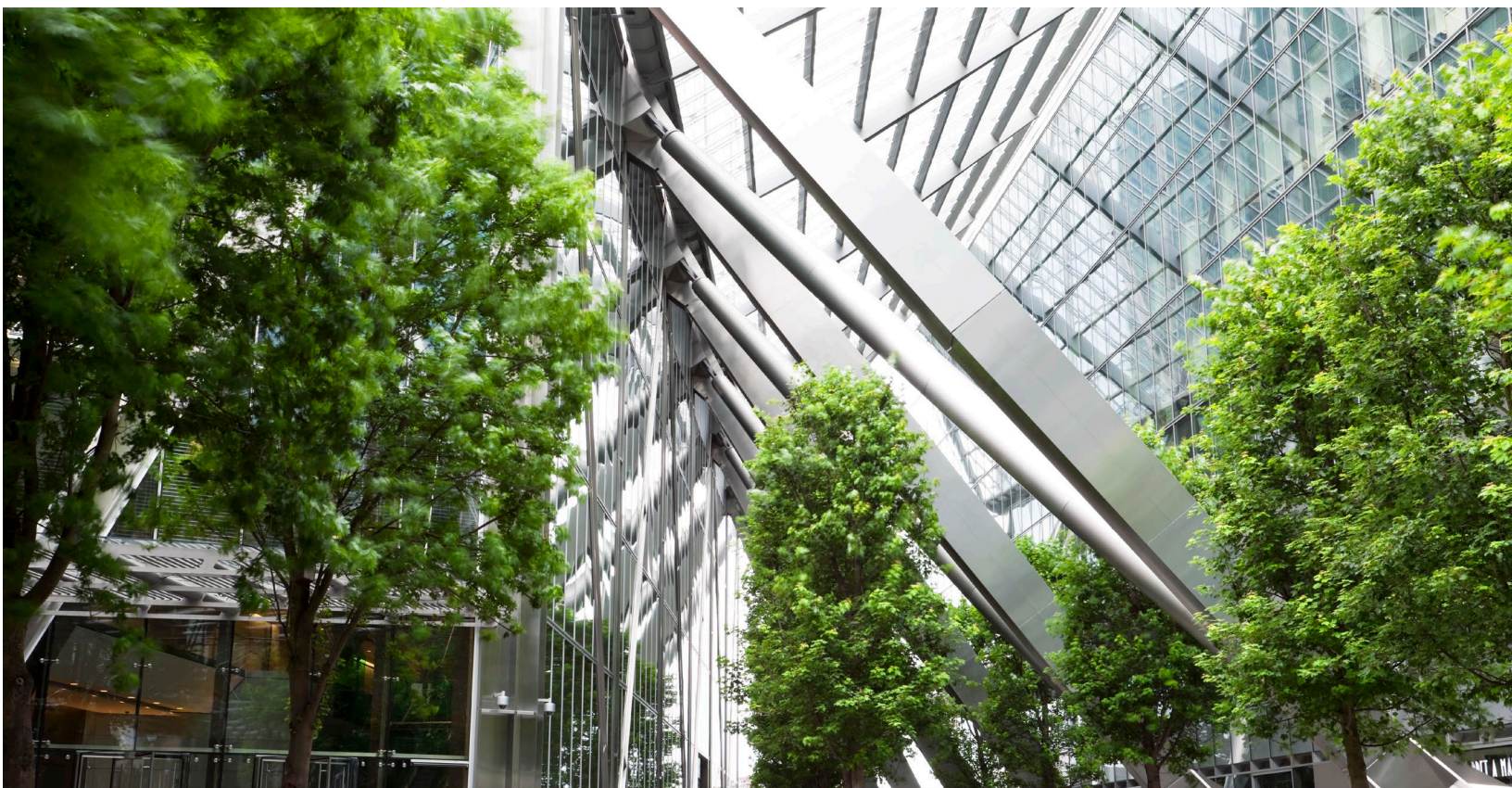




Certification Standard for Carbon Neutral Entities, Buildings, Products and Services

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SCS

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1. Introduction

1.1 Purpose

The purpose of this Standard is to establish the Carbon Neutral certification requirements for entities, buildings, products and services.

