



Preferred by Nature Carbon Footprint Management Standard Version 2.0

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Contact person:	Justin Rehn
Contact email:	jrehn@preferredbynature.org



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A. Introduction

Customers, investors, and the global community expect businesses to take on a leadership role in the fight against climate change. These expectations have led to demands for transparent sustainability reporting, fact-based claims, and climate stewardship across industries. Recognising the importance of reducing emissions in the private sector, this edition of the Preferred by Nature Carbon Footprint Management Standard aims to help organisations manage their corporate, product, and event carbon footprints in a systematic way. The standard may be used to evaluate and reduce GHG emissions, obtain third-party verification, and enhance responsibility.

The standard has been updated to align with leading corporate and product carbon footprint standards and methods, integrating ambitious GHG accounting with reduction and neutrality requirements. The standard builds upon elements of the GHG Protocol standards developed by the World Resource Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) as well as PAS standards developed by the British Standard Institute (BSI).

When an organisation's compliance with the Preferred by Nature Carbon Footprint Management Standard has been independently verified by Preferred by Nature, it may be issued a Preferred by Nature Carbon Footprint Management Verification Certificate. The certificate can then be used to demonstrate compliance with this standard. Preferred by Nature's Logo Usage Guide and the Carbon Communications Requirements listed in Annex VI specify how organisations can use the Preferred by Nature logo and make public claims about their verified status.

Public comment

The original NEPCon Carbon Management Footprint standard was developed through an extensive stakeholder consultation process, including two rounds of public consultation (March to August 2012 and April to June 2013). This version has been updated based on stakeholder feedback and has considered ISEAL Guidelines¹ during its development. The CFM standard is available to the public on Preferred by Nature's website, and comments are welcome outside official public consultation periods and will be considered in future revisions.

Standard effective date

Depending on the outcome of the stakeholder consultation, it is intended that the standard becomes effective beginning April 2020. Conformance with the new version is immediately required for new applicants, while existing certificate holders will have a one-year transition period from the date of publication of the new version to conform to the requirements. The standard will be reviewed at least once every three years.

¹ ISEAL Code of Good Practice for Setting Social and Environmental Standards Version 6.0 – December 2014.

B. Scope

This standard is applicable to any organisation that would like to reduce their climate impact by developing and implementing a carbon footprint management plan. It targets organisations wishing to reduce their carbon footprint or reach carbon neutrality through a combination of emissions reductions and carbon offsetting. The standard can be used for the following:

a. Corporate Carbon Footprint

The scope of the Corporate Carbon Footprint covers the legal entities or relevant holding companies included in the organisational scope.

b. Product Carbon Footprint

The scope of the Product Carbon Footprint covers the entire product life cycle, which may be reduced in certain cases as described in this standard.

c. Event Carbon Footprint

The scope of the Event Carbon Footprint includes the event life cycle and is applicable for a single event or for recurring events.

All aspects of this standard are normative, including the scope, standard effective date, references, terms and definitions, tables and annexes, unless otherwise stated.

The standard indicates when specific requirements are applicable only to *CORPORATE* or *PRODUCT*² footprint. A dedicated annex provides additional requirements for events and identifies applicable requirements in the main body of the standard.

Annex I outlines the accounting principles of carbon footprint management that shall also be adhered to when claiming conformance to this standard. In the case of third-party verification, compliance with these principles shall be evaluated throughout the standard, where applicable.

² Products here also include goods and services.

C. Normative requirements for Carbon Footprint Management

1. Quality requirements

1.1. Public Climate Policy statement

- 1.1.1. The Organisation shall have a written, publicly available Climate Policy statement, endorsed by the Organisation's leadership that covers, at minimum, the following aspects:
- the reasons for engaging in *carbon footprint management*;
 - identification of the *subject* and focus of the *carbon footprint* (e.g. carbon emissions reduction of corporation or product);
 - commitment to reduce the *carbon footprint* and/or achieve *carbon neutrality* of the *subject*;
 - commitment to conduct periodic quantified reporting on the *carbon footprint* as well as to evaluate performance against emissions reduction and offsetting targets, where applicable, set out in a *carbon footprint management plan*;
 - commitment to follow best practices and the principles of *accuracy, completeness, consistency* and *relevance* in carbon related calculations and reporting; and
 - commitment to *transparency* and to public disclosure of key data in relation to the Organisation's *carbon footprint* as well as its achievement of and progress towards carbon emissions reduction and *carbon neutrality*, where applicable.
- 1.1.2. The Organisation shall demonstrate that the Climate Policy is implemented and followed.

1.2. Responsibilities and competence

- 1.2.1. The Organisation shall appoint an individual or position with overall responsibility for conformance with all applicable requirements of this standard.
- 1.2.2. The appointed individual/position shall have sufficient authority and access to resources to ensure compliance with this standard.
- 1.2.3. All relevant staff shall demonstrate awareness of and competence in the Organisation's procedures relevant to fulfilling this standard.

1.3. Documentation

- 1.3.1. The Organisation shall document procedures covering the applicable elements of this standard.
- 1.3.2. The Organisation shall maintain records demonstrating conformance with this standard.
- 1.3.3. All relevant records as per the above indicator shall be retained for a minimum of 5 years.
- 1.3.4. PRODUCT FOOTPRINT ONLY: The Organisation shall keep records of all products sold with carbon claims.

1.4. Performance monitoring

- 1.4.1. The Organisation shall define, document, and implement performance monitoring to conduct periodic assessments of performance against compliance with this standard as well as the established carbon emissions reduction and any offset targets identified in the *carbon footprint management plan*.
- 1.4.2. The Organisation shall describe and justify departures from requirements of this standard, including achievement of reduction and offsetting targets, to demonstrate conformance.

- 1.4.3. The Organisation shall follow up on nonconformities to ensure compliance with this standard.

2. Defining the scope of the carbon footprint

2.1. Defining carbon footprint boundaries

- 2.1.1. CORPORATE FOOTPRINT ONLY: The Organisation shall define and justify the *organisational boundaries* of its *carbon footprint* to include all operations and activities owned by or under the *control* of the Organisation.
- 2.1.2. CORPORATE FOOTPRINT ONLY: The Organisation shall use the same approach for setting its *organisational boundaries* at each level or site to ensure the coherence of and consistency between consolidated *carbon footprint* data.
- 2.1.3. CORPORATE FOOTPRINT ONLY: The Organisation shall identify and list all applicable *direct* and *indirect emissions*³ associated with the Organisation's operations and activities across its value chain (see Annex II).
- 2.1.4. PRODUCT FOOTPRINT ONLY: The Organisation shall define the product, the service provided by the product⁴, and an appropriate *unit of analysis*.
- 2.1.5. PRODUCT FOOTPRINT ONLY: The Organisation shall define and justify all *emission* generating activities within the product *life cycle* (either *cradle-to-gate* or *cradle-to-grave*) *attributable* to the product. The Organisation shall illustrate emissions in a process map.
- 2.1.6. The Organisation shall include in its scope at minimum the required emissions sources indicated in Annex II for *corporate* and *product footprints*, respectively.
- 2.1.7. The Organisation shall define and describe the GHGs applicable to the scope of the *carbon footprint management system*. The Organisation shall, as a minimum, account for the 7 major GHGs: CO₂, CH₄, N₂O, HFCs, PFCs, SF₆ and NF₃.
- 2.1.8. Emissions that are projected to amount to less than 1% of the total *anticipated carbon footprint* may be left out⁵.
- 2.1.9. Emissions considered unfeasible to quantify or associated with unreasonably complicated or costly data collection may be left out in justified cases, provided total excluded emissions do not account for more than 5% of the total *anticipated carbon footprint*⁶.
- 2.1.10. To compensate for any excluded emission sources in 2.1.8 and 2.1.9, the Organisation shall allocate an *emission buffer* to the total *carbon footprint* that is proportionate to the excluded emissions.
- 2.1.11. Any excluded emissions, including carbon intensive activities that have been outsourced, shall be justified and documented.

³ The classification of *direct* and *indirect emissions by scopes* (see Glossary) is determined by the *financial* or *operational control approach* taken to determine *organisational boundaries* (Section 2.1.1).

⁴ If the service provided by the *final product* is unknown (e.g. *intermediate products*), the Organisation shall define the *unit of analysis* as the *reference flow*, or a value that is relevant for completing the GHG inventory.

⁵ This is also broadly referred to as "*materiality threshold*", set to ensure that very minor sources of emissions do not require the same treatment as more significant sources.

⁶ Note that the *anticipated carbon footprint* excludes the non-significant sources identified in 2.1.8.

2.2. Choosing a base year

- 2.2.1. The Organisation shall choose a *base year* for which verifiable emissions data are available and shall specify the reasons for their choice. In justified cases of significant, yearly fluctuations the Organisation may use an average over multiple years.
- 2.2.2. The *base year* shall not be set earlier than 24 months from when a decision is taken to engage⁷ in this *carbon footprint management system*.
- 2.2.3. In the event the Organisation already maintains a *base year* set no earlier than 24 months from when a decision is taken to engage in this *carbon footprint management system*, the existing *base year* along with any previous carbon reductions may stay in effect if the Organisation can demonstrate conformance with similar requirements as set forth herein.
- 2.2.4. The Organisation shall recalculate the *base year carbon footprint* when the following cases significantly change⁸ base year emissions data:
 - a) structural changes involving transfer of ownership or *control* of existing emission-generating activities or operations (due to mergers, acquisitions, and divestments or outsourcing and insourcing activities);
 - b) changes in *calculation methods* or improvements in the accuracy of *emission factors* or *activity data*;
 - c) discovery of significant errors, or several errors collectively significant; or
 - d) changes to categories or activities included in the *Scope 3 inventory*.
- 2.2.5. A recalculation of the *base year carbon footprint* shall NOT occur where the Organisation experiences *organic growth* or decline, such as an increase or decrease in production output, changes in product mix, and closures and openings of operating units that are owned or *controlled* by the Organisation.
- 2.2.6. The Organisation shall use the *base year carbon footprint* as a reference for tracking emissions and their reductions and, where applicable, *carbon offsets*, over time.

