

Certification Standard for Carbon Neutral Entities, Buildings, Products, and Services SCS-108



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Record of Revisions

This Standard is periodically updated. It is the responsibility of the document reader to ensure use of the most current version of the document.

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1. Introduction

- 1.1 The purpose of this Standard is to establish certification requirements to achieve carbon neutral status.
- 1.2 This Standard allows for a stepwise approach to achieving carbon neutral certification.

2. Scope and Limitation

2.1 Scope

- 2.1.1 This Standard applies to:
 - Entities,
 - Buildings,
 - Products, and/or
 - Services.

2.2 Limitation

- 2.2.1 This Standard does not address safety, health, and performance concerns, if any, associated with the certified entity, building, product, and/or service.
- 2.2.2 This Standard does not address all environmental impact tradeoffs that may be associated with every scope or life-cycle phase. Therefore, there may be other environmental impact tradeoffs associated with the certified entity, building, product, and/or service.

2.3 Complaints and Appeals

- 2.3.1 A certification applicant has the right to appeal a certification decision within 30 days of receiving the final report. Appeals shall be submitted to the certification body for evaluation and resolution.
- 2.3.2 Complaints shall be handled directly by the approved certification body. If a satisfactory resolution is not found, a complaint may be elevated to SCS Standards.

3. References

3.1 Normative References

- SCS Standards Certification and Approval Requirements
- Requirements for Certification Bodies Offering Certification of SCS-108

3.2 Additional References

- 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/CB09781107415324
- 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 cycled 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."

4. Terms and Definitions

In this Standard, the following terms are used:

- "shall" indicates a requirement,
- "should" indicates a recommendation,
- "may" indicates a permission, and
- "can" indicates a possibility or a capability.

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 carbon 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 (CO_2e) emissions used to offset GHG emissions from the subject.

Certificate Holder. The entity that is certified to the SCS-108 standard.

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

Cradle-to-Gate. A partial product life cycle inventory that includes raw material extraction, upstream transportation and manufacturing stages.

Cradle-to-Grave. A full product life cycle inventory that includes raw material extraction, upstream transportation, manufacturing, downstream transportation, distribution/storage, use phase and product end of life.

Declaration of Achievement. Certification claim that an applicant can make once the third-party certification body has verified that Carbon Neutral has been achieved for the subject and certification 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 (CO₂e).

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 (GWP). 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 system 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. Emission reductions or removals that cannot be rereleased into the atmosphere. Where there is a risk of rereleasing emissions, emissions or removals are not considered permanent.

Qualifying Date. Date on which the Carbon Neutral Certification 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)

5. Certification Process

5.1 Define the Subject

- 5.1.1 The subject of the certification shall be clearly defined by the applicant, including the name and a description of the subject boundary.
- 5.1.2 The subject of the certification and subject boundary shall be defined with sufficient transparency to identify what the applicant is including in the Carbon Neutral certification.
- 5.1.3 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).
- 5.1.4 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.
- 5.1.5 For certifications regarding services and activities, this description includes sufficient information to completely identify the service or activity.

5.2 Identify Sources & Measure GHG Emissions

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

- 5.2.1 The GHG inventory for the subject being assessed shall include sources and quantified emissions according to the requirements specified in Table 1, 2, and/or 3 based on applicability to the subject (i.e., entity, building, product, and/or service) undergoing certification.
- 5.2.2 All applicants, regardless of subject or certification option, shall adhere to the following requirements for quantifying emission sources:
 - 5.2.2.1 **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.
 - 5.2.2.2 **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. GHG emission totals will be rounded up to the nearest metric ton.

- 5.2.2.3 **Data Boundaries**. Any emission source that is more than 1% of the total carbon footprint shall be included in the carbon footprint. Data gaps may be filled with documented assumptions or proxy data.
- 5.2.2.4 **GHG Inventory Scope**. GHG inventory measurements shall clearly disclose and define scope (i.e., Scope 1, 2, and/or 3).

