   - Ensure calculations are based on conservative assumptions with appropriate sensitivity analysis
   - Cover at least 75% of the organisation's total potential avoided emissions sources by revenue or another appropriate metric

3. Methodology and Boundaries:

- Clearly distinguish Scope 4 boundaries from traditional Scopes 1-3 organisational boundaries
- Define clear functional units for each product or service category in accordance with GHG Protocol guidance
- Establish appropriate system boundaries encompassing all relevant lifecycle stages (manufacturing, distribution, use, end-of-life)
- Document all key assumptions with supporting evidence from credible sources
- Apply conservative estimation methods where data gaps exist, clearly documenting limitations
- Define time periods over which avoided emissions are calculated, typically aligned with product/service lifecycles
- Consider geographical variations in baseline scenarios and emission factors

4. Baseline Scenario Development:

- Identify the most likely alternative technology, practice, or behaviour that would occur without the organisation's solution
- Use market research, technology assessments, and industry data to support baseline assumptions
- Ensure baseline scenarios are conservative, transparent, and aligned with current market realities
- Document technological, economic, and behavioural factors influencing baseline selection
- Plan for regular baseline scenario updates to reflect technological advancement and market changes

5. Scope Boundary Definition and Attribution:

- Scope Boundary Documentation: Clearly document the relationship between Scopes 1-3 operational boundaries and Scope 4 assessment boundaries, explaining how Scope 4 methodology differs from organisational carbon accounting approaches and preventing any overlap or double-counting between traditional footprint and avoided emissions
- Value Chain Attribution and Double-Counting Prevention: Develop transparent approach to value chain attribution using GHG Protocol guidance, documenting methods to prevent double-counting of avoided emissions both between Scopes 1-3 and Scope 4, and across the Scope 4 value chain
- Conservative Allocation and Tracking: Apply conservative allocation when Scope 4 attribution is shared with partners, suppliers, or customers, implementing tracking systems to ensure avoided emissions are not claimed by multiple parties
- Scope 4 Classification: Clearly distinguish between direct Scope 4 emissions (from product use) and enabling Scope 4 emissions (from system-wide changes), providing evidence that boundaries are appropriate and align with the organisation's actual influence and contribution

6. Market Implementation Analysis:

- Base calculations on actual market uptake and use patterns rather than theoretical potentials
- Document market penetration data and adoption rates with appropriate evidence
- Consider real-world implementation factors including user behaviour, maintenance practices, and rebound effects
- Account for regional variations in market conditions and baseline technologies
- Provide evidence of actual deployment and performance data where available

7. Uncertainty Analysis:

- Conduct and report quantitative uncertainty analysis of all datasets used in Scope 4 avoided emissions inventory
- Use the NCS Uncertainty Analysis Tool to quantify uncertainty in line with established methodologies
- Apply uncertainty assessment to both baseline scenarios and comparative solution performance
- Document how uncertainty results will be addressed in subsequent assessments
- Prioritise improvement of data sources with highest uncertainty contributions

8. Compliance with Standards:

- Calculate and report avoided emissions strictly in accordance with GHG Protocol's "Estimating and Reporting the Comparative Emissions Impacts of Products"
- Apply ISO 14064-2 principles for quantification, monitoring, and reporting of emission reductions
- Incorporate ISO 14040/14044 lifecycle assessment principles for system boundary definition and impact assessment
- Align with relevant sector-specific standards and methodologies where applicable
- Demonstrate compliance with international best practices for avoided emissions quantification
- Demonstrate alignment between Scope 4 methodology and established Scopes 1-3 carbon accounting principles

9. **Transparency and Reporting:**

- Clearly communicate the organisation's Scope 4 avoided emissions assessment, including scope, boundaries, and methodologies used
- Use NCS's provided standardised reporting template, detailing baseline scenarios, comparative assessments, and resulting avoided emissions
- Include appropriate context for avoided emissions claims, including limitations, uncertainties, and assumptions
- Provide sector-specific breakdowns and performance metrics relevant to stakeholder needs
- Ensure all public communications align with verified assessment results

10. **Verification Process:**

- Submit complete assessment documentation through the Vero platform
- Engage NCS to verify avoided emissions assessment, methodological compliance, and all supporting data
- Address all verification findings before certification issuance
- Provide evidence of ongoing monitoring and data collection systems
- Demonstrate capacity for annual recertification and continuous improvement