3. Calculation of carbon footprint

3.1. Identifying emission sources

- 3.1.1. The Organisation shall include in the *carbon footprint* calculations all emission sources identified in Annex II and determined by its *carbon footprint* boundaries.
- 3.1.2. The Organisation shall include *Scope 2 emissions* based on average energy generation *emission factors* for a defined geographic location (i.e. *location-based methods*) and when applicable based on emissions factors represented in *contractual instruments* with its energy provider (i.e. *market-based method*) (see Annex III)⁹.

⁷ This would be considered the date in which the agreement with Preferred by Nature is signed. For example, if the agreement is signed in 2020, 2018 reflects the earliest *base year*.

⁸ The change is considered significant when it results in a minimum of 10% over- or underestimation of the *base year carbon footprint*; however, a lower minimum *threshold* may be instituted by the Organisation.

⁹ On the occasion that none of the Organisation's energy-consuming facilities exist in areas where *market-based instruments* provide data, the Organisation need only report per the *location-based method*.

- 3.1.3. CORPORATE FOOTPRINT ONLY: The Organisation shall include additional *Scope 3 emissions*, beyond the minimum set forth in 2.1.6, when such emissions contribute significantly to the *anticipated carbon footprint*, may be feasibly reduced, increase risk exposure, influence stakeholders, are characterised as significant by sector guidance, or meet other relevant sector criteria.
- 3.1.4. CORPORATE FOOTPRINT ONLY: When applicable¹⁰, direct or indirect *biogenic CO₂ emissions* resulting from combustion or biodegradation shall be reported separately from other *emission scopes*. Any GHG removals may be reported but separately.
- 3.1.5. PRODUCT FOOTPRINT ONLY: When applicable, any biogenic emissions or *removals* and *land-use change impacts*¹¹ occurring in the *product boundary* shall be reported separately in the *inventory* results.
- 3.1.6. PRODUCT FOOTPRINT ONLY: The Organisation may include *biogenic carbon* stored in *final products* that is not released to the atmosphere based on the carbon stored in the product after the *100-year assessment period*. Assumptions and calculations of the *storage* profile shall be documented (see Annex VII).
- 3.1.7. *Avoided emissions* shall not be included in the *inventory* but may be reported separately.

3.2. Choosing calculation methods

- 3.2.1. The Organisation shall justify and document the chosen *method(s)* for calculating the *carbon footprint* (e.g. sector specific calculation tools, spreadsheets etc.).
- 3.2.2. Companies shall use the most accurate *calculation method* available to them.
- 3.2.3. In case updated *sector* or *product specific rules* exist, these should be applied¹².
- 3.2.4. *Carbon footprint* calculations shall be made exclusive of any purchases of *carbon offsets*.

3.3. Collecting emission data, choosing emission factors, and calculating results

- 3.3.1. The *carbon footprint* shall be based on *primary data* for all processes owned or operated by the Organisation. For any other process, including those involving *indirect emissions*, the Organisation shall use *primary data* if available and otherwise use *secondary data* from a relevant and authoritative source.
- 3.3.2. The Organisation shall identify and document the method for collecting emission data across the Organisation or the product *life cycle* as well as the sources of data, *emissions factors*, and any techniques used to collect data via sampling or estimation.
- 3.3.3. GHG emissions shall be calculated using *emission factors* from updated and reliable sources (e.g. government publications or industry guidelines) where quantifications are based on calculations (e.g. *activity data* is multiplied by an emission factor).
- 3.3.4. The Organisation shall use *emission factors* that are relevant to the activity concerned and current at the time of quantification (e.g. kgCO₂e per kWh for the year under calculation), whenever possible.

¹⁰ Here as well as 3.1.6, the relevance and significance of such emissions along with the availability of information should be considered by the Organisation. When emissions are shown as insignificant or related sources are not material to production processes, the Organisation may exclude such sources with justification.

¹¹ Until a standard and recognised methodology is available to calculate land-use impacts as well as biogenic emissions and removals, the Organisation must clearly document and justify calculation and accounting methods. This point pertains to both corporate and product inventories.

¹² e.g. ISO 16759 Quantifying and communicating the *carbon footprint* of print media products; Product Environmental Footprint Category Rules and Organisation Environmental Footprint Sector Rules.

- 3.3.5. The Organisation shall convert emissions data¹³ into CO₂ *equivalent* through *Global Warming Potential* (GWP) factors¹⁴.
- 3.3.6. The Organisation shall ensure that emissions reductions are not *double counted*¹⁵; this also applies to emissions reductions resulting from the Organisation's use of *renewable energy*.
- 3.3.7. The Organisation shall ensure that the use of any *energy attribute certificates* demonstrate real emissions reductions (as based on green or *renewable energy*) and that such reductions have not been achieved through *carbon offsets*.
- 3.3.8. CORPORATE FOOTPRINT ONLY: The *Carbon footprint* shall be expressed in emission *intensity terms* as an amount of *kgCO₂e* or *tCO₂e* per intensity unit (e.g. per staff member, service, sale) and in *absolute terms* as an amount of *tCO₂e*.
- 3.3.9. CORPORATE FOOTPRINT ONLY: The Organisation shall use the most appropriate intensity unit to indicate *emission intensity terms* and reductions in order to communicate transparently about their *carbon footprint* (e.g. for production organisations this would normally be a production unit; for service organisations this could be staff).
- 3.3.10. PRODUCT FOOTPRINT ONLY: The *carbon footprint* shall be expressed in relation to the specified *unit of analysis* in *kgCO₂e* or in *tCO₂e* (e.g. *kgCO₂e* per single production unit or per m³ of product) and in *absolute terms* as an amount of *tCO₂e*.

3.4. Allocations¹⁶

- 3.4.1. The Organisation shall avoid or minimise *allocations* where possible. This can be done by gathering additional product-specific data from value chain partners, developing models to estimate emissions related to products produced, subdividing a common process to distinguish product inputs and outputs, or expanding the system boundaries.
- 3.4.2. If *allocations* cannot be avoided, they shall be based on a physical relationship (e.g. mass, volume, number of outputs) or on an economic relationship as a second alternative.
- 3.4.3. The Organisation shall identify and document *allocation* methods.
- 3.4.4. PRODUCT FOOTPRINT ONLY: For *allocations* of recycled input or recyclable output the Organisation shall use the *recycled content* or *closed loop approximation method*¹⁷, or a method based on relationships expressed in 3.4.2 or *sector or product specific rules*.

3.5. Assessing data quality and uncertainty

- 3.5.1. The Organisation shall assess the quality of the data collected and hence the uncertainty of the *carbon footprint* calculation related to:
 - a) *calculation methods* including *emission factors* used;
 - b) estimates and assumptions;
 - c) primary and *secondary data* along with their sources;

¹³ Emissions data may stem from *direct emissions* data or by multiplying *activity data* by an emissions factor.

¹⁴ *GWP* values may be obtained from the Intergovernmental Panel on Climate Change (IPCC) or IPCC *GWP* values approved by the United Nations Framework Convention on Climate Change (UNFCCC).

¹⁵ In the case of *Scope 3 emissions*, *double counting* may be permissible inasmuch that the Organisation acknowledges that such *double counting* may exist when making claims. This exception does not apply when the Organisation receives compensation or credits in exchange for such reductions.

¹⁶ *Allocation* is the process of dividing emissions from a single facility, process or system among its various outputs e.g. several product outputs or *co-products*. (see Glossary).

¹⁷ For information on the *recycled content* and *closed loop approximation methods* refer to GHG Protocol - Product Life Cycle Accounting and reporting Standard or PAS 2050 - Specification for the assessment of the life cycle greenhouse gas emissions of goods and services.

- d) *quality criteria*¹⁸ or alternative data used for *Scope 2 accounting*;
- e) processes and activities especially resulting in significant emissions;
- f) *allocation* methods; and
- g) product use and end-of-life profile when applicable.

3.5.2. The Organisation shall assess data quality based on *accuracy*; *completeness*; *time*, *technological* and *geographical representativeness*; and *reliability*. The assessment should provide a quantitative evaluation when possible.

4. Carbon footprint management plan

4.1. Commitment to carbon emissions reduction or carbon neutrality

- 4.1.1. The Organisation shall set targets for emissions reductions based on the *base year carbon footprint*, meeting at minimum the annual reduction requirements set forth in Annex VI.
- 4.1.2. The Organisation shall follow national or industry best practises for setting targets¹⁹ and reducing emissions where applicable and justify choices in the *carbon footprint management plan*.
- 4.1.3. The Organisation shall define timeframes and a written action plan for achieving emissions reductions, and *carbon neutrality* if applicable, based on the *base year carbon footprint* and the emissions reduction targets.
- 4.1.4. The Organisation shall assess its GHG emissions on an annual basis to ensure its *qualifying dates* occur at 12-month intervals following the *baseline date* (first assessment).
- 4.1.5. The Organisation shall demonstrate a genuine effort to prioritise reductions over offsetting to the furthest extent feasible.
- 4.1.6. The Organisation shall make and implement a plan for improving data quality of *carbon footprint* calculations over time.
- 4.1.7. If the Organisation wishes to offset its emissions, it shall set targets and define a written action plan for emissions *offsets* based on the *base year carbon footprint*.
- 4.1.8. The Organisation shall implement the planned reductions and offsetting described in its written action plans.
- 4.1.9. The *carbon footprint management plan* shall be updated at least every 12 months to reflect any changes in planned reductions, and offsetting if applicable, and to document progress of emissions reductions and offsetting compared to the *base year*.
- 4.1.10. In the event emissions reductions do not meet the minimum targets outlined in Annex VI or are to occur later (e.g. due to investments, business downturns), the Organisation shall update its *carbon footprint management plan* accordingly and provide sufficient justification for any changes or delays.

4.2. Carbon emissions reduction

- 4.2.1. The Organisation shall conform to all applicable national and/or international emissions reduction regulations.

¹⁸ For additional information on *market-based method quality criteria* for evaluating *contractual instruments* see Annex III or refer to GHG Protocol - Scope 2 Guidance.

¹⁹ National or industry guidelines may further clarify or mandate additional criteria or practices for setting targets; however, the actual reduction targets must conform to 4.1.1. Emissions reduction targets set lower than those described in this standard must be appropriately justified and require pre-approval.

