Climate Action Protocol

March 2024

Navigating the complexity of
leading carbon credit-related claims

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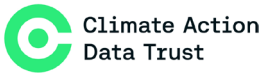
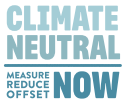
PARTNERS

Climate Impact Partners works with and supports the following internationally recognized bodies:





About Climate Impact Partners

Climate Impact Partners is a leader in developing and delivering high-quality, high-impact carbon market solutions for climate action.

For more than 25 years the company has worked with climate-leading businesses to support more than 600 projects which reduce carbon emissions, improve health and livelihoods, and protect and restore biodiversity.

Through its quality-first approach, Climate Impact Partners' clients are able to achieve ambitious climate targets, meet net zero goals, and deliver real impact.

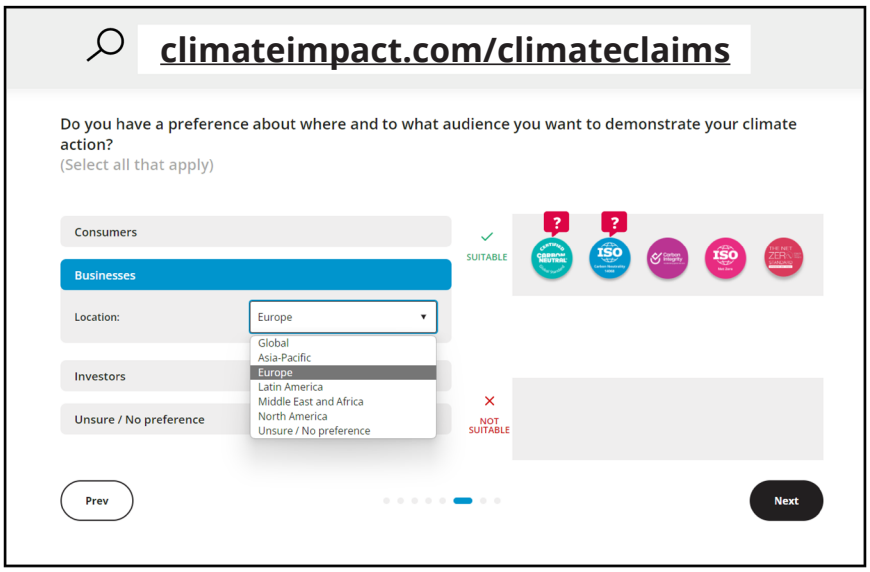
Awards

Climate Impact Partners has been recognized in Environmental Finance's Voluntary Carbon Market Rankings every year since 2011, including winning the Best Offset Retailer eleven times, Best Advisory Service, and Best Project Developer award categories.

Climate Action Protocol *digital tool*

Navigate the complexity to make confident climate claims

Companies are looking for clarity in the climate claims landscape. Climate Impact Partners, leaders in the voluntary carbon market, have developed a digital tool to help companies find which certifications are best suited to their operations and aims.



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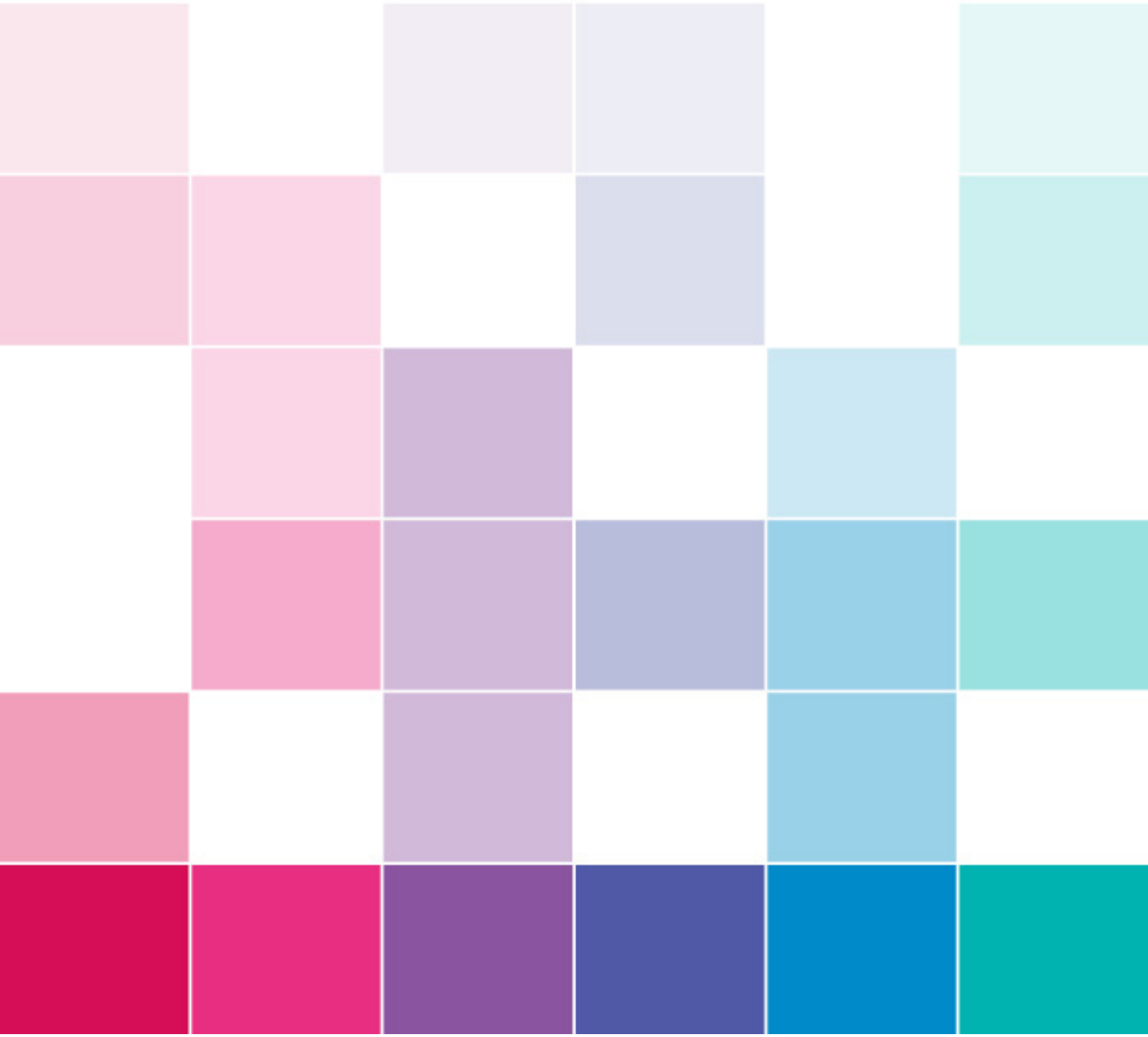

Preface

The world's first climate check-up took place at the COP28 summit in Dubai. It assessed how well countries and other actors are doing in meeting the Paris Agreement's goals. The widening gap between what is required vs what is needed prompted a fiercely negotiated response. A rare consensus emerged: almost all countries pledged to wean themselves off fossil fuels, though not as fast as some had hoped.