Technical Standards:

This certification aligns with and incorporates requirements from the following internationally recognised standards and protocols:

- GHG Protocol: "Estimating and Reporting the Comparative Emissions Impacts of Products" (primary standard)
- GHG Protocol: "Guidelines for Quantifying GHG Emission Reductions from the Use of Sold Products" (supporting standard)
- ISO 14064-2: Specification for quantification, monitoring, and reporting of greenhouse gas emission reductions
- ISO 14040/14044: Environmental management — Life cycle assessment principles and framework
- ISO 14067: Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification
- Relevant sector-specific standards (where applicable)

Scope 4 Relationship to Traditional Carbon Accounting:

- Scopes 1-3: Direct and indirect emissions from organisational operations
- Scope 4: Emissions avoided in the broader economy through the organisation's products and services
- Methodological Distinction: Scope 4 uses product-focused lifecycle assessment rather than organisational carbon accounting
- Complementary Reporting: Scope 4 results reported alongside, not instead of, traditional Scopes 1-3 footprint"

By adhering to these standards, your organisation ensures that its avoided emissions claims are robust, credible, and internationally recognised.

Scope 4 (Avoided Emissions) Measurement, Reporting, and Verification:

The entity shall follow a structured approach to measuring, reporting, and verifying avoided emissions:

1. **Baseline Definition and Validation:**
    - Define clear and realistic baseline scenarios representing what would occur without the entity's product or service
    - Document technologies, processes, or behaviours used in baseline scenarios with supporting market evidence
    - Ensure baseline assumptions are conservative, transparent, and aligned with market realities
    - Validate baseline scenarios through industry consultation, market research, and peer review
    - Update baseline scenarios regularly to reflect technological advancement and market changes
    - Consider multiple baseline scenarios where market conditions vary significantly
2. **Comparative Assessment Implementation:**
    - Ensure functional equivalence between baseline and the organisation's solution across all relevant performance criteria
    - Apply consistent system boundaries and calculation methodologies across scenarios
    - Consider full lifecycle impacts including raw material extraction, manufacturing, distribution, use, and end-of-life phases
    - Document all material differences between baseline and comparative scenarios
    - Account for auxiliary systems, infrastructure, and supporting technologies
    - Address temporal variations in performance and emissions over product lifecycles

3. **Calculation Approach and Quality Assurance:**

- Calculate avoided emissions as the difference between baseline emissions and solution emissions
- Apply appropriate allocation methods where multiple entities contribute to the avoidance
- Document all calculation steps, data sources, emission factors, and assumptions used
- Present results with appropriate uncertainty ranges and contextual information
- Implement quality assurance procedures including independent data verification and peer review
- Validate calculations through sensitivity analysis and scenario testing

4. **Reporting Requirements and Communication:**

- Clearly specify reference units and functional units for each calculation
- Document calculation methodologies, key assumptions, limitations, and uncertainties
- Report both gross and net avoided emissions where applicable
- Communicate results in context of the organisation's overall carbon footprint and sustainability strategy
- Provide sector-specific performance indicators and benchmarking data
- Include visual representations and case studies to enhance stakeholder understanding

5. **Communication Guidelines and Claims Management:**

- Ensure all public claims about avoided emissions are supported by verified calculations
- Provide appropriate context and limitations when communicating results to avoid misleading stakeholders
- Avoid claims about "carbon neutrality" or "carbon positive" status based solely on avoided emissions
- Use NCS-approved terminology and presentation formats consistently
- Distinguish clearly between Scopes 1-3 operational footprint reduction and Scope 4 enabled avoided emissions
- Align communications with broader sustainability commitments and science-based targets

The entity shall document how avoided emissions calculations align with its broader carbon management strategy, while maintaining clear separation between its own footprint reduction efforts and enabled avoided emissions contributions.