1.2 Scope

This Standard covers multiple pathways towards achieving Carbon Neutral certification for entities, buildings, products and services.

1.3 Intended Market

The Standard is applicable globally to entities, buildings, products or services for which certification as Carbon Neutral is sought.

1.4 Intended Users and Interested Parties

The intended users for the certifications generated under this Standard are businesses, government agencies, institutions, consumers, environmental advocacy organizations and other stakeholders.

2. References

References include:

- World Resources Institute/World Business Council for Sustainable Development's "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)" dated March 2004
- World Resources Institute/World Business Council for Sustainable Development's "The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard"
- World Resources Institute/World Business Council for Sustainable Development's "The Greenhouse Gas Protocol: Product Life Cycle Accounting and Reporting Standard"
- IPCC, 2013: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 1535 pp, doi:10.1017/CBO9781107415324
- Intergovernmental Panel on Climate Change. *Climate Change 2021: The Physical Science Basis*. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press. In Press.

- ISO 14040:2006 Environmental management – Life cycle assessment – Principles and framework
- ISO 14044:2006 Environmental management – Life cycle assessment – Requirements and guidelines
- ISO 14064-1:2018, Greenhouse gases – Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals
- ISO 14064-2:2019, Greenhouse gases – Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements
- ISO 14064-3:2019, Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions
- ISO 14065: 2013 Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition
- ISO 14067:2018 Greenhouse gases – Carbon footprint of products – Requirements and guidelines for quantification
- The Climate Registry (TCR) – General Reporting Protocol for the Voluntary Reporting Program, Version 2.1, January 2016
- PAS 2050:2011 “Specification for the Assessment of the Life Cycle Greenhouse Gas Emissions of Goods and Services.”
- Verified Carbon Standard – Version 4.0, September 2019

3. Terms and Definitions

The following definitions are used:

Applicant - The entity seeking to make claims about a specific subject (operations or products).

Carbon Footprint – Total sum of all GHG emissions and removals caused directly or indirectly by a subject. This is calculated over a defined period of time following a recognized GHG accounting methodology.

Carbon Neutral – For the subject under consideration, there is no net increase in emissions of GHGs for a specified period of time; hence, the sum for the subject’s carbon footprint minus the offsetting is equivalent to zero for a specified period of time.

Carbon Offset – A certificate representing the reduction of one tonne of carbon dioxide-equivalent emissions used to counteract emissions from the defined subject.

Certification Period – The duration of validity of a Carbon Neutral certification for a given subject.

Declaration of Achievement – Certification claim that an applicant can make once the third-party verifier has verified that Carbon Neutral has been achieved for the subject and assessment period under consideration.

Declaration of Commitment – The applicant can make a claim of Carbon Neutral Certification for the initial year or for the year following the Declaration of Achievement based on commitment to maintain the certification.

Emission Factor – A coefficient that allows for the conversion of a unit of activity (such as natural gas consumption) to the amount of GHGs emitted, expressed in carbon dioxide equivalents.

Entity – The applicant pursuing Carbon Neutral certification – e.g., regional or local government, community, organization, company, office, division, hotel, club and social group.

Global Warming Potential - The integrated change in radiative forcing (the perturbation of the Earth's atmospheric energy balance, which leads to warming) over a specified time-period following an emission pulse of a given climate pollutant, relative to the same quantity of CO₂.

Greenhouse Gases (GHG) – Gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, the atmosphere, and clouds.

Insetting – GHG mitigation activities that take place within the applicant's organizational boundary or supply chain that are used by the applicant to compensate for its own GHG emissions. This can include GHG reductions that are related either by production, geography or commodity.

Permanent – Adjective applied to emission reductions or removals that cannot be rereleased into the atmosphere. Where there is a risk of rereleasing emissions, measures must be taken to reduce the risk.