- 4.2.2. The methods used by the Organisation to demonstrate reductions shall meet the following principles:
- the methods shall document GHG emission types and amounts (expressed in *tCO₂e*) that have been reduced and the time period involved;
 - the methods shall be the same as those used to calculate *base year* GHG emissions;
 - emissions reductions shall be expressed in *emission intensity* (e.g. per number of staff or production unit) *and absolute terms*, and shall relate to the selected *base year*;
 - reductions made outside of the defined scope shall not be included;
 - any specific national or industry mandatory reduction targets shall be met and described in the *carbon footprint management plan*; and
 - the Organisation shall justify that the claimed emissions reductions are additional to and independent of any general or sector specific financial downturn²⁰.

4.3. Carbon emissions offsetting

- 4.3.1. The Organisation shall purchase and *retire* an amount of *carbon offsets* (credits) equivalent to its remaining emissions to demonstrate *carbon neutrality*.
- 4.3.2. The Organisation shall identify and document the standard (e.g. Gold standard, VCS²¹ etc.) used to generate the *carbon offsets* along with the total amount of credits.
- 4.3.3. The Organisation shall ensure that purchased and *retired carbon offsets* meet the criteria listed in Annex IV.

5. Reporting and public information

5.1. General information

- 5.1.1. The Organisation shall make the name and contact information of the individual responsible for its *carbon footprint management* publicly available.
- 5.1.2. The Organisation shall publicly disclose its progress towards emissions reductions and *carbon neutrality*, if applicable, on an annual basis and in a way that enables results to be tracked against the *base year* (e.g. infographics on webpage).

5.2. Scope

- 5.2.1. The Organisation shall make the following information publicly available in writing:
- the scope of the *carbon footprint* (e.g. corporate or product emissions reductions);
 - a list of and justification for any excluded emissions;
 - assessment of data quality and uncertainty;
 - the *base year*, as well as a justification for the chosen *base year* and the basis for any recalculations, if applicable;
 - the inclusion of and *method* used to calculate *land-use change impacts* and *biogenic emissions* or *removals*, where applicable;
 - the GHGs included within the *carbon footprint*;
 - CORPORATE FOOTPRINT ONLY: the *organisational boundaries* chosen and the approach applied (e.g. *financial* or *operational approach*);

²⁰ Notice that the purpose of point 4.2.2 b, is to enable comparable figures across time, regardless of general business growth or decline. Even though the standard requires *emission intensity terms*, the Organisation shall make a genuine effort to reflect the effects of real emissions reductions in its calculation results and not reductions due to a decline of production volumes resulting from, for example, an overall decline in business.

²¹ Verified Carbon Standard.

- h) CORPORATE FOOTPRINT ONLY: a list of included emissions specified in *Scope 1, 2 & 3* (see Annexes II and IX) including *Scope 3 emissions* by category;
- i) PRODUCT FOOTPRINT ONLY: the *unit of analysis* and the emissions-generating activities within each product *life cycle* stage; and
- j) PRODUCT FOOTPRINT ONLY: the product *life cycle*-stage definition and description, a process map, and justification of a *cradle-to-gate boundary* when chosen.

5.3. Calculation methods

5.3.1. The Organisation shall make the following information publicly available in writing:

- a) all assumptions made in quantifying GHG emissions and the selection or development of *emission factors*;
- b) the source of the *Global Warming Potential* (GWP) factors used;
- c) the *calculation methods* and emission factor sources used to quantify the *carbon footprint*. A reference or link shall be provided for any calculation tools used and emissions factors applied; and
- d) the methods used to perform *allocations*, if applicable.

5.4. Carbon footprint results

5.4.1. The Organisation shall make the following information publicly available in writing:

- a) The total size of the *corporate* or *product carbon footprint* shown in CO₂ *equivalent* and independent of any *carbon offsets*;
- b) CORPORATE FOOTPRINT ONLY: emissions from sources in *Scope 1, 2 and 3*
- c) CORPORATE FOOTPRINT ONLY: results of the *location-based*, and where applicable *market-based Scope 2 emissions* as for comparison.
- d) PRODUCT FOOTPRINT ONLY: total results in CO₂ *equivalent* per *unit of analysis* and the percentage of total *carbon footprint* by *life cycle* stage.
- e) PRODUCT FOOTPRINT ONLY: amount of carbon contained in the product not released to the atmosphere within the 100-year assessment period, if applicable.
- f) PRODUCT FOOTPRINT ONLY: For *cradle-to-gate inventories*, the amount of carbon contained in the *intermediate product*, if applicable.

5.5. Progress towards carbon emissions reduction and carbon neutrality

5.5.1. The Organisation shall make the following information publicly available in writing:

- a) means of achieving GHG emissions reductions, including a list of actions taken;
- b) actual emissions reductions that have been achieved, in *emission intensity terms* and *absolute terms*, compared to original targets set forth in the *carbon footprint management plan*;
- c) time period chosen to measure reduced emissions;
- d) size of the reduced *carbon footprint*, in *emission intensity and absolute terms*;
- e) balance of unavoidable emissions and *retired carbon offsets*, if applicable; and
- f) confirmation that purchased or *retired carbon offsets* meet the criteria stated in 4.3.

6. Claims

6.1. General terms for carbon footprint, carbon emissions reduction, and carbon neutrality claims

6.1.1. Any claims shall be approved by a senior representative of the Organisation and information about the time of approval shall be available.

6.1.2. Claims shall:

- a) clearly identify the *subject* and focus of the declaration;
- b) clearly identify the organisation responsible for making the declaration, or ensure that this is unanimously clear;
- c) include the size of the *base year carbon footprint* and any reduction achieved;
- d) include the *qualifying date*;
- e) not overstate or misrepresent any emissions covered or results.

6.1.3. Claims of carbon emissions reduction and *carbon neutrality* may only be made once the Organisation can demonstrate it has reduced emissions and offset all remaining emissions in accordance with this standard.

6.1.4. The Organisation shall be eligible to make claims about *carbon neutrality* based on offsetting alone ONLY during the first year of verification²² (after the *baseline date*) or if prior emissions reductions meet the minimum requirements of this standard (see 2.2.3²³).

6.1.5. Any Preferred by Nature-related public claims or labels shall be approved by Preferred by Nature prior to use, and evidence of approval shall be maintained as records.

6.1.6. For any Preferred by Nature-related public claims or labels the Organisation shall follow the requirements presented in Preferred by Nature's logo usage guide and Preferred by Nature's Carbon Communications Guidelines (see Annex VI).

6.2. Measured carbon footprint

After calculating the footprint and prior to reducing its carbon emissions, the Organisation may use the following declarations as publicly available statements:

CORPORATE FOOTPRINT: "[Organisation name] has measured our corporate carbon footprint to be [xx] tCO₂e per [intensity unit] and [xx] tCO₂e [absolute terms] during [year]. The carbon footprint is verified by [certification body], [month, 20XX]."

PRODUCT FOOTPRINT: "[Organisation name] has measured the carbon footprint of this product to be [xx] kgCO₂e during [year]. The carbon footprint is verified by [certification body], [month, 20XX]."

6.3. Achievement of carbon emissions reduction

After reducing its carbon emissions, the Organisation may use the following declarations as publicly available statements:

CORPORATE FOOTPRINT: "[Organisation name] has reduced our corporate carbon footprint by [xx%] compared to the [base year] carbon footprint of [xx] tCO₂e per [intensity unit] and [xx] tCO₂e [absolute terms]. Verified by [certification body], [month, 20XX]."

PRODUCT FOOTPRINT: "[Organisation name] has reduced the carbon footprint of this product by [xx%] compared to the [base year] carbon footprint of [xx] kgCO₂e. Verified by [certification body], [month, 20XX]."

6.4. Achievement of carbon neutrality

After reaching *carbon neutrality*, the Organisation may use the following declarations as publicly available statements:

²² Recurring and non-recurring events must demonstrate reduction efforts and at minimum meet the reduction requirements set forth in Annex VI.

²³ Neutrality claims may be made during the first year if sufficient historical reductions exist per 2.2.3.

CORPORATE FOOTPRINT: “[Organisation name] has achieved carbon neutrality in [year] by reducing our emissions by [xx%] and offsetting all remaining emissions, compared to the [base year] carbon footprint of [xx] tCO₂e per [intensity unit] and [xx] tCO₂e [absolute terms]. Carbon offsets are verified by a third party, using [xx] standard. Verified by [certification body], [month, 20XX].”

PRODUCT FOOTPRINT: “This product can be considered carbon neutral as we have offset all life cycle carbon emissions. The product carbon footprint has been reduced by [xx%] from [cradle-to-gate/to-grave], compared to the [base year] carbon footprint of [xx] kgCO₂e. Carbon offsets have been verified by a third party, using [xx] standard. Verified by [certification body], [month, 20XX].”

References

For further elaboration of concepts or calculation methodology, the background standards below may be consulted. Comparability between different GHG accounting standards and Preferred by Nature's Carbon Footprint Management Standard may be provided upon request.

- i. WRI/WBCSD: Greenhouse Gas Protocol - Corporate Accounting and Reporting Standard Revised Edition (2015)
- ii. WRI: Greenhouse Gas Protocol - GHG Protocol Scope 2 Guidance: An amendment to the GHG Protocol Corporate Standard (2015)
- iii. WRI/WBCSD: Greenhouse Gas Protocol - Corporate Value Chain (Scope 3) Accounting and Reporting Standard: Supplement to the GHG Protocol Corporate Accounting and Reporting Standard (2011)
- iv. WRI/WBCSD: Greenhouse Gas Protocol - Technical Guidance for Calculating Scope 3 Emissions: Supplement to the Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2013)
- v. WRI/WBCSD: Greenhouse Gas Protocol - Product Life Cycle Accounting and Reporting Standard (2011)
- vi. BSI: Publicly Available Specification 2060 - Specification for the demonstration of carbon neutrality (2014)
- vii. BSI: Publicly Available Specification 2050 - Specification for the assessment of the life cycle greenhouse gas emissions of goods and services (2011)

Annex I: Principles of Carbon Footprint Management (normative)

The five accounting principles below shall be adhered to when claiming conformance to this Standard. In case of third-party verification, compliance with these principles shall be evaluated throughout the standard, where applicable.