Validity and Recertification:

The Avoided Carbon Emissions Certification is valid for one year from the date of issuance. To maintain certification, organisations must annually:

- Recalculate their full Scope 1-3 carbon footprint using current NCS requirements
- Update Scope 4 avoided emissions assessment with current market data, technology performance, and adoption rates
- Review and refine baseline scenarios to reflect technological and market developments
- Demonstrate continuous improvement in data quality and methodological sophistication
- Address any changes in product offerings, market conditions, or regulatory environment
- Verify all data and claims with NCS through the established verification process

Next Steps:

Upon achieving Avoided Carbon Emissions Certification, organisations are encouraged to:

1. **Expand Assessment Scope:**
    - Consider expanding the scope of products and services included in the assessment to capture additional avoided emissions opportunities
    - Develop more detailed sector-specific methodologies for key product categories
    - Explore innovative approaches to quantifying avoided emissions from emerging technologies
2. **Enhance Technical Capabilities:**
    - Invest in enhanced data collection and monitoring systems to reduce calculation uncertainty
    - Develop internal expertise in lifecycle assessment and comparative impact methodologies
    - Collaborate with suppliers and customers to improve data quality across the value chain
3. **Strategic Integration:**
    - Integrate Scope 4 avoided emissions considerations into product development and innovation processes
    - Use avoided emissions insights to guide investment decisions and strategic planning
    - Align avoided emissions strategy with broader sustainability commitments and science-based targets

4. **Knowledge Sharing and Leadership:**

   - Share case studies and methodological insights through the NCS Alumni Network to advance best practices
   - Participate in industry initiatives to standardise avoided emissions methodologies
   - Engage with customers and stakeholders to promote understanding of broader climate contributions

5. **Continuous Improvement:**

   - Explore strategies to increase the climate benefits of existing products and services
   - Investigate new market opportunities where avoided emissions potential is significant
   - Consider how avoided emissions achievements can inform future product development priorities

This certification provides organisations with rigorous, standardised verification of their broader climate contributions, complementing existing carbon reduction efforts with recognised acknowledgement of enabled Scope 4 emissions reductions throughout the value chain. It represents a sophisticated approach to demonstrating comprehensive climate leadership that extends beyond operational boundaries to encompass the full spectrum of an organisation's contribution to global decarbonisation.

8. Low Carbon Pathway Tool

The Natural Carbon Solutions (NCS) Low Carbon Pathway Tool is an integral part of the NCS Certification process, guiding all reporting entities (Organisations, Products, Events, Buildings) in strategically planning and prioritising carbon reduction activities across their operations and value chains.

This structured, sector-agnostic approach, accessible through the Vero Platform, provides entities with clear guidance on prioritisation via a simple Impact vs. Influence matrix, complemented by additional practical criteria and innovative enhancements.

Step 1: Define Activities

- Clearly define organisational boundaries and activities in line with NCS Carbon Measured certification requirements.
- Utilise predefined or custom categories relevant to your entity within the Vero Platform.

Step 2: Quantify Emissions

Report carbon emissions for each identified activity, expressed typically as tCO2e per year, categorising these emissions based on impact:

- **High Impact:** Activities significantly above the average emissions across all categories.
- **Medium Impact:** Activities around average emissions.
- **Low Impact:** Activities below average but greater than 1% of total emissions.
- **Negligible Impact:** Activities contributing less than 1% of total emissions.

Step 3: Assess Influence

Classify each activity based on your entity's level of influence or control:

- **High Influence:** Entity has full or substantial control over emission sources.
- **Medium Influence:** Entity has partial control or significant influence.
- **Low Influence:** Entity has limited or indirect influence.
- **No Influence:** Entity has no direct control or influence.

Step 4: Prioritise Reductions (Impact vs. Influence Matrix)

Plot activities using the simplified Impact vs. Influence matrix within the Vero Platform to clearly identify immediate and longer-term priorities:

	High Influence	Medium Influence	Low/No Influence
High Impact	Immediate Priority	Near-term Priority	Long-term Action
Medium Impact	Near-term Priority	Near-term Priority	Long-term Action
Low/Negligible	Long-term Action	Long-term Action	Monitor Only

Note: consider high-quality carbon offsetting as an option within this matrix, especially when offsetting might deliver greater emissions reductions per pound spent compared to internal actions. Additionally, consider how your products or services enable emissions reductions elsewhere, which can be verified through Avoided Carbon Emissions Certification to demonstrate broader climate impact.