Qualifying Date – Date on which the Carbon Neutral claim has been or will be claimed.

Scope 1 – Source of GHG emissions that are owned or controlled by an applicant.

Scope 2 – Sources of GHG emissions from the generation of electricity, heat/cooling and steam that are consumed by the applicant but are generated by sources owned and controlled by another entity.

Scope 3 – Sources of GHG emissions that are indirectly related to the entity, buildings, products and services consistent with the definition in the GHG Protocol, "A Corporate Value Chain (Scope 3) Accounting and Reporting Standard."

Subject - The focus of the GHG emissions analysis, which can include products, services, buildings, projects, municipalities or other governmental jurisdictions, operations, activities and events.

Tonne – Metric ton (i.e., 1,000 kilograms or 2,204.6 pounds)

4. Certification Scope

4.1 Subject.

This Program covers the establishment for Carbon Neutral certification for the following subjects: entities, buildings, products and services.¹

4.2 Types and Levels of Certification

In order to add flexibility to claims of Carbon Neutral, this Standard allows for claims related to different types and levels of certification.

4.2.1 Entities

4.2.1.1 Carbon Neutral Certification – Scopes 1 and 2. Covers GHG inventory for all Scope 1 and 2 emissions (see Appendix C).

4.2.1.2 Carbon Neutral Certification – Operations. Covers GHG inventory for Scopes 1, 2 and select Scope 3 categories (see Appendix C).

4.2.1.3 Carbon Neutral Certification - Operations and Supply Chain. Covers GHG inventory for Scopes 1, 2 and all Scope 3 categories that are expected to exceed 1% of the total GHG inventory (see Appendix C), including at least 95% of the total GHG emissions.

4.2.2 Buildings

4.2.2.1 Carbon Neutral Certification – Scopes 1 and 2. Covers GHG inventory for all Scope 1 and 2 emissions (see Appendix C).

4.2.2.2 Carbon Neutral Certification – Operations. Covers GHG inventory for Scopes 1, 2 and select Scope 3 categories (see Appendix C).

4.2.2.3 Carbon Neutral Certification - Operations and Supply Chain. Covers GHG inventory for Scopes 1, 2 and all Scope 3 categories that are expected to exceed 1% of the total GHG inventory (see Appendix C), including at least 95% of the total GHG emissions.

4.2.3 Products

4.2.3.1 Carbon Neutral – Manufacturing Scope. Covers cradle-to-gate GHG inventory, including at least 95% of GHG emissions associated with the manufacture and packaging

¹ Examples of services eligible for Carbon Neutral certification include events, transportation, business travel and product distribution.

of a product, but excludes downstream GHG emissions from product distribution, product use and end of life.

- 4.2.3.2 **Carbon Neutral – Full Life Cycle Scope.** Covers cradle-to-grave GHG inventory, including at least 95% of GHG emissions associated with the manufacture and packaging of a product, as well as product distribution, product use and end of life.

4.2.4 Services

- 4.2.4.1 **Carbon Neutral Transportation – Scopes 1 and 2.** Covers GHG emissions from mode of transport vehicle operation only.
- 4.2.4.2 **Carbon Neutral Transportation – Scopes 1, 2 and 3.** Covers the full life-cycle GHG emissions from the manufacture, maintenance and operation of the mode of transport (e.g., automobile, plane, train, ship), accounting for at least 95% of the total GHG emissions for the transportation service.
- 4.2.4.3 **Carbon Neutral Distribution – Scopes 1 and 2.** Covers GHG emissions for transportation of a product from the point of origin to customers, as well as any emissions from product refrigeration during distribution if applicable.
- 4.2.4.4 **Carbon Neutral Distribution – Scopes 1, 2 and 3.** Covers the GHG emissions from manufacture of the mode of transport (e.g., automobile, plane, train, ship), maintenance, and operation, and distribution of a product from the point of origin to customers, accounting for at least 95% of GHG emissions. Any emissions from product refrigeration during distribution are included if applicable.
- 4.2.4.5 **Carbon Neutral Events – Scopes 1, 2 and 3.** Covers all activities prior to the event (e.g., planning, preparation), during the event, and after the event, accounting for at least 95% of GHG emissions. The carbon management plan for events must address the reduction of emissions during the event, but does not need to address the reduction of emissions over time.