But the summit stalled on the thorny issue of carbon markets, which allow countries to trade emissions reductions under Article 6 of the Paris deal. This means the voluntary carbon market, which many companies use to offset their own emissions, will grow more slowly. Yet it remains a vital tool for reaching net zero.

Companies are not waiting for governments to act. They are taking matters into their own hands, following various voluntary standards and frameworks to cut their carbon footprints. The number of corporates that have made significant voluntary climate change commitments has grown from 24% in 2019 to 66% in 2023, based on research into the Fortune Global 500.[1] This has fueled significant growth in the voluntary carbon market (VCM), bringing much needed additional funding to reducing global emissions, while also channeling vital climate finance to the Global South.

With an expectation that more companies will step up to make voluntary climate commitments over the coming years, the VCM has the potential to play an increasingly important role in reducing and removing global emissions between now and 2050. Estimates of the size of the VCM in 2050 vary from 2.5 $GtCO_2e$ of reduced emissions and removals to 5.9 $GtCO_2e$ and a potential value of $1 trillion,[2] so it is clear that there is a significant positive climate impact that can be achieved through the VCM.

However, the VCM is currently in a transition period due to a number of factors: the move from the Kyoto Protocol era to the Paris Agreement, signed in 2015 but operational from 2021; increased public and media scrutiny on corporate climate performance; enhanced regulatory pressure from the EU, the UK, and the USA[3, 4, 5] and a growing expectation that companies need to decarbonize at breakneck speed in line with science – albeit research has found that companies using the VCM deliver deeper internal reductions by putting a price of carbon into the business[6, 7].

These factors have prompted a re-assessment of current VCM practices. The development of best practice frameworks is challenged by the tension of, on the one hand, building a 'big tent' which encourages more companies at various stages of their climate action to step up and, on the other hand, setting a high bar which ensures all organizations are achieving ambitious targets. This is a critical balance, which if achieved could arrive at an internationally recognized framework defining quality and integrity standards that could catalyze future market growth and the crowding-in of more carbon finance.

Numerous initiatives have taken on the task and each one is in the process of developing its own guidance and rules. This could be viewed as a patchwork of opinions, discussions, and timelines, with some initiatives publishing guidance in stages throughout 2023 and further publications expected in 2024. We at Climate Impact Partners take the view that these initiatives represent an opportunity to both drive quality and create the trust needed to vastly grow the circle of companies taking climate action through the VCM. After the publication of standards and codes by some initiatives, we can see a high degree of alignment. That said, it may take some time for a universally accepted framework of best practice to emerge, and there is a mission to help corporates navigate an evolving landscape and understand the competing options.

Stepping back, companies can choose to integrate the use of carbon credits into their climate management strategies for many reasons, including to demonstrate to stakeholders that they are taking immediate and verified climate action. The Science-Based Targets Initiative (SBTi) in its February 2024 Beyond Value Chain Mitigation (BVCM) report,[8] has endorsed the role of carbon credits in private sector action to reach global net zero emissions, and recommends that companies should purchase carbon credits equivalent to at least 50% of their unabated Scope 1, 2 and 3 emissions. SBTi will not be validating BVCM by businesses but suggests any resulting claims should be externally verified or certified. Carbon neutral and net zero claims have emerged as the most widely used way to communicate ambitious climate goals and achievements in a simple, and meaningful fashion. The current discussions are focused on ensuring that the actions behind those claims, and the claim itself, are clear, credible, and robust, and that they are not used inappropriately by companies to 'greenwash' their activities. Specifically, this work involves developing comprehensible definitions and frameworks for claims, ensuring there is valid and transparent action to back those claims, and examining possible new claims which may broaden the options for voluntary action to more companies.

It is in this context that this Climate Action Protocol brings together and compares the most established global initiatives used by businesses to take action and ultimately make corporate climate claims using carbon credits. Its purpose is to enable a greater understanding of these initiatives and to help companies navigate the complexity of the current landscape. It embraces and profiles the attempts to create a global consensus around claims in the VCM, highlighting similarities and encouraging and aiding use, rather than creating another new claim. This Climate Action Protocol contributes to building that consensus early, in order to respond to the urgent need to increase climate finance.

1. Climate Impact Partners, 2023, Commitment Issues: Markers of Real Climate Action in the Fortune Global 500. It defines significant climate commitments as: carbon neutral, net zero, RE100 or Science Based Target.
2. BloombergNEF, 2023. Long-Term Carbon Offsets Outlook
3. European Commission, 2023, Proposal for a Directive on substantiation and communication of explicit environmental claims (Green Claims Directive)
4. UK Advertising Standards Authority, 2023, Updated environment guidance: carbon neutral and net zero claims in advertising
5. Federal Trade Commission, 2023, A Proposed Rule on the Guides for the Use of Environmental Marketing Claims
6. Sylvera, 2023, Carbon Credits: Permission to Pollute, or Pivotal for Progress?
7. Trove Research, 2023, Corporate emission performance and the use of carbon credits
8. https://sciencebasedtargets.org/resources/files/Above-and-Beyond-Report-on-BVCM.pdf

Science Based Targets Initiative (SBTi)'s Beyond Value Chain Mitigation (BVCM)

Above And Beyond: An SBTI Report on the Design and Implementation of Beyond Value Chain Mitigation (BVCM)

The SBTi develops criteria and provides tools and guidance to enable businesses and financial institutions to set GHG emissions reduction targets in line with what science tells us is needed to keep global heating below 1.5°C.

In February 2024, the SBTi published its report on Beyond Value Chain Mitigation (BVCM). The report has reinforced the importance of companies going beyond internal emissions reductions if we are to meet global net zero goals. Within BVCM, SBTi recommends that companies purchase carbon credits equivalent to at least 50% of their unabated Scope 1, 2 and 3 emissions.