Step 5: Additional Practical Criteria

After initial prioritisation, you shall consider the following criteria within the Vero Platform to refine action selection:

- **Cost-effectiveness:** Identify actions providing the greatest emissions reductions per investment.
- **Ease of Implementation:** Prioritise actions that are easiest and quickest to operationalise.
- **Strategic Alignment:** Select measures closely aligned with organisational strategy, regulatory requirements, or stakeholder expectations.

These criteria will assist you in efficiently selecting among multiple actions within each priority level.

Step 6: Set Reduction Targets

Clearly define within the Vero Platform:

- Annual reduction targets for each prioritised action.
- Specific timelines for meeting these targets.
- Documentation of reduction actions and supporting calculations for NCS review.

Step 7: Monitor Progress and Adapt

- Regularly update emissions data within the tool to track performance against reduction targets.
- Annually review and adapt your prioritisation and reduction strategies to ensure continuous improvement.

Step 8: Predictive Emissions Scenario Planning

Utilise the Predictive Emissions Scenario Module within the Vero Platform to:

- Model potential future emissions scenarios using historical data and projected business growth.
- Assess the effectiveness of various reduction pathways, enabling informed and proactive strategic decision-making.

Step 9: Climate Resilience Assessment

Perform a simplified Climate Resilience Assessment within the Vero Platform to:

- Quickly evaluate key climate-related physical and transitional risks relevant to your operations.
- Integrate resilience insights into your carbon reduction planning seamlessly, without introducing complexity or significant additional costs.

You are also encouraged to explore the "Decarbonisation Innovation Hub" within the NCS Alumni Network for peer insights, case studies, and innovative solutions to further enhance your sustainability strategy.

Alignment with International Standards

This tool explicitly aligns measurement and prioritisation of emissions with ISO 14064-1:2018 and the GHG Protocol Corporate Standard. Clear references and guidance are provided within the Vero Platform to ensure transparency and adherence to best practices.

By employing this structured yet comprehensive approach, you will effectively prioritise carbon reduction efforts, ensuring meaningful progress that consistently aligns with international standards.

9. Uncertainty Analysis Tool

The Uncertainty Analysis Tool is a crucial component in calculating the carbon footprint inventory uncertainty, aligning strictly with the GHG Protocol's established methodology. All reporting entities shall use this tool as part of the certification process to ensure ongoing improvements in data quality and accuracy of footprint measurements. The following enhanced guidance complements this robust and compliant approach:

Methodology

You shall follow the GHG Protocol-compliant methodology, calculating parameter uncertainty based on Data Quality Indicators (DQIs). Activity data and emission factor uncertainties shall be evaluated separately, using Taylor series expansion for uncertainty propagation.

Process

You shall:

- Define inventory activities clearly in alignment with Carbon Measured certification and your carbon reduction plan.
- Specify the use of primary or secondary data.
- Assign Basic Uncertainty numerical factors according to GHG Protocol guidance.
- Evaluate data quality for activities and emission factors using provided DQI tables.
- Report carbon emissions for each activity in tCO2e/year to weight the data quality.
- For organisations pursuing **Avoided Carbon Emissions Certification**, apply the same uncertainty analysis methodology to avoided emissions datasets using comparative lifecycle assessment data quality indicators.

Data Quality Indicator

	Data Quality Indicator				
	Technology	**Time**	**Geography**	**Completeness**	**Reliability**
Very Good	Data generated using the same technology	Data with less than 3 years of difference	Data from the same area	Data from all relevant sites over an adequate time period to even out normal fluctuations	Verified data based on measurements
Good	Data generated using a similar but different technology	Data with less than 6 years of difference	Data from a similar area	Data from more than 50 percent of sites for an adequate time period to even out normal fluctuations	Verified data partly based on assumptions or non-verified data based on measurements
Fair	Data generated using a different technology	Data with less than 10 years of difference	Data from a different area	Data from less than 50 percent of sites for an adequate time period to even out normal fluctuations or more than 50 percent of sites but for a shorter time period	Non-verified data partly based on assumptions, or a qualified estimate (e.g. by a sector expert)
Poor	Data where technology is unknown	Data with more than 10 years of difference or the age of the data are unknown	Data from an area that is unknown	Data from less than 50 percent of sites for shorter time period or representativeness is unknown	Non-qualified estimate
N/A	-	-	-	-	-

Materiality Thresholds

You shall identify and address uncertainty thresholds (e.g., uncertainty exceeding 10-15%), prioritising areas for improved data collection methods or measurement technologies.