4.3 Claim Declarations

The following claim declarations are acceptable under this Standard.

- 4.3.1 Declaration of Commitment
- 4.3.2 Declaration of Achievement
- 4.3.3 Declaration of Achievement with a Declaration of Commitment for the following year

5. Process for Achieving Certification

5.1 Define the Subject

The subject of the certification assessment is clearly defined by the applicant, including the name and a description of the subject boundary. The subject of the certification and subject boundary must be defined with sufficient transparency to identify what the applicant is including in the Carbon Neutral certification.

5.1.1 For certifications regarding entities or buildings, this description shall also include the number of facilities, divisions, offices, and operations included in the scope, along with their location(s).

5.1.2 For certifications regarding products, this description includes a sufficient description and supporting information to uniquely identify the product. This may require a defined scenario for the product use phase and disposal.

5.1.3 For certifications regarding services and activities, this description includes sufficient information to completely identify the service or activity.

5.2 Define the Type and Level of Certification to Support the Intended Claim.

The type and level of certification required to support the intended claim by the applicant shall be defined, as described in Section 4.2.

5.3 Identify the Subject GHG Emission Sources

The GHG inventory for the subject being assessed shall include emissions sources as specified based on the certification level selected by the applicant.

5.3.1 **Carbon Neutral for Entity.** The GHG emissions required to be included in the subject GHG inventory (e.g., Scopes 1, 2, 3) are described in Appendix C. An applicant can choose to include emission sources beyond the required sources; these additional sources shall be clearly identified by the applicant.

5.3.2 **Carbon Neutral for Building.** The GHG emissions required to be included in the subject GHG inventory (e.g., Scopes 1, 2, 3) are described in Appendix C. An applicant can choose to include emission sources beyond the required sources, and these should be clearly identified by the applicant.

5.3.3 **Carbon Neutral for Product.** The scope of the subject GHG emissions can include manufacture of the product only (cradle-to-gate GHG emissions) or the complete life cycle (cradle-to-grave GHG emissions). For certification assessments scoped to include the use phase and cradle-to-grave GHG emissions, the basis of the calculation of GHG emissions of the use phase and end-of-life shall be clearly defined.

5.3.4 **Carbon Neutral for Service.** Accounting for at least 95% of Scope 1, 2 and 3 GHG emissions is required.

5.4 Measure Subject GHG Emissions

5.4.1 **Carbon Neutral for Entity, Building and Service.** The GHG Inventory for the subject under evaluation shall be determined according to the requirements of *The Greenhouse Gas Protocol: Corporate Accounting and Reporting Standard*. The scopes included shall be clearly defined and disclosed.

5.4.2 **Carbon Neutrality for Product.** The subject's GHG emissions shall be developed in accordance with *The Greenhouse Gas Protocol: Product Life Cycle Accounting and Reporting Standard*, ISO 14067 or PAS 2050.

5.4.3 **Type of Data.** Data used to determine the GHG inventory shall be based on primary data unless the applicant can demonstrate it is not practical. If secondary data are used, an authoritative source relative to the subject must be available and cited unless otherwise justified.

5.4.4 **GWP.** All claims of Carbon Neutral should use the Global Warming Potential values for GHGs based on a 100-year horizon from IPCC 2021 AR-6 (i.e., GWP-100) as listed in Appendix A. The applicant can also elect to evaluate all GHG emissions using the Global Warming Potential Values over 20 years (i.e., GWP-20). This shall follow the IPCC-published Global Warming Potential values, referenced in Appendix A.

5.4.5 **Data Boundaries.** At least 95% of the GHG emissions shall be included. Any single data gap shall not exceed more than 1%. Data gaps may be filled with reasonable assumptions or proxy data.