- i. Accuracy Ensure that bias and uncertainty have been reduced to the largest extent possible, and the quantification of GHG emissions is neither systematically over nor under actual emissions. Accurate representation should allow stakeholders to make decisions with a reasonable degree of certainty as to the integrity of the information.
- ii. Completeness Account for and report on all GHG emission sources and activities within the chosen boundary. Disclose and justify any specific exclusions.
- iii. Consistency Use consistent methodologies, data, and assumptions to allow for meaningful comparisons of the carbon footprint over time. Document any changes to the data, inventory boundary, methods, or any other relevant factors in a transparent manner.
- iv. Relevance Ensure the carbon footprint appropriately reflects the GHG emissions of the organisation or product and serves the decision-making needs of users both internal and external to the organisation.
- v. Transparency Make available the data, methodologies and assumptions used in the carbon footprint calculations and reduction efforts to relevant stakeholders. All issues should be addressed in a factual and coherent manner, based on clear assessment.

Based on GHG Protocol - Corporate Accounting and Reported Standard (2015) and PAS 2050: 2011 Specification for the assessment of the life cycle greenhouse gas emissions of goods and services.

Annex II: GHG emission sources (normative)

Background

This annex specifies which emissions at minimum are to be included for *Corporate* and *Product footprints*, to be compliant with the Preferred by Nature CFM standard. The annex is used as reference by auditors and is thus part of the requirements of this standard. For clarity, separate tables are provided for Corporate Footprint and Product footprint. The first table also indicates required emissions for Events.

Emission scopes for Corporate Footprint Verification

Table below outlines emission sources required or to be considered when pursuing Corporate Carbon Footprint verification. Exclusions related to any required categories shall be justified and documented in the *carbon footprint* report. In all instances, organisations are to include any optional categories if related sources are relevant to operations or represent material emissions.

^E Indicates emission sources required for *carbon neutral* events. (See Annex V for other emission sources that may be applicable to events.)

Corporate Footprint	Scope 1: Direct emissions from sources owned or controlled by the Organisation	Scope 2: Indirect emissions from generation of purchased electricity consumed by the Organisation.
	Stationary combustion (such as fuels in boilers, furnaces, turbines, engines, etc.) as for generation of electricity, heat, steam. Required^E	Emissions from the generation of electricity, heat, cooling, or steam. Required^E <i>Refer to GHG Protocol Scope 2 Guidance.</i>
	Mobile combustion (such as fuels in automobiles, trucks, buses, ships) to deliver/transport materials, products, waste, employees. Required^E	
	Process emissions (such as those from manufacturing or processing of materials and chemicals in certain industries) Required	
	Fugitive emissions (e.g. releases from refrigerant leaks, wastewater treatment, gas transport.) Required^E	
	Scope 3 (upstream): Indirect emissions stemming from activities of the Organisation but occurring from sources not owned or controlled by it.	Scope 3 (downstream): Indirect emissions stemming from activities of the Organisation but occurring from sources not owned or controlled by it.
	Purchased goods and services (such as emissions occurring from extraction of raw materials, agricultural activities, production, waste, and land use prior to product acquisition by Organisation). Optional	Transportation and distribution include emissions of products sold by the Organisation between its operations and the end user via vehicles and facilities not owned or operated by the Organisation. Examples are storage of sold products and transport. Required
	Capital goods (involving emissions from production of goods acquired by the Organisation). Examples include machinery, facilities, and vehicles. Optional	Processing of sold products includes emissions from intermediate products that require additional processing or transformation before use by end user. Optional
	Fuel- and energy-related activities including emissions from e.g. production and transportation of fuel/energy purchased by the Organisation, along with transmission and distribution losses. Required	Use of sold products involves emissions from use of a product or service sold by the Organisation over the expected lifetime. Examples are direct use emissions and indirect use emission [§] . Optional
	Transportation and distribution of products or services purchased including emissions (non-fuel and -energy related) between tier 1 suppliers and the Organisation's operations as well as emissions from third-party services (e.g. inbound and outbound logistics). Examples include air, rail, road, and marine transport, along with storage of purchased products. Required^E	End-of-life treatment of sold products involves total end-of-life emissions from waste disposal and treatment of products sold by the Organisation. Optional
Waste stemming from operations includes emissions from third-party disposal and treatment of waste generated in the Organisation's owned or controlled operations. Examples are landfill disposal, composting, incineration, waste-to-energy, wastewater treatment. Required^E	Leased assets include emissions from operation of assets owned by the Organisation (as lessor) and not included in Scopes 1 or 2. Optional	
Business travel involves emissions from transport of employees for business activities in vehicles owned or operated by a third party (e.g. aircraft, trains, buses, cars) or from hotel stays. Required^E	Franchises include emissions from operation of franchises not included in Scopes 1 or 2. Optional	
Employee commuting includes emissions from transport of employees between homes and places of work. Examples include car, bus, rail, and air travel. Required	Investments [¶] involves projected lifetime emissions associated with the Organisation's investments not included in Scopes 1 or 2. Required <i>Refer to GHG Protocol - Corporate Value Chain (Scope 3) Accounting and Reporting Standard.</i>	
Leased assets [†] include emissions from operation of assets leased by the Organisation (as lessee) and not reported under Scopes 1 or 2. Required^E	Water consumption^{**} Includes monitoring and management of water consumption by the organisation across the value chain. Optional	
<small>[†] Leased assets involve buildings, company vehicles, and equipment not reported under Scopes 1 or 2. For purpose of this standard, organisations are to include at minimum leased vehicles. For event carbon footprints, leased assets are to be included where Organisations lease or rent venues, vehicles, and equipment or materials demonstrating material or significant emissions.</small>	<small>[¶] This category is required for investors (e.g. organisations making investments to gain profit or those not profit driven) or organisations focusing on financial services.</small>	
<small>[‡] Here aspects include direct use-phase emissions, or products that directly consume energy during use or GHGs and products that comprise or form GHGs released during use. Indirect use-phase emissions include products that indirectly consumer energy during use (e.g. washing and drying of apparel, refrigeration or heating of food).</small>	<small>^{**} Monitoring water consumption is recommended if no water management plan exists in the Organisation.</small>	
	<small>[§] Indicates emission sources required for carbon neutral events.</small>	

Emission scopes for Product Footprint Verification

Table below outlines emission sources required or to be considered when pursuing Product Carbon Footprint verification. Exclusions related to any required *life cycle* stage shall be justified and documented in the *carbon footprint* report. (*Note: emission sources including storage, use, and end-of-life are only applicable to cradle-to-grave.*)

Product Footprint		Life cycle stage	Emission source		
Product Footprint	Cradle-to-gate	 Material acquisition and pre-processing (from nature to production gate)	Emissions associated with raw materials ⁱ , purchased goods and inputs, packaging, and equipment.	Required	
			Transportation between processes and facilities, including packaging.	Required	
		 Production (upon entering facility and until exit)	On-site emissions (scopes 1 and 2) involving fuels, electricity, etc.	Required	
			Transport between organisational sites.	Required	
			Assembly and processes, and any fugitive emissions.	Required	
	Cradle-to-grave (including prior stages) ⁱⁱ	 Distribution and storage (from production facility until customer acquisition)	Distribution of products and storage between sites (including retail emissions when applicable).	Required	
			 Use ⁱⁱⁱ (customer acquisition until discard)	Transport to user home.	Required
		 End-of-life (discard until returned to nature or recycled)	Emissions associated with use (e.g. cooling, warming, electricity, maintenance).	Required	
			 End-of-life (discard until returned to nature or recycled)	Collection and transport of product and its packages.	Required
				Waste management including breakdown of components and sorting.	Required
 Water consumption ^{iv}	Incineration or land filling.	Required			
		Includes monitoring and management of water consumption by the organisation across product's life cycle.	Optional		

ⁱ Raw materials also refers to emissions from land-use change when significant impacts are observed, or sources are material to production processes. Also refer to Annex VII for additional information.

ⁱⁱ Not required for cradle-to-gate.

ⁱⁱⁱ Although a more difficult stage to evaluate, this is where significant emissions may occur due to energy consumption, for example.

^{iv} Monitoring water consumption is recommended if no water management plan exists for the product.

It is not a requirement for product verification to report on categories not directly linked to the product or service in focus because such non-*attributable processes* do not necessarily become, create or carry the product or service through its *life cycle*. Such categories may include capital goods, overhead operations, research and development, transportation of the product user, or employee commuting. If such processes are to be included, the Organisation shall disclose the information in the *GHG inventory* report and make the categories publicly available.

In the case the Organisation focuses on *intermediate products* and the use of the *final product* is unknown, the Organisation may enlist a *cradle-to-gate boundary* approach although additional stages such as distribution and storage are to be included if emissions are material or the life cycle stage is relevant to operations. It is encouraged that organisations working with *final products* take a *cradle-to-grave boundary* approach, incorporating all stages of the product *life cycle*. Any emission sources not material to the product may only be left out with appropriate justification.

Annex III: Scope 2 emissions (guidance and normative)

Background

Two approaches are used to determine emissions from the generation of purchased electricity, steam, heat, and cooling consumed by the Organisation, the *location-based* and *market-based methods*. The *location-based approach* is used to calculate *Scope 2 emissions* stemming from average energy *emission factors* within a specified regional or country, for example. The *market-based approach* calculates *Scope 2 emissions* based on the electricity the Organisation purchases through *contractual instruments* (e.g. *energy attribute certificates*, power purchase agreements) or based on available supplier information, for the given market.

Both the *location-* and *market-based approaches* are to be used when calculating *Scope 2 emissions*, even in cases when the Organisation chooses not to subscribe to *contractual instruments*, but market-based information is available. For more information on the appropriate *emission factors* to be used in both methods, and determining the quality of *contractual instruments*, refer to the last section of this annex or *GHG Protocol - Scope 2 Guidance*.

The following tables represents source examples to calculate *Scope 2 emissions*, for both the *location* and *market-based methods*.

Location-based method emission factors	
Emission factors	Source examples
Regional or subnational emission factors	eGRID emission rates (United States); Defra UK grid average emission factor (United Kingdom)
National production emission factors	International Energy Agency (IEA) factors

Market-based data and instruments	
<i>Note: emission factors and sources are presented from most (energy attribute certificates) to least (location-based method) accurate for calculating market-based emissions</i>	
Emission factors	Source examples
Energy attribute certificates	Renewable Energy Certificates, Guarantees of Origins
Contracts	Power purchase agreements and other supplier contracts lacking energy attribute certifications
Supplier-specific emission rates	Emission rates allocated and disclosed to retail users, representing the entire, delivered energy product; green energy tariffs
Residual mix	EU countries (RE-DISS project) where energy production data excludes voluntary purchases
Other grid-average emission factors (e.g. location-based data)	eGRID, Defra UK, IEA national emission factors

Source: Adapted from Greenhouse Gas Protocol - GHG Protocol Scope 2 Guidance (2015).