Within its Corporate Net Zero Standard, SBTi highlight BVCM as one of four key components of climate targets. Whilst not a requirement, the SBTi encourage companies to take immediate action to mitigate emissions beyond their value chain whilst on the pathway to net zero.

Carbon-credit related claims are a key part of BVCM business case

The SBTi highlights that climate claims are a key part of the business case for BVCM. The SBTi does not have plans to validate BVCM claims and states that claims should meet general requirements of high-integrity and high ambitions. It recommends that BVCM claims are externally audited or certified to increase credibility over self-declared claims. The report gives the VCMI's Carbon Integrity claim as an example of a high-quality claim to communicate BVCM.

The standards and initiatives within the Climate Action Protocol, including VCMI's Carbon Integrity claim, are important tools to communicate action through credible claims as part of companies' BVCM.

The Voluntary Carbon Market is a key solution for delivering BVCM

BVCM Goals

1) Deliver additional near-term mitigation outcomes to achieve the peaking of global emissions in the mid-2020s and the halving of global emissions by 2030

2) Drive additional finance into the scale-up of nascent climate solutions and enabling activities to unlock the systemic transformation needed to achieve net zero by mid-century globally.

Principles

- Scale: Maximize mitigation outcomes
- Financing need: Focus on underfinanced mitigation
- Co-benefits: Support the SDGs
- Climate justice: Address inequality.

The report sets out BVCM goals and principles to guide companies to take action for high-impact and high-integrity BVCM activities and investments.

The SBTi acknowledges that 'ability to pay' varies across sectors and encourages businesses to deliver BVCM activities based on their business case and ability to secure buy-in and financial resources.

As best practice, the SBTi recommends that a company sets a BVCM budget by applying a carbon price to unabated Scope 1, 2 and 3 emissions annually, and using this budget to fund a combination of near-term BVCM outcomes and long-term BVCM finance.

It guides companies to use a portion of the BVCM budget for verified emissions reductions (carbon credits) which are proportional to at least 50% of the company's remaining Scope 1, 2 and 3 emissions. Mitigation outcomes beyond 2021 are preferred.

The BVCM guidance from SBTi is an explicit acknowledgement from an NGO globally renowned for rigorous corporate climate action of the importance of going beyond internal reductions if we are to meet global net zero goals, and the role of carbon credits in delivering those additional mitigation opportunities.

Climate Action Protocol: Navigating the complexity of leading carbon credit-related claims

We are pleased to present this 2024 inaugural edition of the Climate Action Protocol. This is an expansion of The CarbonNeutral Protocol which Climate Impact Partners launched in 2002 and updated annually to provide businesses with a framework for CarbonNeutral certified climate action. However, in the last 12 months the views, options and requirements for corporate statements of their climate commitments and actions have significantly changed. Therefore, Climate Impact Partners, as trusted partner to businesses throughout the world, has also made a change. The Climate Action Protocol, is an open access guide developed for business, by business, that draws together leading independent standards and initiatives for carbon credit-related claims into a practical guide to help companies understand the requirements of each.

Purpose

The Climate Action Protocol has been developed as a resource to provide businesses around the world with a guide to navigate the requirements of the most credible and transparent carbon credit-related claims.
As third-party standards, frameworks and guidance are developed, the Climate Action Protocol builds upon the best in the market to help companies compare claims that are recognized internationally and understand the requirements for making them.

The Climate Action Protocol is designed for:

- Businesses and organizations – To understand what is required to develop credible programs for financing climate solutions
- Technical partners – To aid Climate Impact Partners' technical partners, (e.g. greenhouse gas (GHG) assessment partners) understanding of what is required of them so that their services are consistent with the requirements of the different claims available to companies
- The wider Climate Action Community – To encourage partnerships amongst business, NGOs, policy-makers, regulators and civil society to promote high standards for carbon accounting, internal abatement and the use of carbon credits to finance climate solutions beyond the value chain.

Principles

Three principles form the foundation for the claims covered in the Climate Action Protocol:

1. Promote immediate action to support deeper and widespread transformation

Transformation to a sustainable and resilient net zero economy is accelerated by entities acting ahead of and beyond regulation. By doing so they reduce emissions under their direct control and finance mitigation activities elsewhere in line with the UN Framework Convention on Climate Change (UNFCCC) goals and the UN's Sustainable Development Goals (SDGs).

2. Build on robustness, transparency, and continuous improvement

The standards and initiatives covered are credible markers of best practice when communicating voluntary climate action to key stakeholders. Entities commit to disclosing the basis of their claims – including the GHG emission inventories, management processes, methodologies, standards and protocols – and accept that these requirements may change to align with emerging best practice.

3. Are committed to pragmatism and global impact

Addressing the requirements of the claims outlined in the Climate Action Protocol is an actionable, understandable, and pragmatic response that can be adopted by any entity to meet its climate objectives and play a meaningful role in driving the transition to net zero across the global economy. The labels of the standards and initiatives enable entities to communicate their action to key stakeholders so they may be recognized and rewarded for their progressive action.

Structure

The Climate Action Protocol is divided into two core sections, as follows:

1. Overview of Requirements

The Overview of Requirements section sets out core requirements of the claims. This section is intended to give readers a high-level understanding of the fundamental elements of each claim, and a comparison between them.
This is accompanied by guidance on best practice principles across the five steps (Figure 1) which underpin credible action.

2. Detailed Requirements

The Detailed Requirements section provides more information about the requirements of each of the claims.

It is intended to give companies practical and actionable information about the requirements they need to address under the relevant claims. These specifications draw upon the documentation published by each of the parties which maintain the frameworks or standards.

The Climate Action Protocol summarizes the requirements of a number of relevant recognized standards and initiatives which organizations can use to make climate-related claims to communicate their climate action and programs. The initiatives covered are described below.