Subject	Options	Scope 1	Scope 2	Scope 3	Measurement Requirements	
	А	Identify all Scope 1 and 2 GHG emissions sources.		Not included		
Entities	В			Operations : Identify applicable Scope 3 GHG emissions sources outlined in <u>Appendix C</u> that are expected to exceed 1% of the total GHG inventory.	The GHG Inventory for the subject under evaluation shall be calculated according to the	
or Buildings	C			Operations and Supply Chain: Identify applicable Scope 3 GHG emissions sources outlined in <u>Appendix</u> <u>C</u> that are expected to exceed 1% of the total GHG inventory, including at least 95% of the total GHG emissions.	requirements of "The Greenhouse Gas Protocol: Corporate Accounting and Reporting Standard."	

Table 1. Certification Requirements for Entities and/or Buildings

Table 2. Certification Requirements for Products

Subject	Options	Life Cycle Phases	Measurement Requirements
	A	Identify all cradle-to-gate* emissions sources from the life cycle stages that are expected to exceed 1% of the product carbon footprint.	The GHG Inventory for the subject under evaluation shall
Products	В	Identify all cradle-to-grave* GHG emissions sources from the life cycle stages that are expected to exceed 1% of the total product carbon footprint; including at least 95% of the total GHG emissions	requirements of "The Greenhouse Gas Protocol: Product Life Cycle Accounting and Reporting Standard", ISO 14067, or PAS 2050. For certifications 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.

*See terms and definitions to know which life cycle stages are included for cradle-to-gate and cradle-to-grave.

Subject	Options	Scope 1	Scope 2	Scope 3	Measurement Requirements
	A	Transportation: Identify GHGemissions sources from mode oftransport vehicle operation only.			
	В	Transportation : Identify full life cycle GHG emissions sources from the manufacture, maintenance, and operation of the mode of transport (e.g., automobile, plane, train, ship).			
	С	Distribution: Ide emissions source transportation o the point of orig as well as any en product refrigera distribution, if a	ntify GHG es for f a product from in to customers, nissions from ation during oplicable.	Not included	The GHG Inventory for the subject under evaluation shall be calculated according
Services	D	Distribution : Identify GHG emissions sources 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. Any emissions from product refrigeration during distribution are included if applicable.		of "The Greenhouse Gas Protocol: Corporate Accounting and Reporting Standard."	
	E	Events : Identify GHG emissions sources (outlined in <u>Appendix C</u>) from all activities prior to the event (e.g., planning, preparation), during the event, and after the event. The GHG 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.			

Table 3. Certification Requirements for Services

5.3 Verify GHG Inventory

5.3.1 The completed annual GHG inventory and report shall be independently verified to a "limited" level of assurance by a third-party verifier to ensure that the data are accurate, complete, and conform to the applicable external GHG standard. An Assurance Statement or report is required depending on how the applicant intends to use the verified GHG inventory.

5.4 Purchase and Retire Carbon Offsets

- 5.4.1 Initial certification to the SCS-108 Carbon Neutral Standard can be achieved solely through purchasing and retiring carbon offsets. Only approved offset instruments and insetting projects, described in Appendix B and Appendix D respectively, are allowed.
- 5.4.2 Once the GHG inventory has been completed and verified (sections 5.2 and 5.3), sufficient carbon offsets shall be purchased, and retired by the applicant.

Note: Sufficient is defined as the number of carbon offsets needed to meet or exceed offsetting all the subject's measured GHG emissions.

- 5.4.3 For all subsequent annual certifications, the certificate holder shall demonstrate:
 - 5.4.3.1 Reductions to its emissions through mitigation strategy and reduction measures are prioritized over the purchase and retirement of offsets,
 - 5.4.3.2 A reduction in emissions for the certified subject on an absolute or intensity basis,
 - 5.4.3.3 In case of product certification, a reduction in carbon emissions at the product-level, and
 - 5.4.3.4 The purchase and retirement of carbon offsets is sufficient.