Quality criteria for market-based approach

The following *quality criteria* principles apply to the *market-based Scope 2 emissions method*.

Contractual instruments used in *accounting* shall:

- a) convey the GHG emission rate claims;
- b) demonstrate any GHG emission rate claims are unique to the Organisation;
- c) be retired by the reporting Organisation;
- d) align to the greatest extent possible with the period of energy consumption;
- e) be sourced from the same market where the Organisation consumes energy;
- f) characterise the resulting *residual mix* of energy after *contractual instruments* are claimed and/or retired, or disclose if such information is unavailable.

Additionally:

- g) any supplier-specific *emission factors* shall demonstrate actual electricity delivered to the Organisation, noting if and how any certificates have been used in emission factor calculations;
- h) when *energy attribute certificates* are absent, any claims involving direct electricity purchases (as from generators) or consumption from on-site generation shall be verified and shown as unique to the Organisation.

Any of the above requirements not reflected in market-based *Scope 2 accounting* shall be justified and documented in the *GHG inventory report* and made publicly available.

Annex IV: Offsetting emissions (normative)

Background

By offsetting, the Organisation compensates its unavoidable carbon emissions by purchasing and retiring *carbon credits* that represent *additional* reductions taking place outside of the Organisation's direct or indirect operations, e.g. sequestered carbon in a forest reforestation project. A credit should not be considered an *offset* until it is *retired*.

Principles for offsetting

For the purchase and *retirement* of *carbon credits* the following principles apply.

Carbon credits shall:

- a) represent genuine, *additional*, permanent GHG emissions reductions;
- b) be unique and not *double counted*;
- c) entail no *carbon leakage*;
- d) be verified by a qualified and independent third-party verifier;
- e) be issued only after emissions reductions linked to the offset project have occurred unless noted as otherwise per the applicable offset standard;
- f) be *retired* within 12 months from the date of purchase;
- g) be supported by publicly available project documentation (including quantification methodology as well as validation and verification procedures);
- h) be stored and *retired* in an independent and credible registry; and
- i) demonstrate that any benefits to local beneficiaries (e.g. farmers) and sustainable development goals have been realised and shall continue at least through the completion of the project, when applicable, based on appropriate documentation and management.

Carbon credits deriving from forest carbon and land-use projects are recommended, and the Organisation should provide justification when choosing other credits.

Credible verification schemes

During publication of this standard, Preferred by Nature identified the following verification schemes as supporting or relating to the above principles²⁴. The list may not be conclusive and other schemes may be eligible if they comply with the principles noted above.

- Gold Standard (e.g. Global Goals)
- Verified Carbon Standard (including CCB²⁵)
- Plan Vivo Standard

²⁴ You may contact Preferred by Nature for the latest list of credible schemes, since this may change with greater frequency than revisions to the standard.

²⁵ Climate, Community & Biodiversity Standards.

Annex V: CFM requirements for Events (normative)

Background

This standard can be used for developing and managing the *carbon footprint* of a recurring or one-time event. Due to the nature of events, some requirements in the core part of the standard are not applicable to events while others require adaptation depending on event type. There are also additional requirements that must be considered by an organisation wishing to manage the *carbon footprint* of an event. This annex provides the supplementary requirements and outlines where adaptations or exclusions in the body of the standard may apply.

Requirements and guidance

Organisations pursuing *carbon neutral* events or seeking verification of calculations shall follow these requirements to comply with this standard.

The Organisation shall:

- a) demonstrate its role (e.g. planner, organiser, host) in relation to the event and that it maintains authority to make changes required to achieve emissions reductions;
- b) identify the type of event (e.g. festivals, business conference, etc.) and whether the event is recurring, annual, or non-recurring;
- c) conduct an initial *carbon footprint* assessment for the event(s)²⁶ based on plans illustrating the necessary elements to stage and execute the event;
- d) evaluate the initial event plan to identify emission hot spots and sources across the entire *life cycle* of the event (e.g. event planning, delivery, closure) and assess potential GHG emissions based on the event plans (see Annex II for emission source requirements);
- e) identify targets²⁷ and approaches to reduce emissions prior to the event;
- f) reduce GHG emissions associated with the event (e.g. advertising, travel, electricity consumption, food and beverage, accommodations, clean-up and waste disposal);
- g) conduct and document an assessment directly following the event to determine if anticipated emissions reductions have been achieved;
- h) document and justify all methodologies, assumptions, choices, and exclusions related to the event as per the guidelines noted in this standard;
- i) ensure *carbon offsets* are purchased and *retired* prior to making neutrality claims before or during event, if applicable, and that additional *offsets* are purchased following the event if actual emissions exceed anticipated emissions; and
- j) in the case of recurring or annual events, the Organisation shall develop an emissions reduction strategy (e.g. *carbon footprint management plan*) to reduce emissions over a specified timeframe.

Although not requirements, the Organisation should:

- a) take reasonable efforts to ensure event stakeholders and participants are informed and aware of carbon reduction or *neutrality* objectives and any elements that may affect achieving emissions reduction targets;

²⁶ In the case of recurring events, a previous event plan and *carbon footprint* assessment may be used only if the current event is not materially different (e.g. same type, scale) from the previous plans.

²⁷ Both recurring and non-recurring events must meet the reduction targets set forth in Annex VI.

- b) consider following publicly available specifications or rules for similar events to assist in defining event *life cycle* boundaries; and
- c) attempt to reduce emissions associated with the travel of attendees.

Requirements based on the Preferred by Nature CFM Standard

The following table is meant to be used in conjunction with the supplementary event requirements noted above in this annex. The information refers to sections of this standard and notes where any requirements may be excluded as it pertains to events and where adaptations may be applicable based on the additional event requirements or frequency of events. Other requirements in the standard not noted here remain applicable to each event type.

Event Neutrality	Standard sections	Adaptions or exclusions*/ Notes
	 1.1 Climate policy	1.1.1 (d) Quantified reporting applies to initial and post event assessments, as well as the emissions reduction strategy for recurring events.
	 1.3 Documentation	1.3.4*
	 1.4 Performing monitoring	1.4.1 Monitoring of events to assess performance against reduction and offset targets applies to post assessments and the reduction strategy (recurring and annual events) when applicable.
	 2.1 Defining scope of the carbon footprint	2.1.1 Boundaries are to include event activities and operations resulting in material emissions across the event's life cycle. 2.1.4* Instead the event is to be defined by its purpose, date, location, and estimated number of attendees. 2.1.5*
	 2.2 Choosing a base year	2.2 Section only applicable to recurring events. A base year is to be identified for annual events. For more frequent events, an initial emissions baseline is to be selected representing the event. Assessment of potential GHG emissions from the initial event acts as the baseline for emissions reductions for non-recurring events.
	 3.1 Identifying emission sources	3.1.1 See Annex II 3.1.2 Location-based method satisfies the requirement for non-recurring events unless a contractual instrument with an electricity provider is in place. 3.1.4*, 3.1.5*, 3.1.6*
	 3.3 Collecting emission data, choosing emission factors, and calculating results	3.3.1 If primary data cannot be measured or obtained for the initial assessment of a non-recurring event the Organisation may use estimates from a previous or similar event. 3.3.7 Applicable to both recurring events or non-recurring events when contractual instruments for sale and purchase of energy are in place. 3.3.10*
	 3.4 Allocations	3.4.4*

Standard sections	Adaptions or exclusions*/ Notes
 <p>4.1 Commitment to carbon emissions reductions and neutrality</p>	<p>4.1.1 All events are to reduce emissions by the minimum set forth in Annex VI. Emission reduction targets for non-recurring events shall be based on the initial assessment.</p> <p>4.1.3 Timeframes and action plans for achieving emissions reductions are to be based on the event plan and initial assessment for non-recurring events.</p> <p>4.1.4 Not applicable to non-recurring events.</p> <p>4.1.7 Offsetting targets and actions plans for non-recurring events are based on the initial assessment.</p> <p>4.1.9 Not applicable to non-recurring events.</p> <p>4.1.10 Not applicable to non-recurring events.</p>
 <p>4.2 Carbon emission reduction</p>	<p>4.2.2 (b) Methods to calculate emissions reductions for non-recurring events are to be the same as those used in the initial assessment.</p>
 <p>4.3 Carbon emissions offsetting</p>	<p>4.3.1 Retirement of offsets shall occur prior to making any neutrality claims before or during the event.</p> <p>4.3.2 In the case of carbon neutrality claims, additional carbon offsets shall be purchased and retired following the event if actual emissions exceed anticipated emissions calculated before the event.</p>
 <p>5.1 General information (public reporting)</p>	<p>5.1.2 A public report is to be provided before and following the event. The pre-event report must at minimum include total projected GHG emissions, emission source categories, any exclusions, planned reduction activities, and offset credits retired when applicable.</p> <p>Post-event reporting shall include the requirements in Section 5 of this standard and occur within 4 months following the event.</p>
 <p>5.2 Scope & 5.3 Calculation Methods</p>	<p>5.2.1 (d) Applies to recurring and annual events, when applicable.</p> <p>5.2.1 (i, j)*</p> <p>5.2.1, 5.3.1 Changes to boundaries, emission sources, calculations or data quality between the initial and post carbon footprint assessments are to be included in the public report.</p>
 <p>5.4 Carbon footprint results</p>	<p>5.4.1 (d, e, f)*</p>
 <p>5.5 Progress towards emission reduction and neutrality</p>	<p>5.5.1 (b) Any differences in projected emissions from the initial assessment compared to actual emissions shall be noted and explained.</p>
 <p>6.1 Making claims</p>	<p>6.1.2 Claims or logo usage shall only be used in relationship to the event and corresponding GHG emissions and not used to demonstrate neutrality of e.g. the Organisation, host, planner, event organiser or product.</p> <p>6.1.4 All events must demonstrate any required emission reductions prior to offsetting in the case of carbon neutrality claims.</p>

Event Neutrality

Annex VI: Preferred by Nature’s Carbon Communications (normative)

Levels of labels

Organisations that have fulfilled the requirements of this standard and have undergone verification by Preferred by Nature may apply off and on-product labels according to the levels below:

- Measuring CO₂:** After Organisation has completed calculation of the *carbon footprint* and has committed to emissions reductions in its *carbon footprint management plan*.
- Reducing CO₂:** After Organisation has achieved emissions reductions according to its *carbon footprint management plan*, meeting the minimum thresholds described in this annex.
- CO₂ neutral:** After Organisation has achieved emissions reductions according to its *carbon footprint management plan*, meeting the minimum thresholds described in this annex, and has offset all remaining, unavoidable emissions.