Initiatives covered

CarbonNeutral® certification

The CarbonNeutral Protocol

A program developed and awarded by Climate Impact Partners to provide companies a clear, credible, and transparent framework for CarbonNeutral® certification. Certification is awarded in accordance with the requirements defined in The CarbonNeutral Protocol. First developed and published in 2002, The CarbonNeutral Protocol is revised and updated annually to reflect developments in climate science, international policy, standards and business practice.

carbonneutral.com/the-carbonneutral-protocol

ISO 14068-1:2023 Carbon Neutrality

ISO 14068-1:2023

Transition to net zero
Part 1: Carbon neutrality

The ISO 14068 Carbon Neutrality is a standard by the International Organization for Standardization (ISO), an international standard development organization composed of representatives from the national standards organizations of 170 member countries. The standard has been under development since project approval in 2020 and was finalized in 2023. It is part of the ISO 14060 family of standards which covers the quantification, monitoring, reporting, validating, and verifying of greenhouse gas emissions and removals as well as carbon neutrality, and it builds on the British Standards Institution's (BSI) PAS 2060 Carbon Neutrality standard.

iso.org/standard/43279.html

Voluntary Carbon Market Integrity Initiative (VCMI)

Claims Code of Practice

The VCMI's Carbon Integrity claim provides guidance for companies to make credible claims about their voluntary use of carbon credits. The VCMI was established in 2021 as an international non-profit, co-funded by the UK Government and the Children's Investment Fund Foundation (CIFF), and led by Meridian Institute, a US-based not-for-profit organization. Following a public consultation, the operable Claims Code of Practice was published in 2023, with further guidance published later that year. There are Platinum, Gold and Silver Carbon Integrity claims. Additional claims under the VCMI banner are expected to be outlined later in 2024.

vcmintegrity.org/vcmi-claims-code-of-practice/

ISO Net Zero

Net Zero Guidelines

The ISO Net Zero Guidelines, launched at COP27 in 2022, are a tool to guide policymakers and all who work towards net zero for their business, group, or country to understand net zero definitions, principles and claims. It is an International Workshop Agreement, which will be reviewed after three years to consider it being further processed to become an international standard.

iso.org/netzero

SBTi Net Zero

Corporate Net Zero Standard

The SBTi's Corporate Net Zero Standard was first published in 2021 and updated in 2023, and is the first global science-based standard for companies to set net zero targets.

sciencebasedtargets.org/net-zero

Development
The Climate Action Protocol undergoes an ongoing development cycle which involves input from multiple stakeholders and incorporates additional key initiatives over time.

Climate Impact Partners' Advisory Council[1] is consulted on development priorities and, in addition, we consult with our clients, environmental consultancies, and other sustainability leaders and environmental NGOs.

Climate Impact Partners invites and encourages input from clients and others with an interest in corporate climate action. Suggestions for development priorities for subsequent versions of the Climate Action Protocol should be sent to Climate Impact Partners at business@climateimpact.com.

The versions of each third-party standard, initiative and framework referred to within this document are presented on our links to claims[2] webpage. As the Climate Action Protocol undergoes its annual development cycle, it will be updated with any changes published by those third parties.

Acknowledgements
Climate Impact Partners is solely responsible for the development and deployment of the Climate Action Protocol. However, we wish to acknowledge and thank our clients, members of our Advisory Council, and the many organizations and individuals that have contributed to the development.

Above all, we wish to thank the organizations and initiatives that are featured within the Climate Action Protocol. These initiatives are each playing a significant role in our progress towards global net zero and laying the foundations for businesses to take credible action.

1. carbonneutral.com/who-we-are/advisory-members
2. https://climateimpact.com/links-to-claims

Disclaimer

Climate-related claims are increasingly regulated by national and supra- national laws, which may impose additional restrictions, requirements and disclosures beyond the requirements of the standards, initiatives and frameworks referenced within the Climate Action Protocol. To find out general information about relevant laws and regulations across any jurisdictions please refer to Climate Claims Regulation Tracker[1] published by Climate Impact Partners (this information is intended as a general information resource for guidance purposes only and does not constitute legal advice, nor is it a complete and comprehensive list of all applicable laws and regulations).

The Climate Action Protocol references, interprets and summarizes information from different third party standards, initiatives and frameworks, based on compiled publicly available data. The information presented in the Climate Action Protocol is not exhaustive or comprehensive, and organisations should refer to the original source documentation as part of their decision making. The third party standards, initiatives and frameworks may be updated from time to time and are accurate at the time of publication of the current version of the Climate Action Protocol.

Climate Impact Partners shall not be liable for any claims, losses, damages, or liabilities arising from the use of the information contained herein, including but not limited to:

- Quality: The accuracy, completeness, or reliability of the information contained herein.
- Comprehensiveness: The inclusion or exclusion of specific data points or categories.
- Availability: Any interruptions, downtime, or unavailability of the information.
- Adequacy: The suitability of the information for any particular purpose or situation.
- Accuracy: Errors, omissions, or inaccuracies in the data contained herein.
- User Reliance: Any reliance placed by users on the information contained herein.

The Climate Action Protocol does not constitute legal or technical advice from Climate Impact Partners on which standard, framework or initiative your organisation should use. Climate Impact Partners strongly recommends that organisations making climate-related claims regularly seek legal advice to ensure such claims are and continue to be in compliance with all applicable laws and regulations, and meet the evolving initiatives and frameworks referenced in this Climate Action Protocol.