5.5 Develop, Implement and Monitor a GHG Management Plan

- 5.5.1 Prior to initial certification and annually thereafter, applicants shall develop and implement a GHG Management Plan that includes the following, at minimum:
 - 5.5.1.1 GHG emissions sources, per scope,
 - 5.5.1.2 Records of GHG inventory calculations,
 - 5.5.1.3 Emissions reductions target(s), including timeline(s),
 - 5.5.1.4 Mitigation strategy and reduction measures implemented, and
 - 5.5.1.5 Carbon offset strategy.
- 5.5.2 The GHG Management Plan shall be signed by the Sustainability Manager or a senior representative from the company.
- 5.5.3 The GHG Management Plan shall be updated annually.
- 5.5.4 Progress against the GHG Management Plan shall be reported on annually.

6. Continual Improvement

- 6.1 The certificate holder shall work to reduce its GHG emissions over time through implementation of its GHG Management Plan.
- 6.2 Progress shall be reviewed and monitored by the certification body during annual audits.

7. Claims and Labelling

7.1 Claims

- 7.1.1 The following claim declarations are acceptable under this Standard:
 - 7.1.1.1 Declaration of Commitment can be made for the 12-months following initial certification,
 - 7.1.1.2 Declaration of Achievement can be made for the previous 12-month period, and
 - 7.1.1.3 Declaration of Achievement for the previous 12-month period with a Declaration of Commitment for the following 12-month period.
- 7.1.2 For all claims related to this Standard, the subject, certification, claim and scope of measured GHGs (as per Tables 1-3) shall be disclosed on the Carbon Neutral certificate.
- 7.1.3 Claims and logo usage shall be reviewed and verified by the certification body.

7.2 Labeling

7.2.1 General

- 7.2.1.1 All uses of the Certification Label or references to the certification on the product and in product advertising shall be conducted in conformance with U.S. Federal Trade Commission guidelines or other national guidelines if outside of the U.S.
- 7.2.1.2 The certificate holder shall comply with the requirements of the Labeling and Language requirements of the certification body at all times.

7.2.2 Private Label Claims

- 7.2.2.1 Private Label Customers are permitted to use the Certification Label as a pass-through certified claim only.
- 7.2.2.2 Private Label Users shall obtain permission for private label use from the approved certification body and may be subject to administrative fees for using the Certification Label.
- 7.2.2.3 The approved certification body shall manage and monitor private label usage.
- 7.2.2.4 Private Label Customers are not permitted to make any changes to the final product before it is sold or embellish the recycled content or other environmental claims associated with the product.

Appendix A: Global Warming Potential Values

The Global Warming Potential (GWP) values evaluated using a 100-year and/or 20-year time horizon are listed below in Table A1. 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	

Table A1. Global Warming Potential (GWP) Values for Select Greenhouse Gases

Appendix B: Approved Carbon Offsets

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

Appendix C: Scope 3 GHG Emissions Categories

Table C1 below shall be used to determine the applicable Scope 3 categories.

Note: Scope 1 and 2 emissions are required for all options and types of subjects undergoing certification.

Table C.1. Applicable Scope 3 Categories

	Option and Type of Subject Undergoing Certification			
Scope 3 Categories	Table 1, Option B: Carbon Neutral Operations*	Table 1, Option C: Carbon Neutral Operations and Supply Chain *	Table 3, Option E: Events	
1. Purchased goods and services	Required	Required	x	
2. Capital goods	Required	Required	Х	
3. Fuel- and energy related activities (not included in Scope 1 nor 2)	Required	Required	X	
4. Upstream transportation and distribution (if owned by applicant)	Required	Required	X	
5. Waste generated in operations	Required	Required	x	
6. Business travel	Required	Required	Х	
7. Employee Commuting	Required	Required	Х	
8. Upstream leased assets	Required	Required	Х	
9. Downstream transportation and distribution (if owned by applicant)	Optional	Required		
10. Processing of sold products	N/A	Required		
11. Use of sold products	N/A	Required		
12. End-of-life treatment of sold products	N/A	Required		
13. Downstream leased assets	N/A	Required		
14. Franchises	N/A	Required		
15. Investments	N/A	Required		

*Applicants shall include all scope 3 categories that are relevant.

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:
 - o Additionality
 - \circ Uniqueness
 - o Measurability
 - \circ Verifiability
 - o Permanence