Annual Uncertainty Improvement Reporting

You shall explicitly document annual uncertainty improvements within your carbon footprint report, specifying actions undertaken to enhance data quality and their quantifiable impacts.

Linking Uncertainty to Reduction Planning

You shall integrate uncertainty analysis outcomes into your Low Carbon Pathway planning, prioritising actions that significantly improve data accuracy to support more effective emission management decisions.

Qualitative Uncertainty Commentary

You shall optionally include qualitative commentary in your uncertainty analysis, explaining uncertainties not fully captured quantitatively, enhancing transparency and stakeholder understanding.

Supporting Tools within Vero

You shall utilise the Vero Platform for:

- Dynamic Uncertainty; visually track uncertainty changes year-on-year, clearly identifying progress and highlighting areas requiring attention.
- Additional guidance on the practical implementation of uncertainty analysis methodologies.

Continuous Improvement

You shall consistently strive to improve data quality and reduce uncertainties, ensuring carbon footprint measurements become increasingly accurate, reliable, and aligned with international standards.

By adopting these enhanced requirements alongside the robust GHG Protocol methodology, you will significantly enhance the practical value of uncertainty analysis, driving continuous data quality improvements essential for effective carbon management.

10. Natural Carbon Solutions (NCS) Alumni Network

The Natural Carbon Solutions (NCS) Alumni Network provides ongoing support and value to entities that have completed their carbon footprint verification. The network fosters credibility, facilitates strategic knowledge sharing, and encourages meaningful collaboration, driving continuous progress in sustainability and decarbonisation.

Recognising the importance of balancing public transparency with private confidentiality, the Alumni Network offers distinct public and private resources, ensuring alumni maintain control over their information while maximising their sustainability impact.

Public-Facing Platform

The public component ensures transparent communication of carbon footprint outcomes, allowing stakeholders and the wider public to easily verify and appreciate each entity's sustainability achievements. Key features include:

- **Public Disclosure Dashboard:** Clear, verified summaries of high-level carbon footprint data.
- **Certification Verification System:** Quick and straightforward validation of certification status.
- **Alumni Highlight Pages:** Professionally presented profiles highlighting sustainability milestones and commitments, enhancing visibility and stakeholder trust.

Private Members Area

The exclusive private platform offers alumni access to valuable resources and structured collaboration opportunities, carefully curated and facilitated by the NCS team:

Recognition and Credibility

- **Annual NCS Sustainability Awards:** Celebrating outstanding alumni achievements in sustainability innovation, emissions reduction initiatives, and data quality excellence.
- **Digital Certification Badges:** Official digital badges affirming sustainability leadership, suitable for professional sharing and recognition.

Strategic Knowledge Sharing

- **Quarterly Insights Summary:** Concise, curated updates featuring practical insights, emerging trends, and best practices relevant to decarbonisation.
- **Expert Q&A Library:** A structured repository of strategic insights captured from prior expert sessions, ensuring ongoing value from collective expertise.
- **Scope 4 Impact Studies:** Examples of how alumni organisations are quantifying and communicating their broader climate contributions through products and services that enable emissions reductions across value chains.

Facilitated Peer Collaboration

- **Structured Virtual Roundtables:** Regular, NCS-hosted discussions providing targeted forums to collaboratively address specific sustainability challenges, exchange practical solutions, and share experiences among alumni peers.

Success Story Showcase

- **Case Study Library:** Regularly featured case studies illustrating tangible sustainability successes achieved by alumni, serving as both inspiration and practical reference.

The NCS Alumni Network offers a collaborative environment designed to empower and inspire continuous sustainability advancement, strengthening alumni impact and innovation.