Trademark and copyright

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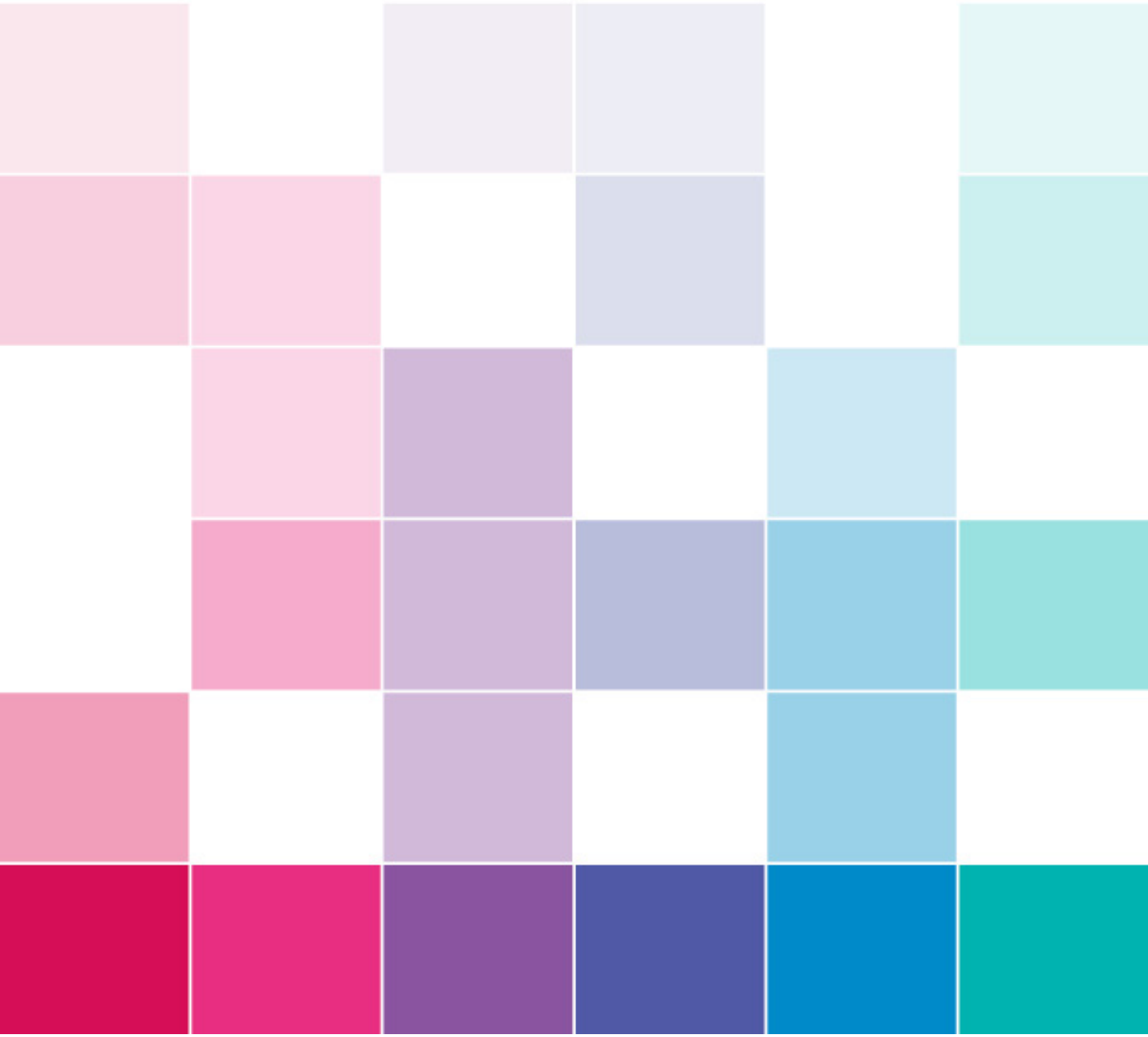
Full credit is given to the authors of the original published texts.

1 www.climateimpact.com/climate-claims-regulation-tracker

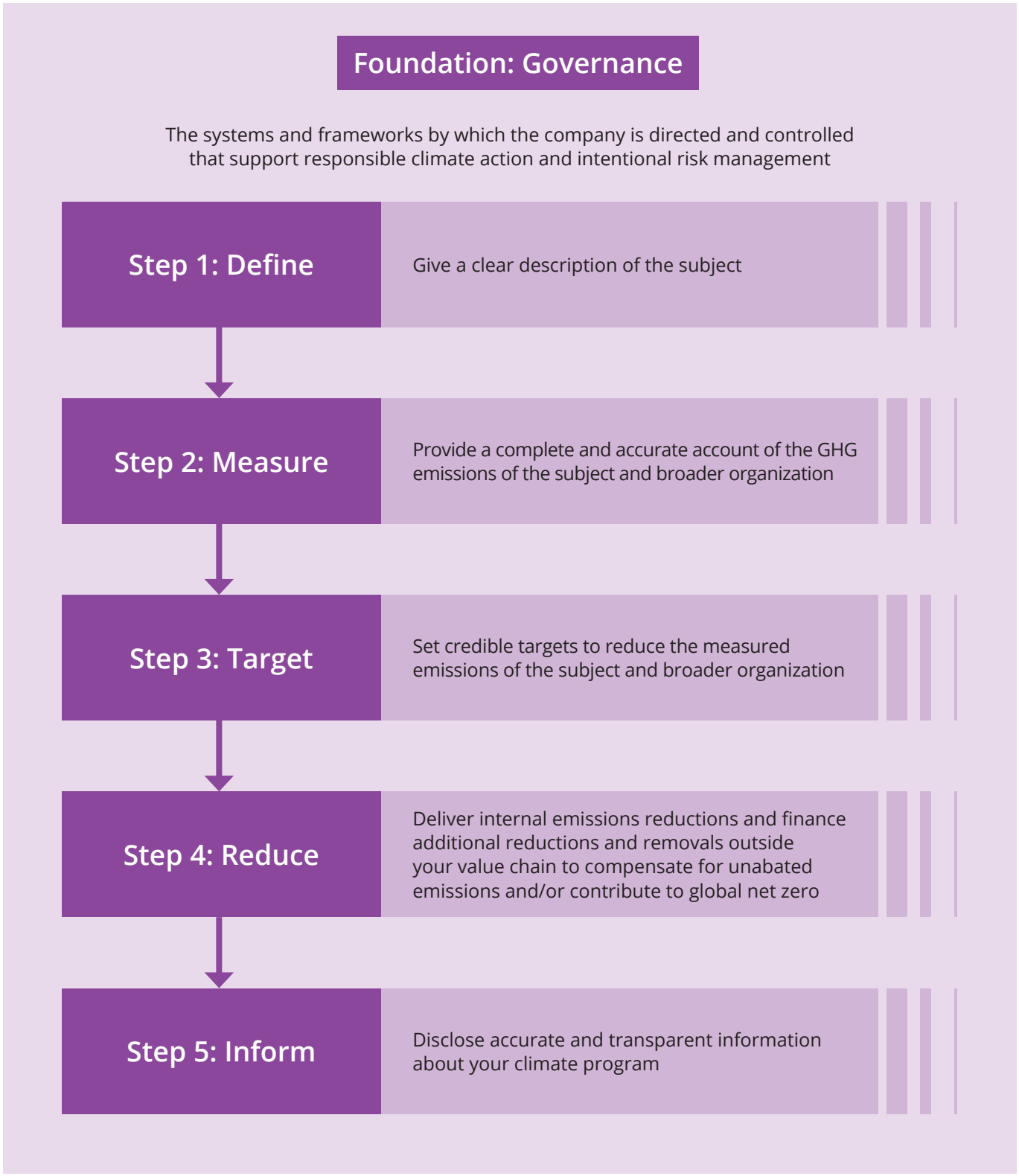
Overview of requirements



The five steps to making a credible climate claim

As illustrated in Figure 1, there are five steps underpinning a high-integrity climate-related claim. While these steps are set out sequentially, they may be carried out in parallel.

Figure 1: Five Steps Underpinning a Credible Climate Claim



Foundation: Governance

Overview: Governance refers to the frameworks a company defines and implements to deliver on its environmental and social goals, and on its transparency and reporting obligations. Strong governance starts with high-level leadership putting the right frameworks in place; the integration of climate considerations can then trickle down across the company.