5.5 GHG Inventory Verification (optional)

The completed GHG inventory and report should be independently verified to a reasonable level of assurance by a third-party verifier to ensure that the inventory is accurate, complete and conforms to the applicable GHG standard. An Assurance Statement is required, which affirms conformance to the appropriate standard for the claim.

5.6 Implement GHG Management Plan

5.6.1 For the initial certification period, certification for Carbon Neutral can be achieved solely through purchasing carbon offsets. In subsequent years, certification shall include a combination of reductions of direct GHG emissions and purchase of carbon offsets. This shall include a documented GHG Management Plan to manage and reduce GHG emissions of the subject.

5.6.2 The GHG Management Plan shall state the timescale and targets for achieving certification, along with mitigation measures, a statement of commitment (if applicable), and an offset strategy to be adopted.

5.6.3 The GHG Management Plan shall be signed by the Sustainability Manager or a senior representative from the company.

5.6.4 The GHG Management Plan shall be updated annually.

5.7 Purchase and Retire Carbon Offsets.

5.7.1 Once the GHG inventory has been completed and verified, sufficient carbon offsets shall be purchased and retired by the applicant. Sufficient is defined as the number of carbon offsets needed to meet or exceed all of the subject's measured emissions. GHG emission totals will be rounded up to the nearest metric ton. Only approved offset instruments described in Appendix B are allowed.

5.7.2 Insetting projects may be used for achieving Carbon Neutral certification only when the insetting project meets the requirements detailed in Appendix D.

5.8 Carbon Neutral Certification

5.8.1 The Subject will be eligible for Carbon Neutral certification for the qualifying assessment period if the quantity of the retired carbon offsets is equivalent to the GHG emissions inventory.

5.8.2 In support of the Declaration of Achievement of Carbon Neutral, an SCS Logo and Certificate of Certification will be provided to the applicant.

5.8.3 Verification of Carbon Neutral certification shall be completed annually.

5.9 Communication of Carbon Neutral Certification Claims

5.9.1 Claims of Carbon Neutral can only be made upon successful completion of the Carbon Neutral certification process.

5.9.2 For all claims of Carbon Neutral, the subject, certification, claim and scope of measured GHGs shall be disclosed on the Carbon Neutral certificate. The certificate shall be posted on the SCS website.

5.9.3 The SCS logo and certificate for Carbon Neutral may be used in advertising, literature, publicity, labels, and technical bulletins in printed or electronic media, subject to SCS trademark use guidelines.

5.9.4 Claims of Carbon Neutral may be made on a commitment basis for the following 12-month period, an achievement basis representing a prior 12-month period, or achievement with a commitment to the following 12-month period.

5.9.5 Annual recertification is required to maintain Carbon Neutral status.

Appendix A

Global Warming Potentials over 100-year and 20-year time horizons

The Global Warming Potential values evaluated using a 100-year time horizon are listed below, based on IPCC AR6 WG1 Chapter 7, Table 7.SM.7. These are allowed for projects which primarily target the long-lived GHGs.

Greenhouse Gas	GWP-100 Value from IPCC Sixth Assessment Report (AR6)	GWP-20 Value from IPCC Sixth Assessment Report (AR6)
Carbon Dioxide (CO ₂)	1	1
Methane (CH ₄)	27.2 for non-fossil origin, and 29.8 for fossil origin	81.2
Nitrous Oxide (N ₂ O)	273	273
Chlorofluorocarbons	See IPCC AR6 WG I, Chapter 8, Table 7.SM.7	See IPCC AR6 WG I, Chapter 8, Table 7.SM.7
Hydrofluorochlorocarbons	See IPCC AR6 WG I, Chapter 8, Table 7.SM.7	See IPCC AR6 WG I, Chapter 8, Table 7.SM.7
Chlorocarbons and Hydrochlorocarbons	See IPCC AR6 WG I, Chapter 8, Table 7.SM.7	See IPCC AR6 WG I, Chapter 8, Table 7.SM.7
Hydrochlorocarbons	See IPCC AR6 WG I, Chapter 8, Table 7.SM.7	See IPCC AR6 WG I, Chapter 8, Table 7.SM.7
Bromocarbons, hydrobromocarbons and halons	See IPCC AR6 WG I, Chapter 8, Table 7.SM.7	See IPCC AR6 WG I, Chapter 8, Table 7.SM.7
Fully fluorinated species	See IPCC AR6 WG I, Chapter 8, Table 7.SM.7	See IPCC AR6 WG I, Chapter 8, Table 7.SM.7
Halogenated alcohols, ethers, furans, aldehydes and ketone	See IPCC AR6 WG I, Chapter 8, Table 7.SM.7	See IPCC AR6 WG I, Chapter 8, Table 7.SM.7
Miscellaneous compounds	See IPCC AR6 WG I, Chapter 8, Table 7.SM.7	See IPCC AR6 WG I, Chapter 8, Table 7.SM.7