10.1 Certification Disclosure Requirements

NCS Certification	Alumni Disclosure Requirements
	• Organisation name • Business sector • Total measured footprint for NCS reporting year • Explanation of any emission exclusions from the assessment (where applicable) • Disclosure of issued NCS label
	• Evidence that the organisation has achieved the necessary reduction requirements to achieve the Carbon Efficient certification • A list of the carbon reduction measures that have been implemented across the organisation prior to successful issuance of the NCS Carbon Efficient certification
	• The reporting year for which a Carbon Neutral certification has been issued for • Summary of the carbon reduction plan • Details of the carbon credits purchased to achieve certification
	• The Net Zero targets that have been formally set across the organisation • How the reporting organisation intends to achieve Net Zero targets (i.e., publication of a Lower Carbon Action Plan)
	• The reporting year for which a Net Zero Carbon certification has been issued for • How the reporting organisation has achieved its Net Zero targets • Details of the carbon credits purchased to reach Net Zero certification

NCS Certification	Alumni Disclosure Requirements
Natural Carbon Solutions Avoided Carbon Emissions Organisation	• Brief summary of avoided emissions methodology applied • Total verified avoided emissions by product/service category • Key baseline scenarios and comparative technologies assessed • Market penetration data supporting avoided emissions calculations

11. Natural Carbon Solutions Offsetting Requirements

All reporting entities that purchase carbon credits shall meet quality standards to achieve NCS Certification. To ensure compliance with international best practices and the latest standards, including ISO 14068-1 and ICVCM guidelines, the following requirements must be met:

1. Eligible Carbon Credits

All carbon credits used for NCS Certification must originate from projects that:

- Are validated and verified by an independent third-party according to recognised international standards (e.g., VCS, Gold Standard, CDM, or ICROA Endorsed Standards).
- Demonstrate **additionality**: The project must prove that the carbon credits generated are additional to what would have occurred in the absence of the project. This includes financial additionality, ensuring that the project relied on carbon finance to be viable.
- Ensure **permanence**: The project must implement safeguards to prevent the reversal of carbon sequestration or reductions. In the case of potential reversals, the credits must be backed by buffer reserves or insurance mechanisms.
- Mitigate **leakage**: Projects must demonstrate that carbon reductions within the project boundary do not lead to increased emissions outside the project boundary.

2. Expiry and Retirement of Carbon Credits

All purchased carbon credits must be retired within 12 months of the transaction to maintain alignment with international standards and ensure that credits reflect the latest carbon footprint. Credits that exceed this timeframe must be retired, and new credits must be purchased to account for the current carbon footprint for re-certification with NCS.

3. Public Disclosure and Verification

Entities are required to:

- Publicly disclose the number and type of carbon credits purchased.
- Provide evidence that these credits meet the NCS quality standards and are aligned with ISO 14068-1 and ICVCM best practices.

4. Selection of Carbon Credits from Alternative Standards

NCS will consider carbon credits from standards not listed in ICROA Endorsed Standards or those that are not classified as NCS Carbon Credits on a case-by-case basis. Such credits must:

- Meet or exceed the requirements of ISO 14068-1 and ICVCM guidelines.
- Demonstrate compliance with all legal and regulatory requirements, including the proof of full and uncontested legal land title/tenure rights.
- Ensure that the project activities do not convert or degrade native ecosystems, and that they positively contribute to socio-economic benefits without negative impacts on human livelihoods or the environment.

5. Offsetting Hierarchy and Strategy

In line with ISO 14068-1:

- **Emission Reduction First:** Entities must prioritise actual emission reductions within their operations and value chain before relying on offsets. Offsetting should only address residual emissions that cannot be eliminated through reductions.
- **Removal Credits:** Over time, entities should transition towards carbon credits that focus on carbon removal (e.g., afforestation, reforestation, soil carbon sequestration), for residual GHG emissions all credits should be Removal credits.
- **No Double Counting:** Projects must ensure that carbon credits are not double counted, either within the country's national inventory or across different schemes. Credits must be clearly attributed to the purchaser, and registry systems should have mechanisms in place to prevent and correct any double counting or reversals.

6. Additional Requirements for 'High-Risk' Projects

For high-risk projects, such as those involving renewable energy in well-developed markets, entities must:

- Provide additional documentation to prove financial additionality, demonstrating that the project would not have occurred without carbon finance.
- Ensure that the project is implemented in regions where the grid mix remains dominated by fossil fuels, ensuring the relevance and impact of the carbon credits.

By adhering to these guidelines, entities will ensure that their carbon credit purchases, and offsetting strategies are not only compliant with NCS standards but also reflect the latest and highest international best practices. This will support credible and effective carbon neutrality claims, aligned with global efforts to mitigate climate change.