Principles for off-product label use

Preferred by Nature off-product CFM labels can be used provided these principles are followed:

- Off-product labels may be applied for promotional use, such as websites, letterheads, catalogues, email signatures, annual reports, CSR reports etc.
- Off-product labels shall be accompanied by a claim according to Section 6 of this standard.
- Off-product labels communicating carbon emissions reduction shall only be used after the Organisation has demonstrated a minimum of a 4.2% annual reduction (in *absolute terms*) for combined Scope 1 and 2 emissions and a minimum of a 2.5% annual reduction (in *absolute terms*) for Scope 3 emissions²⁸, compared to the *base year carbon footprint*²⁹.
- Off-product labels communicating carbon emissions reduction or *carbon neutrality* shall only be used continuously as long as companies can demonstrate annual carbon emissions reductions compared to the *base year carbon footprint*.



Principles for on-product label use

Preferred by Nature on-product CFM labels can be used provided these principles are followed:

- On-product labels may be placed on products that fulfil the requirements of this standard.

²⁸ Minimum reduction targets are influenced by the Science Based Targets initiative (SBTi Target Validation Protocol, 2020). Organisations or products demonstrating a high proportion of Scope 3 emissions compared to overall GHG emissions should consider setting a more ambitious Scope 3 target than noted in this annex.

²⁹ Non-recurring events shall meet the same minimum reduction requirements based on initial assessment.

- b) On-product labels communicating carbon emissions reduction shall only be used after the Organisation has demonstrated a minimum of a 4.2% annual reduction (in *absolute terms*) for combined Scope 1 and 2 emissions and a minimum of a 2.5% annual reduction (in *absolute terms*) for Scope 3 emissions, compared to the product's *base year carbon footprint*.
- c) On-product labels communicating carbon emissions reduction or *carbon neutrality* shall only be used continuously as long as companies can demonstrate annual carbon emissions reductions compared to the *base year carbon footprint*.



All labels are available in the following three colours: black; Preferred by Nature green; and white on Preferred by Nature green. Labels shall be large enough that all text is legible. Organisation may also opt to specify amount of kgCO₂e or tCO₂e measured or reduced directly beneath label.

Disclaimer: Preferred by Nature reserves the right to withdraw verification certificates or the use of any logo based on the misrepresentation of any information by the Organisation, failure of the Organisation to pay any related fees, the termination of the agreement between the Organisation and Preferred by Nature, or the Organisation's failure to comply with this standard.

Pre-approved statements

Organisations that have been third-party verified by Preferred by Nature may choose to use any of the following general statements to communicate their *carbon footprint management* efforts. Other similar communications may be used upon Preferred by Nature's approval.

- a) We are committed to reducing our carbon footprint annually, lessening our impact on the world's climate.
- b) We are committed to reducing our carbon footprint annually and are verified as meeting the requirements of the Preferred by Nature Carbon Footprint Management Standard.
- c) We recognise the need to offer more climate friendly [products/services] and believe this will support our business to grow and strengthen in the long-term. We are committed to reducing our carbon footprint annually and are verified as meeting the comprehensive requirements of the Preferred by Nature Carbon Footprint Management Standard.
- d) We are committed to lessening our impact on the world's climate by reducing carbon emissions in our value chains. Verified under the Preferred by Nature's Carbon Footprint Management Standard, we are able to communicate our carbon footprint with confidence, offering a transparent way for our customers to track our progress.
- e) Meeting the requirements of the Preferred by Nature Carbon Footprint Management Standard enables us to communicate our carbon footprint with confidence and offers a transparent way for our customers to track our progress. We are committed to reducing our carbon footprint annually, enabling us to pass on efficiency benefits to our customers.

- f) Verification according to the Preferred by Nature Carbon Footprint Management Standard demonstrates our commitment to reducing our carbon footprint annually, lessening our impact on the world's climate.
- g) We are committed to reducing and monitoring our carbon footprint while meeting Preferred by Nature's comprehensive standard for carbon footprint management. By identifying areas in our value chain that have the greatest climate impact, we are able to achieve the highest potential for reduction.
- h) Verified as meeting the Preferred by Nature Carbon Footprint Management Standard demonstrates we are working to reduce our carbon footprint annually, enabling us to pass on efficiency gains to our customers.

Annex VII: Land-use change and carbon storage in products (guidance)

Background

Land-use change attribution is defined by the emissions resulting from any change in land use associated with an organisation's activities or the production of a product, such as the change from forest to agricultural land. Also refer to 3.1 of this standard for additional information.

Including emissions from land-use change

Land-use change shall be included in *product carbon footprints* when emissions are significant or the extraction of raw materials and associated agricultural or forest activities are material to production (Section 3.1.5). Organisations that estimate high emissions resulting from change in land-use due to their activities are to include *land-use change impact* in their *corporate carbon footprint* per 3.1.3. Land-use conversion may represent an area for carbon emissions reduction, e.g. by changing from uncertified to certified timber, where land-use change is not expected³⁰.

Methods for calculating land-use change

The basic principle for calculating the carbon emissions resulting from land-use change is to assess the change in *carbon stock* between the previous and new land use over a 20-year period or a harvest cycle - whichever is longer. When the location of origin of purchased raw material is known, the Organisation can calculate the change in *carbon stock* base on satellite imagery, historical data, sector, or country specific data, or otherwise generic *activity data* or *emission factors* (e.g. IPCC³¹, FAOSTAT³²). If the location of origin or previous land-use is not known, the Organisation must estimate the most likely scenario and choose a conservative approach.

Please find more guidance in the Greenhouse Gas Protocol - Product Standard (Appendix B).

Carbon storage in products

Carbon stored in products is relevant for *product carbon footprints* and is defined by the accumulation of carbon in a form other than atmospheric gas e.g. carbon stored in wood products. *Carbon storage* should be calculated based on the expected use profile of the product over a *100-year assessment period* - i.e. amount of carbon expected to remain in the product after 100 years. Assumptions and calculations of the storage profile shall be documented. Organisations are advised to obtain recognised default values for carbon stored in products, e.g. Winjum et al. (1998)³³ or IPCC³⁴.

³⁰ Preferred by Nature deems FSC™ certification to offer assurance for responsible forest management. Other standards are considered by Preferred by Nature on a case-by-case basis.

³¹ IPCC, 2006 IPCC Guidelines for National GHG Inventories, vol. 4: Agriculture, Forestry, and other Land Use.

³² FAO, FAOSTAT. Available from <http://faostat.fao.org>, 2011.

³³ Winjum, J.K., Brown, S. and Schlamadinger, B. (1998): Forest harvests and wood products: sources and sinks of atmospheric carbon dioxide. *Forest Science* 44: 272-284 31

³⁴ IPCC, 2006 IPCC Guidelines for National GHG Inventories, vol. 4: Agriculture, Forestry, and other Land Use.

Annex VIII: Insetting (guidance)

Background

Insetting demonstrates a pathway for the Organisation to reduce emissions in its own supply chain or value chain³⁵) while often providing for additional social, economic, and environmental shared value. While carbon offsetting compensates for GHG emissions outside of the Organisation's direct or indirect operations, *insetting* typically leverages *carbon offsets* to reduce emissions directly associated with an organisation's value chain.

Preferred by Nature recognises the value of the *insetting* approach, including its potential to drive emissions reductions for the *product footprint*. For the purpose of compliance with this standard, *insetting* projects cannot be used for the purpose of offsetting unless they have been verified by a qualified and independent third-party verifier based on a credible *carbon credit* scheme.

Guidelines and insights

While *insetting* projects are specific to the Organisation, the following guidelines³⁶ may act as a starting point when considering *insetting* projects. These points however neither represent a full list of guidelines nor requirements involving *insetting*. Other standards and methodologies are also to be reviewed, used, and followed when pursuing *insetting* activities (see below). All other applicable requirements of this standard shall be followed in the event the Organisation is to reduce emissions via *insetting*, while making any necessary updates to the Climate Policy and *carbon footprint management plan*.

Any *insetting* efforts undertaken by the Organisation should:

- a) demonstrate analysis has been done prior to *insetting* e.g. noting reasons for moving ahead with *insetting* and identifying applicable impact factors (e.g. climate mitigation, forests, society) and projects in its *carbon footprint* objectives, monitoring, planning, and results;
- b) demonstrate a direct connection between the Organisation's supply chain and the offsetting project and credits, including any investments made;
- c) incorporate *insetting* to support and develop mitigation activities and carbon reductions related to *Scope 3 emissions*;
- d) ensure projects are certified according to recognised offsetting and/or *insetting* standards as noted in this annex; and
- e) identify and document any standards and projects used for *insetting*, the outcomes of the project, and emissions reduction targets and results.

³⁵ Both value chain and supply chain are often used interchangeably with respect to *insetting*. Although definitions around these terms vary, supply chain may be considered as part of an organisation's value chain inasmuch that value is added by the supply chain.