A strong governance framework is developed and defined at the board level, which may include:

- Board engagement, information and reporting to define the company's Environmental, Social, and Governance (ESG) strategy, with climate change and ESG always on the Board's agenda and ESG performance linked to executive pay and bonuses
- Board structure, independence and diversity
- Effective management of conflicts of interest
- Implementation of a responsible tax strategy
- Building climate targets into financial decisions, including investment decisions
- Reference to double materiality to identify key topics for the organization.

Strong environmental governance includes appointing a senior individual or dedicated team to hold responsibility for delivery of ESG performance and related projects within the organization. For larger businesses this is often a Chief Sustainability Officer or Sustainability Director who is supported by an appropriately resourced Sustainability team which holds relevant experience and expertise.

Smaller businesses may not have the resource to maintain a sustainability team but often appoint 'sustainability champions' whose role includes ESG matters and key projects. The sustainability team should help develop additional policies for ethical business.

A governance framework also impacts business relationships and agreements with third parties such as suppliers, customers and counterparties. This might include:

- Supplier Code of Conduct
- Know Your Customer (KYC) which refers to the policies and procedures in place to manage risk and verify identity
- Free, Prior and Informed Consent (FPIC) which concerns obtaining consent from Indigenous People for any activities undertaken on their land.

Organizations should also consider impacts beyond strictly their GHG emissions within their climate strategies, such as:

- Social impacts and human rights
- Conservation and enhancement of biodiversity and nature
- Just transition and equity.

Finally, organizations' communication and public policy advocacy should be aligned with their climate and ESG goals – including the global transition to a low-emissions economy in line with the Paris Agreement.

Table 1: Comparison of governance requirements across standards

Requirements	Certified Carbon Neutral Global Standard	ISO Carbon Neutrality 14068	VCMI Carbon Integrity	ISO Net Zero	Science Based Targets The Net Zero Standard
Management has long-term commitment to maintain claim	X	✓	X	X	X
At least one of: • board-level compensation is linked to climate performance indicators • board members climate-related capabilities or expertise • board-level progress reviews on meeting near-term emissions reduction targets	X	X	✓	X	X
Advocacy activities must be consistent with the Global Standard on Responsible Corporate Lobbying's categories (and set out in a public statement)	X	X	✓	X	X

Note: All initiatives highlight strong governance as a core part of delivering a high quality climate strategy. Specific topics vary between the standards which makes direct comparison difficult, however there are core themes and recommendations which run throughout.

Step 1: Define

Overview: The first step to making a credible climate-related claim is to clearly define its subject. For many organizations, the desired subject of the claim is the entire organization itself, but this may also be a more specific subject, such as a particular line of product, or activity, like an event. A claim is made for a specific part of an organization by defining the boundary around the relevant operations.

Categorizing the subject of the claim
Standards often classify subjects into three broad categories:

1) Entity: These claims relate to the full value chain of the organization, or a specific part of the organization such as a particular division, subsidiary or location.

2) Products: These claims relate to a product sold by an organization, including to public consumers and business customers. The definition of a product is broad and includes:

- Tangible goods purchased or manufactured by the organization for onward sale
- Capital assets built or constructed, such as buildings and developments
- Intangible goods such as a service or 'on-demand' goods.

3) Activities: These claims relate to the delivery of a utility or service, such as travel or an event which is operated by the organization. Such activities may take place within the organization itself, or form part of a service sold to a customer.

Some standards allow claims only in relation to the full value chain of the business, and therefore cannot be applied against discrete subjects like those outlined above.

Engaging with stakeholders
There are a number of factors that can influence what is the most suitable subject for a claim, and an organization should make sure to engage with a broad range of stakeholders during its decision making.

Examples of questions to consider include:

- What is the main objective of the claim?
- Who or what is the intended audience?
- Where do I want to make a claim?
- When do I want to make a claim?

It's important to carefully consider what expectations your stakeholders are likely to have when reading a claim, and whether certain stakeholders might interpret the claim differently to others. Generally speaking, a boundary should include as extensive a scope as possible. As an example, for a product claim, the boundary should include the full cradle-to-grave lifecycle of the product.

Table 2: Comparison of definition requirements across standards

Requirements	CERTIFIED CARBON NEUTRAL® Global Standard	ISO Carbon Neutrality 14068	VCMI Carbon Integrity	ISO Net Zero	SCIENCE BASED TARGETS THE NET ZERO STANDARD
Subject is a sub-set of the value chain of the organization (e.g. a product, event)	✓ (e.g. CarbonNeutral product)	✓ (Products, Events)	X	X	X
Subject is the full value chain of the organization	✓ (CarbonNeutral brand)	✓* (Organizations, Financial Institutions)	✓	✓	✓
Subject is the current state of emissions	✓	✓	✓	✓	✓
Subject is future state	X	X	X	✓ (Net Zero Target)	✓ (Net Zero Target)

* ISO 14068 Carbon Neutrality's subject includes "the following categories: direct GHG emissions and indirect GHG emissions from purchased energy, upstream purchasing, downstream sold products including the use phase and end-of-life phase, goods transportation, travel and financial investments". This is not equivalent to "full value chain emissions" but since two of the Scope 3 categories the ISO 14068 Organization claim requires – upstream purchasing (Scope 3.1) and downstream sold products including use phase (Scope 3.11) – constitute 70% of global Scope 3 emissions (BCG, SBTi, 2023, The Scope 3 Challenge, link, page 17), we have marked as requiring full value chain emissions.

Step 2: Measure

Overview: The second step is to measure the emissions associated with the entity, product or activity as defined in Step 1, as well as the broader emissions of the organization's value chain.

Principles of measurement
A recognized, well-established methodology should be used to underpin the measurement of the GHG emissions inventory, and to guide data collection. Sector specific guidance should be used where appropriate. The most commonly applied standards include:

- The Greenhouse Gas Protocol's:
  - Corporate Accounting and Reporting Standard
  - Scope 2 Guidance
  - Corporate Value Chain (Scope 3) Guidance
  - Sector specific guidance such as the GHG Protocol Agricultural Guidance.
- The ISO 14060 family of standards

All GHG accounting and reporting frameworks, such as those above, as well as regulatory requirements for measurement and reporting of emissions are subject to change. Therefore organizations should monitor updates annually to ensure the latest and most appropriate versions are applied.

Measurement of the GHG emissions inventory of a subject and organization involves identification of the boundary of measurements. This involves applying a consistent approach, which usually involves using an Equity Share approach, or Control approach, the latter of which can be either Financial Control or Operational Control. The Greenhouse Gas Protocol's Corporate Accounting and Reporting Standard gives guidance on how these approaches can be applied.