Appendix B

Approved Carbon Offsets

Carbon offsets must be tracked back to the original project(s) that led to GHG reductions or removal enhancements. If the original project cannot be identified, the carbon offset cannot be used as the basis of crediting.

In addition, for carbon offsets to be valid for achieving Carbon Neutrality, they shall meet the following criteria.

- Credits have been verified by a third-party verifier against an established protocol.
- Credits are generated from GHG reduction or removal enhancement projects.
- Projects generating the credits meet the criteria of additionality, leakage and double counting as defined in the WRI GHG Protocol for Project Accounting and/or ISO 14064:2.
- Credits shall be from emission reductions that are permanent.
- Credits shall be retired on a public registry.

Carbon offsets that meet the criteria above can be procured from the following systems. Carbon offsets from other systems can also be acceptable providing that they can be shown to meet the above criteria.

- Clean Development Mechanism (Certified Emission Reductions)
- Gold Standard
- Verified Carbon Standard
- American Carbon Registry
- Climate Action Reserve
- California Cap and Trade Compliance Offset Program

Carbon offsets are calculated on GWP-100 basis, and can in addition be calculated on a GWP-20 basis.

Appendix C

Entity GHG Emission Requirements

	Carbon Neutral Scopes 1 and 2	Carbon Neutral Operations	Carbon Neutral Operations and Supply Chain
Scope 1 Emissions	X	X	X
Scope 2 Emissions	X	X	X
Scope 3 Categories			
1. Purchased goods and services		O	X
2. Capital goods		X	X
3. Fuel- and energy related activities (not included in Scope 1 nor 2)		X	X
4. Upstream transportation and distribution (if owned by applicant)		X	X
5. Waste generated in operations		X	X
6. Business travel		X	X
7. Employee Commuting		X	X
8. Upstream leased assets		O	X
9. Downstream transportation and distribution (if owned by applicant)		X	X
10. Processing of sold products			X
11. Use of sold products			X
12. End-of-life treatment of sold products			X
13. Downstream leased assets			X
14. Franchises			X
15. Investments			X
X – Required; O – Optional			

Appendix D

Requirements for Acceptable Insetting Projects

Insetting projects are interventions along a company's value chain that are designed to generate GHG emissions reductions and/or carbon storage. The focus on location-specific mitigation actions generates multiple positive sustainable impacts.

- **Responsibility** – The applicant company must have provided a financial investment in the insetting project used for certification under this Standard. Double counting shall be avoided. To avoid double counting, only the carbon credits generated by the insetting project and purchased by the applicant company can be used to offset its emissions.
- **Project boundary** – In order for the insetting project to be applicable under this Standard, the location of investment shall be within the applicant's supply chain or supply chain communities (geographical region that is impacted by the supply chain activity).
- **Verification** – The insetting project shall generate carbon credits and shall be verified by an accredited third-party verifier.
- **Carbon offsets** – Insetting projects that generate carbon credits shall be meet the requirements of the following:
 - Additionality
 - Uniqueness
 - Measurability
 - Verifiability
 - Permanence



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