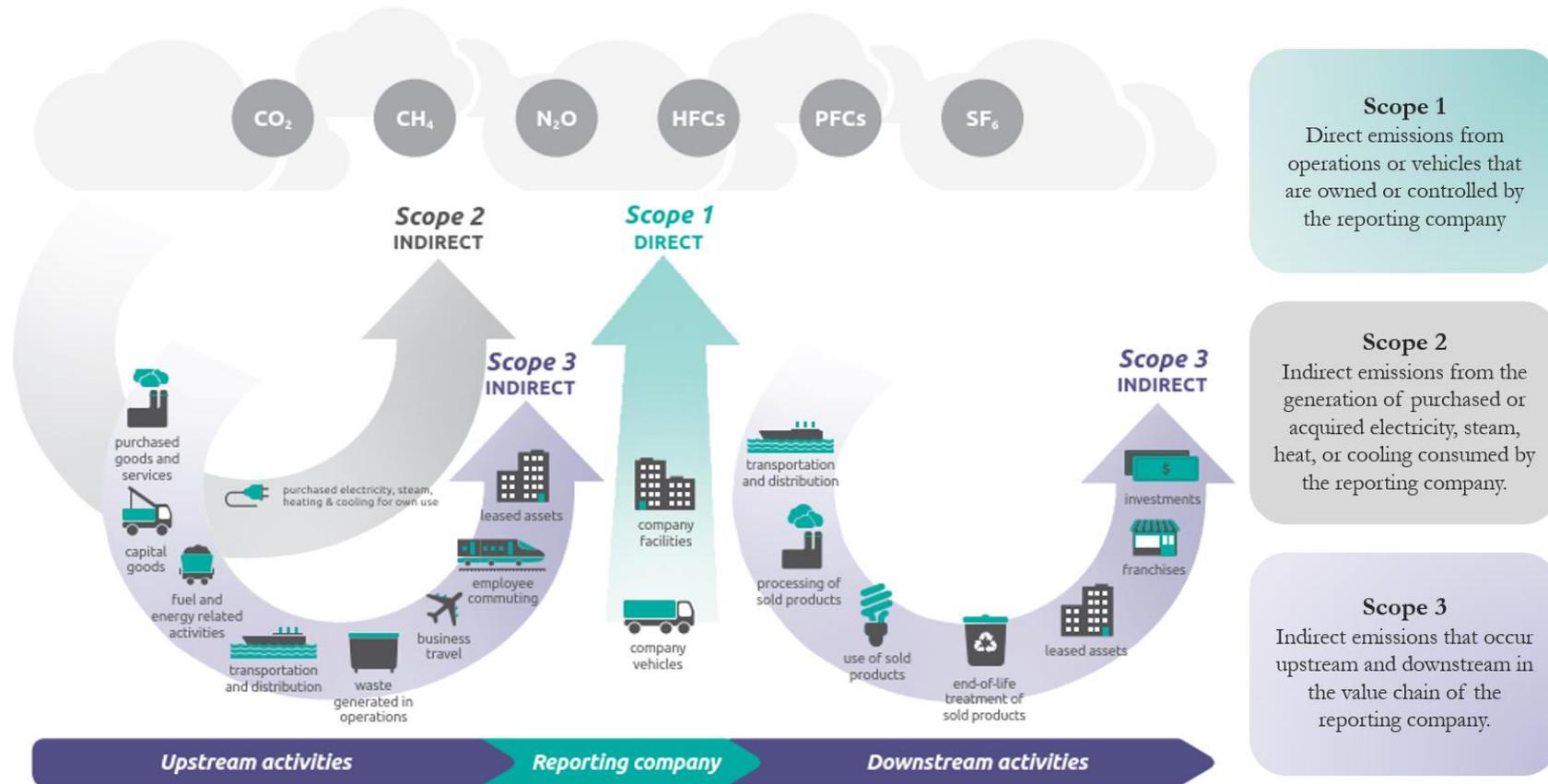
³⁶ These guidelines represent only general points taken from other *insetting* standards and best practices and may differ depending on the requirements of the Organisation or its subscription to specific *insetting*, offsetting and project standards.

Verification schemes

Verification schemes for carbon offsetting projects such as those noted in Annex IV may be considered for the generation and *retirement* of *carbon offsets* applicable to and for supporting *insetting*. Other schemes may be eligible inasmuch that they align with similar principles as noted in Section 2 above as well as Annex IV.

For further guidance, please refer to other insetting programs and authorities (e.g. International Platform for Insetting, Plan Vivo, ICROA).

Annex IX: Emissions across the value chain (guidance)



Source: Adapted from Greenhouse Gas Protocol - Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011)

Glossary

100-year assessment period	Time period for which the GHG emissions and removals from the product life cycle shall be accounted for per global warming potential time horizon.
Absolute target	Target that denotes a reduction in absolute emissions over a timeframe (e.g. reduce CO ₂ e emissions by 30% below the 2018 base year by 2025).
Accuracy	As an indicator for assessing data quality and uncertainty, refers to using the data that is most accurate and allows for measurements close to actual values.
Activity data	Quantitative measure of level of activity resulting in GHG emissions (e.g. litres of fuel consumed, kilowatt-hours of electricity used). Activity data is multiplied by an emission factor to obtain GHG emissions of the process, activity, or operation.
Additionality	Principle often associated with GHG projects whereby emissions reductions stemming from the project would not have occurred otherwise as through normal course of business activities.
Allocations	Process of dividing GHG emissions (or removals) from a single facility or other system (e.g. vehicle, business unit, corporation) among its outputs or from a common process between a specific product and co-products. For example, a company shares an office building with other companies. To determine the company's share of electricity use, it determines the proportion of space it occupies in the building (based on building's total area and occupancy rate) as a percentage and multiplies the result by total energy use (e.g. kWh) of the building. The company can then multiply this value by a relevant emission factor. Methods for allocations can be further explored in GHG Protocol's Corporate Value Chain (Scope 3) (Chapter 8) and Product Life Cycle Accounting and Reporting Standards (Chapter 9).
Anticipated carbon footprint	Refers to an estimate of the carbon footprint, not to be at the same level of accuracy as results following more thorough calculations.
Application period	The time period between verification of the base year carbon footprint (i.e. baseline date) and the first qualifying date or between subsequent qualifying dates.
Attributable processes	Any services, materials or energy flows that eventually become, make, and move the product through its life cycle.
Attributional approach	A foundational approach to product life cycle accounting, where GHG emissions and removals are attributed to the unit of analysis of the product or service in focus. This attribution of GHG emissions and removals to the unit of analysis is done by linking attributable processes along the life cycle.
Avoided emissions	Avoided emissions are emissions reductions that are indirectly caused by the studied product or a process that occurs in the studied product's life cycle. In the case of renewable energy (e.g. biomass) avoided emissions can be calculated by assuming that the use of the biomass reduces the demand for coal-fired power. Some standards allow avoided emissions to be subtracted from the total inventory results.
Base year carbon footprint	Greenhouse gas emissions of the Organisation (corporate footprint) or from the product life cycle (product footprint) measured in the determined base year. The base year carbon footprint is used for tracking emissions reductions and offsets.
Baseline date	Date the Organisation's corporate, product, or event carbon footprint was first verified based on the requirements of this standard.
Biofuels	Fuel derived from plant material (e.g. wood, ethanol from plant matter).

Biogenic CO₂ emissions	CO ₂ emissions stemming from combustion or biodegradation of biologically based materials not including fossil fuels (e.g. combustion of biological material from forests and agricultural feedstock).
Biomass	Materials or fuels produced by biological processes including non-fossil material (e.g. plants), biofuels, and biogenic waste and gas.
Calculation method	The technical method used by the Organisation to calculate the carbon footprint.
Carbon credit	The 'currency' used when offsetting. (see <i>Carbon offset</i>)
Carbon dioxide (CO₂)	A naturally occurring gas and one of the most abundant greenhouse gases in the atmosphere. Carbon dioxide is also a by-product of industrial processes, burning fossil fuels, and land-use changes.
Carbon dioxide equivalent (CO₂e)	The universal unit of measurement used to indicate the global warming potential of greenhouse gases expressed in the terms of the 100-year global warming potential of one metric tonne of carbon dioxide (tCO ₂ e). Product carbon footprints are usually expressed in kilograms or tons of CO ₂ e.
Carbon footprint	The total set of greenhouse gas (GHG) emissions caused by an organisation, event or product. For simplicity of reporting and comparison, it is often expressed in terms of the amount of carbon dioxide equivalent.
Carbon footprint management	The activity of monitoring, reducing, offsetting and reporting on a corporate or product carbon footprint.
Carbon footprint management plan	Organisation's plan for monitoring, reducing and offsetting carbon emissions. The plan can consist of various data sources and documents and does not necessarily need to be a single document.
Carbon footprint management system	A broad term covering the Organisation's full system of managing its carbon footprint.
Carbon inventory	Quantified list of a subject's GHG emissions and sources.
Carbon leakage	An unintended change caused by a project or climate policy such as an increase in GHG emissions. For instance, a forest project may only shift deforestation activities to another country or area, reducing positive impacts of the project.
Carbon neutral	Condition in which during a specified time period there is no net increase in the global emissions of greenhouse gases to the atmosphere as a result of the GHG emissions associated with the subject.
Carbon offset	Illustrate a reduction, removal or avoidance of emissions from a project used to compensate for GHG emissions occurring elsewhere. Offset calculations are derived based on a hypothetical scenario relative to the base year emissions footprint that illustrates what emissions would have been in absence of the mitigation project. An offset is commonly purchased as a credit quantified as a metric tonne of CO ₂ e reduction and upon retirement can be used to offset emissions on a voluntary basis.
Carbon sequestration	Uptake or removal of CO ₂ emissions and storage of carbon in biological sinks, or any physical unit or process that stores GHGs (e.g. forests).
Carbon stock	The total amount of carbon stored on a plot of land at any given time in one or more of the following carbon pools: biomass (above and below ground), dead organic matter (dead wood and litter), and soil organic matter. A change in carbon stock can refer to additional carbon storage within a pool, the removal of CO ₂ from the atmosphere, or the emission of CO ₂ to the atmosphere.