12. Standards used in Natural Carbon Solutions

The Natural Carbon Solutions certification scheme integrates requirements from multiple internationally recognised standards to ensure comprehensive compliance and methodological rigour. The following table details the standards applied across different certification pathways:

Standard	Publication Date	Last Updated	Summary of Standard	NCS Application	NCS Compliance
Greenhouse Gas (GHG) Corporate Accounting and Reporting Standard	2001	2004	The most widely used international framework for organisational greenhouse gas emissions inventory and reporting	All Organisation certifications	Full
GHG Protocol Corporate Value Chain (Scope 3) Standard	2011	2013	Provides requirements and guidance for companies to prepare and publicly report a corporate-level Scope 3 emissions inventory	All Organisation certifications	Full
GHG Protocol Product Standard	2011	2013	Provides requirements and guidance for quantifying and publicly reporting GHG emissions throughout the lifecycle of products	Avoided Emissions assessments	Full
GHG Protocol "Estimating and Reporting the Comparative Emissions Impacts of Products"	2019	2019	Primary methodological framework for quantifying avoided emissions through comparative lifecycle assessment	Avoided Emissions assessments	Full
ISO 14064-1	2006	2018	International standard specifying principles and requirements for quantifying and reporting greenhouse gas emissions and removals at the organisation level	All Organisation certifications	Full

Standard	Publication Date	Last Updated	Summary of Standard	NCS Application	NCS Compliance
ISO 14064-2	2006	2019	International standard specifying principles and requirements for quantification, monitoring and reporting of GHG emission reductions or removal enhancements	Avoided Emissions assessments	Full
ISO 14068-1	2023	2023	International standard outlining requirements for achieving and demonstrating carbon neutrality at organisation and product levels	Carbon neutrality pathways	Full
ISO 14040	2006	2020	Environmental management - Life cycle assessment principles and framework	Avoided Emissions assessments	Supporting
ISO 14044	2006	2020	Environmental management - Life cycle assessment requirements and guidelines	Avoided Emissions assessments	Supporting
ISO 14065	2013	2020	Requirements for greenhouse gas validation and verification bodies for use in accreditation	Verification processes	Methodological alignment
ISO 14066	2011	2011	Requirements for greenhouse gas validation and verification teams	Verification processes	Methodological alignment

Standard	Publication Date	Last Updated	Summary of Standard	NCS Application	NCS Compliance
Science Based Targets Initiative (SBTi) Corporate Net Zero Standard	2021	/	This standard provides recommendations and guidance towards setting corporate-level Net-Zero targets that can be verified through the SBTi.	Organisation	Full Corporate Compliance
PAS 2060 (Now superseded by ISO 14068)	2010	2014	PAS 2060 outlines how an organisation can demonstrate Carbon Neutrality.	Organisation	N/A

Notes:

- **Full Compliance:** NCS certification demonstrates complete adherence to all applicable requirements
- **Supporting:** Standards provide methodological guidance but are not primary compliance frameworks
- **Methodological Alignment:** NCS verification processes align with standards' principles without requiring direct certification

Ready to Begin Your Certification Journey?

Whether you're taking your first steps in carbon measurement or advancing towards being a low carbon organisation, Natural Carbon Solutions provides the verification frameworks and technical expertise to support your environmental leadership.

Our comprehensive certification pathways offer organisations the flexibility to demonstrate meaningful climate action aligned with international standards whilst supporting business growth. Contact our team today to discuss how NCS certification can enhance your sustainability strategy and position your organisation as a verified leader in carbon management.

Natural Carbon Solutions

About Natural Carbon Solutions

Natural Carbon Solutions is a leading independent carbon management certification and verification scheme, combining rigorous third-party verification with innovative methodologies that recognise the diverse ways organisations contribute to global decarbonisation. Since 2022, we have advanced carbon management beyond traditional compliance approaches, providing comprehensive frameworks that enable environmental leadership whilst supporting commercial excellence.

Through our ISO-certified verification processes, proprietary Vero platform, and expert verification team, NCS delivers internationally recognised certifications that meet the highest professional standards, empowering organisations across all sectors to demonstrate verified environmental achievements with confidence and credibility.