Identifying emissions categories and sources
In the majority of cases, 100% coverage of an organization's emissions is infeasible due to availability of resources and data. Therefore organizations must identify which emission sources are material to its operations and value chain. Initially, this often involves a screening exercise across the value chain in order to understand which emissions sources and emissions categories are likely to be material, and which are not. Material emissions categories and emissions sources should be prioritized for data collection efforts.

Data quality
In order to measure the emissions of the subject in the most accurate way possible, it is critical that the best available data is collected. The preferred type of data is always primary data (data collected or directly measured which can be converted to CO_2e emissions through the application of conversion factors, without needing to first apply estimates), followed by secondary data (data which requires the application of assumptions or estimations).

Primary Data: Primary data is more precise, and does not require estimation. Organizations should prioritize primary data across each emission source (for example, liters of fuel consumed; kWh of electricity used).

Secondary Data: Secondary data is less precise than primary data; it can be drawn from financial data (for example, spend data on taxis for business travel), or can be extrapolated using benchmarks from data, such as the floor area of an office.

Secondary data and methods of estimation should be from credible and substantiated sources, and additionally be conservative to avoid understatement. The use of secondary data reduces the overall accuracy of the subject's footprint. For example, if spend based data is applied for the procurement of a raw material and a lower price is secured, an emissions reduction would be reported, which may not be reflective of the actual situation. Where such information is used, organizations should prioritize the provision of primary data in subsequent data periods.

Emissions factors
Activity or spend data is converted into a GHG emissions inventory using conversion factors. Organizations should ensure that conversion factors are from credible sources and relevant to the emissions source, including consideration of geographical reference and date of publication. Commonly used conversion factors include those published by:

- The UK Government, Department for Environment, Food and Rural Affairs (DEFRA)
- The US Government, Environmental Protection Agency (EPA)
- The International Energy Agency (EIA)
- The ecoinvent database, a Swiss non-profit organization.

Part 1: Measuring the carbon footprint of the subject of the claim

The emissions of the entity, product or activity which is the subject of the intended claim – as defined in Step 1 – should be measured in line with the above principles.

Organizations should measure and include the relevant emission sources depending on the respective subject of measurement and, if necessary, taking into account the materiality defined in the screening exercise. The GHG Protocol sets materiality of 5%, but it is important to note that the concept of materiality is subjective, and involves a value judgement.

Part 2: Measurement of the organizational footprint

Measurement of material emissions sources across the value chain allows the organization to fully understand its climate impact and support decision making for reduction efforts. Emissions commonly categorized into three Scopes, as defined by The Greenhouse Gas Protocol:

- Scope 1: Direct GHG emissions that occur from sources that are owned or controlled by the company. For example, consumption of natural gas in an office or diesel by a company car.
- Scope 2: Indirect GHG emissions that arise from generation of energy consumed by the organization. For example, electricity consumption of a manufacturing facility.
- Scope 3: Encompasses indirect GHG emissions within the value chain of the organization, which arise as a consequence of the activities of the company, but occur from sources not owned or controlled by the organization. For example, embodied emissions of raw materials used in the manufacture of a product sold by the organization, or emissions from business travel.

Scope 3 emissions are usually the most significant category for organizations, often comprising 90% or more of their total GHG inventories. Whilst this Scope is typically the most complex to measure, it is essential to understand the emissions associated with the entire value chain, as it provides a comprehensive overview of where emissions lie across the organization. In addition, it allows external parties to have a better understanding of how the footprint of specific subjects, such as a product) fit into the wider organizational footprint.

Verification and assurance

Organizations should consider involving third parties in the measurement of their emissions. This can enhance quality of calculations and reporting, lend additional credibility and increase stakeholder trust. It is particularly recommended for organizations which do not have employees with expertise in carbon accounting and reporting.

Involvement of third parties might include:

- Third-party assurance or verification: this is the most robust level of third-party review. It involves an independent assurance provider or verifier performing audit or verification procedures over the underlying data and calculations; this includes agreeing samples of information to underlying evidence.
- Third-party validation: this ensures that calculations are completed in accordance with relevant standards and requirements. Whilst the third party may obtain some supporting evidence to support the data, this is not as extensive as assurance and verification, and may not be performed to a recognized verification standard.
- Third-party calculation: a third-party carries out or assists with data collection and/or the calculation of the GHG emissions inventory of the organization.

Table 3: Comparison of measurement requirements across standards

Requirements	CERTIFIED CARBON NEUTRAL Global Standard	ISO Carbon Neutrality 14068	VCMI Carbon Integrity	ISO Net Zero	SCIENCE BASED TARGETS THE NET ZERO STANDARD
Measurement of Scope 1 emissions	✓	✓*	✓	✓*	✓
Measurement of Scope 2 emissions	✓	✓*	✓	✓*	✓
Measurement of Scope 3 emissions	✓	✓*	✓	✓*	✓
Third party validation or assurance of emissions	✓	✓	✓	✓	✓

*ISO standards require alignment with ISO 14064-1 and ISO 14067, which categorizes emissions sources differently to the GHG Protocol's Scope 1, 2 and 3. In practice, the emissions sources required are similar, and so for ease of comparison this has been presented in line with the GHG Protocol's nomenclature.

Step 3: Target

Overview: The Intergovernmental Panel on Climate Change's (IPCC) 2023 AR6 Synthesis Report tells us that continued increase in GHG emissions has made it increasingly difficult to meet the objective of the Paris Agreement, to limit the increase in global average temperature to well below 2 °C, and to pursue efforts to limit it to 1.5 °C.

Businesses can demonstrate leadership in climate action and contribute to the global effort to combat climate change by setting GHG reduction targets that are aligned with climate science. Setting ambitious targets helps incentivize senior management support for internal GHG reduction projects, and it encourages creative thinking by all stakeholders to identify new opportunities for reductions.

General target setting advice

When making any type of climate-related claim, a time-bound GHG emissions reduction target specific to that claim should always be set. Reduction targets should consider the emissions at the organizational level and those specific to the subject of the claim, such as product emissions.

For organization-wide emissions targets, the emissions of all subsidiaries should be included, and cover all relevant emissions as recommended by the standard being assessed against. Effective targets also support the SDG priorities and broader ESG agendas. An organization should set challenging short- and long-term targets that fit into a net zero framework. Product-level targets should also be considered for manufacturers; especially if a product is the subject of a climate-related claim, in which case the targets should be developed alongside entity-level targets to ensure alignment. It is best practice to publicly disclose targets because doing so offers transparency and accountability.