Carbon storage	Retention of carbon from biogenic or fossil sources or of atmospheric origin in a form other than atmospheric (e.g. wood products).
Closed loop approximation method	Also known as the 0/100 method, takes into consideration the impact that end-of-life recycling has for the acquisition of virgin material, which maintains the same intrinsic properties as the recycled material.
Completeness	As an indicator for assessing data quality and uncertainty, refers to the degree data is representative of applicable activities (e.g. percentage of activities or locations where data is available and incorporated out of the total number within the chosen boundaries; number of applicable emission sources included).
Contractual instrument	Various types of contracts between parties for the purchase of energy and carrying attributes about the energy generation. Examples may include renewable energy certificates and guarantees of origin, direct agreements, supplier-specific emission rates, and emission factors representing the residual mix.
Control	Ability of a company to directly influence policies of operations either through demonstrating operational control or financial control. (see <i>equity share, financial and operational control approach</i>)
Co-products	Two or more products that come from the same unit process or product system.
Cradle-to-gate	Life cycle stages from the extraction or acquisition of raw materials to the point at which the product leaves the Organisation undergoing the assessment.
Cradle-to-grave	Life cycle stages from the extraction or acquisition of raw materials to recycling and disposal of waste.
Direct emissions	Emissions from sources owned or controlled by the reporting organisation. (Also referred to as Scope 1 emissions).
Double counting	When two or more individuals or organisations claim ownership of a specific emissions reduction or carbon offset.
Downstream emissions	Emissions occurring downstream in the value chain, after the handover of products or waste to a third party e.g. emissions caused by use, waste handling and recycling activities of the Organisation's products.
Emission buffer	An emission buffer refers to a percentage with which the total carbon footprint is multiplied in order to compensate for excluded emissions.
Emission factor	An amount of greenhouse gases emitted, expressed as carbon dioxide equivalent and relative to a unit of activity (e.g. kgCO ₂ e emitted in relation to a kWh of electricity purchased).
Emission intensity terms	An expression of the carbon footprint per unit of physical activity or unit of economic value, e.g. tCO ₂ e per staff member employed or per ton of product produced within the base year. (Also known as <i>intensity ratio</i> .)
Emission rate	Emission factor provided by an electricity supplier to its clients. The term is often associated with Scope 2 emissions.
Emission scopes	The release of greenhouse gases into the atmosphere divided into direct (Scope 1) and indirect emissions (Scopes 2 and 3).
Energy attribute certificate	A type of contractual instrument in the energy sector that demonstrates insights and information about energy generation to sellers, distributors, consumers and electricity regulators. Instruments commonly attributed to this category include certifications, credits, and tags.

Equity share approach	A type of consolidation approach whereby the subject or company accounts for emissions from operations based on its share of equity in the operation.
Final product	Products or services consumed by the final user.
Financial control approach	A type of consolidation approach whereby a subject or company accounts for all emissions over which it maintains financial control, or is able to direct financial and operating policies of an entity as to realise economic benefits.
Function	The service provided by the evaluated product.
Functional unit	The quantified performance of the evaluated product or service. It helps measure the function of the product or service and acts as a reference point for relating inputs and outputs. Examples include a paper cup – delivery of 6 ounces of a cold beverage, printed material – square cm of the printed good, hot shower – number of 5-minute warm water cycles). (see <i>Unit of analysis</i>)
Geographical representativeness	As an indicator for assessing data quality and uncertainty, refers to the extent data relates to the actual location of the activity, process, or operation.
GHG accounting	The activity of accounting for an organisation’s greenhouse gas emissions.
GHG inventory	Accounting of the GHG emission releases into the atmosphere.
GHG removal	Sequestration or absorption of GHG emissions from the atmosphere; regarding biogenic removals, this typically refers to CO ₂ absorption by biogenic materials.
Global Warming Potential (GWP)	A measure of how much a given amount of greenhouse gas contributes to global warming, relative to the same amount of carbon dioxide. (see <i>CO₂e</i>)
Greenhouse Gases (GHGs)	The atmospheric gases responsible for causing global warming and climate change. Major GHGs are carbon dioxide (CO ₂), methane (CH ₄) and nitrous oxide (N ₂ O). Less prevalent – but powerful – greenhouse gases include hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF ₆), and nitrogen trifluoride (NF ₃).
Guarantee of Origin	Type of energy attribute certification common in Europe.
Indirect emissions	Emissions from sources owned or controlled by a third party but whose emissions are influenced by the reporting organisation. (see <i>Scope 2 and 3 emissions</i>)
Intensity target	A reduction target relative to the intensity unit. e.g. 15% reduction of emissions per staff member between 2015 and 2018.
Intermediate product	The output from a unit process that becomes the input to another unit process requiring additional transformation within the product system.
Inventory boundary	Point of demarcation that illustrates direct and indirect emissions included in the carbon footprint inventory.
Insetting	Direct investments made and actions taken by an organisation within its value chain to reduce its carbon footprint and often produce other positive sustainable impacts.
Land-use change attributions	The change in carbon emissions resulting from a land-use change attributed to a corporate or product footprint. The land-use change attribution is calculated by determining or estimating the carbon storage potential of the previous land use and subtracting the carbon storage potential of the new land use.
Land-use change impact	A change in the purpose for which land is used by humans (e.g. between crop land, grass land, forest land, wetland, industrial land). Examples include biogenic CO ₂ emissions and removals as a result of carbon stock changes from land conversion; biogenic and non-biogenic emissions such as CO ₂ , CH ₄ , N ₂ O stemming from e.g. biomass burning or liming in the preparation of converted land.

Life cycle	Continuous and linked phases of a product system (e.g. processes of product or service to help model the life cycle), including land use, raw material acquisition and pre-processing, production, distribution and storage, product use, and end-of-life.
Life cycle assessment	Collection and evaluation of inputs, outputs and prospective environmental impacts of the product system (or product/services and processes) across the life cycle.
Location-based method	A method to quantify Scope 2 emissions derived from the average energy generation emission factors for a specific region or (local, national) boundary.
Market-based method	A method to quantify Scope 2 emissions of an organisation based on contractual instruments including those coupled with agreements between the Organisation and its supplier for the procurement of a determined electricity bundle.
Material threshold	Term employed in the process of emission verification. It is commonly incorporated to determine if an error or omission in the carbon footprint inventory represents a material discrepancy, or error that is significant to the extent it may influence performance or decisions.
Method	Methods used to calculate the carbon emissions from activities taking place within the Organisation as well as upstream and downstream in the value chain.
Operational control approach	A type of consolidation approach whereby a subject accounts for all emissions over which it maintains operational control, or maintains authority to introduce and implement operating policies at an operation.
Organic growth	Refers to the growth or decline of the Organisation's business operations, e.g. increasing or decreasing production volumes.
Organisational boundaries	The boundaries that determine the activities owned or controlled by the reporting organisation, depending on the consolidation approach taken (e.g. <i>equity share</i> , <i>financial</i> or <i>operational control approach</i>).
Primary data	Data obtained through the direct measurement of activities in the Organisation's value chain or processes in the product life cycle.
Process emissions	Emissions stemming from physical or chemical processes often linked to industry sectors such as aluminium, cement, chemical, iron and steel, oil and gas, and waste.
Product carbon footprint	The calculated emissions from all life cycle stages of a given unit of product or well-defined service product in its time of function.
Qualifying date	The date at which the proclaimed carbon emissions reduction and/or carbon neutrality are verified, and the Organisation may qualify for related claims.
Ratio indicator	Indicators that illustrate information on relative performance such as intensity or efficiency ratios.
Recycled content method	Also known as the 100-0 method, allocates the related process emissions and removals from recycling to the product life cycle that uses the material.
Reference flow	Amount of the evaluated product that is needed to fulfil the function (e.g. service) defined in the unit of analysis or that is relevant for completing the GHG inventory.
Reliability	As an indicator for assessing data quality and uncertainty, refers to the degree any sources, data collection methods, and procedures used to gather and calculate data are dependable.
Renewable energy	Energy from non-fossil sources including e.g. wind, solar, hydropower, biomass.
Renewable energy certificate	Type of energy attribute certification common in North America.

Residual mix	Mix of energy generation resources and attributes including GHG emissions left over after contractual instruments have been claimed or retired.
Retirement (of carbon credits)	To permanently remove carbon offsets from market to ensure that they are not re-sold. Offsets are usually retired by giving them individual serial numbers and placing them in an official registry.
Science Based Targets	GHG emissions reduction targets aligned with scientific insights in order to meet the goals of the Paris Agreement.
Scope 1 emissions	See <i>Direct emissions</i> .
Scope 2 emissions	Indirect GHG emissions from the generation of purchased electricity that is consumed by the Organisation.
Scope 2 Quality Criteria	Requirements that contractual instruments (e.g. contracts between an organisation and a utility provider for sale and purchase of energy attributes concerning energy generation) must meet to be used in market-based (Scope 2) accounting method.
Scope 3 emissions	Indirect GHG emissions (excluding Scope 2) that occur in the value chain of the Organisation, including upstream and downstream emissions.
Secondary data	Data not obtained through the direct measurement of activities in the Organisation's value chain or processes in the product life cycle. Such data is taken from industry average data (e.g. published databases, government statistics, scientific studies, and sector guides), financial activities, and proxy data from similar activities.
Sector / product specific rules	Rule set developed for a specific sector or product group, stating the most significant carbon emission sources in the corporate footprint or the product life cycle. Such rules shall enable consistent application of a carbon footprint methodology within a sector and ensure meaningful comparison between companies and products.
Significance threshold	Qualitative or quantitative criteria used to define a significant change to data, inventory boundaries, methods or any other relevant factors that triggers base year emissions recalculation.
Subject	Refers to the entity under investigation and subject of the measurement, reduction, or neutrality claim e.g. corporation, product, or event.
Supporting documentation	The documents by which the Organisation demonstrates conformance with this standard, e.g. the climate policy statement and carbon footprint management plan.
Technological representativeness	As an indicator for assessing data quality and uncertainty, refers to the extent data relates to technologies or solutions used or the product under assessment.
Time representativeness	As an indicator for assessing data quality and uncertainty, refers to the extent data coincides with the actual timeframe or age of the activity, process, or operation.
Unit of analysis	Basis on which inventory results are calculated. Parameters such as size, service life, and level of quality should be used to help define the unit of analysis. For final products, this typically refers to the functional unit, and for intermediate products this refers to the reference flow. (see <i>Functional unit</i> and <i>Reference flow</i>)
Upstream emissions	Emissions occurring upstream in the value chain before takeover of the material by the reporting organisation. Upstream emissions are generally caused by a third party and can therefore be difficult to obtain, determine or quantify.
Waste	Waste material arising from the production or use phase and sent to waste management - waste from the production that is reused for a different process is therefore not considered as waste.

About us

Preferred by Nature (formerly NEPCo) is an international non-profit organisation working to support better land management and business practices that benefit people, nature and the climate. We do this through a unique combination of sustainability certification services, projects supporting awareness raising, and capacity building.

For more than 25 years, we have worked to develop practical solutions to drive positive impacts in production landscapes and supply chains in 100+ countries. We focus on land use, primarily through forest, agriculture and climate impact commodities, and related sectors such as tourism and conservation. Learn more at www.preferredbynature.org

Contact

Justin Rehn
Climate Programme Specialist
jrehn@preferredbynature.org
Contact no: +46 72 187 54 66

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