Some sectors are dependent on developments in new technologies and solutions to effectively decarbonize, such as the aviation industry. In these cases, organizations should support the advancement of technological innovation that they anticipate will be material to enabling them to meet their reduction goals.

Establishing a baseline

Establishing a baseline year allows an organization to report annual changes to emissions compared to a reference point in time. At the point of setting reduction targets, the baseline year should be recent, and be representative of normal business operations. For example, selecting 2020 as a baseline year would not be representative for many organizations as the global COVID-19 pandemic caused major disruptions in many supply chains, and to business travel. Organizations should also avoid 'cherry-picking' a baseline year to enable them to inflate reported levels of GHG footprint reduction.

Where relevant, a single baseline year should serve as the starting point for both short term and long-term targets. If an organization changes its emissions calculation methodology significantly over time, the baseline year's emissions can and should be recalculated using the new methods, as this makes progress reports more accurate. As an example, such a change might include the acquisition or disposal of a subsidiary company.

Absolute and intensity targets

GHG emissions reduction targets may be categorized between absolute reduction targets and intensity reduction targets. Absolute reduction targets represent a total decrease in GHG emissions footprint compared to the base year. In contrast, intensity targets are based on a normalized metric. For example, in the case of a professional services firm, an emissions intensity target may be the emissions per full-time employee. A manufacturer however may report its emissions per functional unit of a product.

In the absence of industry-specific guidance, companies should prioritize absolute reduction targets as they are likely to encourage the most significant GHG emissions reductions overall. Absolute reduction targets do not, however, allow comparisons of GHG intensity with peers, and may not accurately report efficiency improvements where reductions are achieved from a decline in output. Intensity targets may be most appropriate for small businesses in periods of high growth.

Science-aligned reduction pathways and net zero

To be science-aligned, the aim of short-term and long-term targets should be to reduce GHG emissions at a rate compatible with the models and pathways required to keep global warming below 1.5°C, in line with the recommendations of the IPCC.

Short-term targets (also referred to as near-term) are typically set 5-10 years beyond the baseline year. Long-term targets represent a time horizon of 10-15 years or more, and many organizations use them to set 2050 goals. These targets should represent a significant absolute reduction of emissions for the organization and they are likely to be extremely challenging.

All reduction targets should be created in the context of reaching net zero by 2050. While the definitions of net zero vary, the widely accepted definition is that net zero occurs when GHG emissions released are balanced out by GHG emissions removed from the atmosphere. This balancing of the atmospheric carbon budget is required to keep global warming below 1.5°C. Organizations should prioritize the absolute reduction of the majority of their GHG emissions, then should fully compensate for any remaining GHG emissions with high-quality carbon removal offsets to reach a net zero target. Beyond net zero, lie two goals. First, that of 'true zero emissions', which occurs when an organization operates in the absence of fossil fuels and does not require any carbon footprint compensation. Second, that of 'climate positive', a term indicating that an entity is taking action by removing GHGs from the atmosphere or reducing emissions to the atmosphere such that the aggregated reductions and removals exceed the unabated emissions from the subject, and/or compensate for a company's historical emissions.

Monitoring progress

Organizations should monitor performance against their reduction targets to ensure that they are on track to meet their goals, and take action to course-correct when necessary. Integrating a target with a yearly GHG inventory process and regularly comparing emissions to the base year are crucial for monitoring progression toward a target. To this end, organizations should establish additional interim targets. When there are major changes that affect a target's accuracy and relevance, companies should recalculate the target and realign their decarbonization strategy.

Table 4: Comparison of target requirements across standards

Requirements	CERTIFIED CARBON NEUTRAL Global Standard	ISO Carbon Neutrality 14068	VCMI Carbon Integrity	ISO Net Zero	SCIENCE BASED TARGETS THE NET ZERO STANDARD
A near-term science-aligned target	✓	✓	✓	✓	✓
A long-term science-aligned target	X	✓	✓	✓	✓
A net zero target	X	✓	✓	✓	✓
Full Scope 3 emissions are included in targets	✓	✓	✓	✓	✓*

*Under the SBTi Net Zero Standard, small companies do not have to set near-term targets for Scope 3 but must commit to measure and reduce them.

Step 4: Reduce

Part 1: Internal abatement

Overview: The fourth step is for the organization to drive change within its direct operations and value chain in order to deliver and achieve the internal emissions reduction targets it set. Emissions reductions should be made at the organizational level, and at the subject level where a climate-related claim is made, such as emissions of a product.

For many organizations, the greatest opportunity to achieve immediate reductions lies within Scope 1 and 2 emissions categories as they are the most easily influenced and controlled. This is not the case for all sectors; for example, where there is reliance on energy intensive processes, such as the manufacture of steel or cement, or a current lack of viable alternative fuels or technology, such as aviation, Scope 1 and 2 can be difficult to mitigate. In these instances, organizations should consider how they can influence and accelerate the adoption of new solutions which they will need in the future to operate in a low-carbon economy.

Scope 3 emissions sources are usually more difficult to address due to a lack of direct control and the need to engage with value chain participants. Due to the relative difficulty and magnitude of Scope 3 emissions sources, such as purchased goods and services, it is important to assess and prioritize reduction opportunities early so they can be acted upon.

Tools and approaches to assist decision making

Initially, the full value chain GHG assessment and calculation will allow the organization to identify material emissions sources or 'hotspots', which can help identify reduction opportunities. The organization should consider both potential impact and complexity when prioritizing its abatement activities. Examples of tools and methods available to assist decision making are described below.

Life Cycle Assessment software

Where an organization has a complex supply chain, for example product manufacturers, Life Cycle Assessment (LCA) software may aid understanding of the best opportunities to drive reduction within their product value chains and undertake cost-benefit analysis of planned changes. Such tools can help organizations understand the potential impact of using an alternative material or changing to a new supplier in a different geography to enable a lower carbon transport option.

Internal carbon price

Developing an internal carbon pricing mechanism can help organizations incentivize reductions by introducing a financial metric to GHG intensity-related performance. This can support with decision-making, such as investment into new capital assets or development of new and existing products using LCA software as described above.

Marginal abatement cost (MAC) analysis

An excellent framework to assist organizations in evaluating a range of internal GHG reduction projects is marginal abatement cost analysis, an economic concept that measures the cost of reducing one more unit of GHG emissions. Marginal abatement costs are presented on a marginal abatement cost curve or MAC curve, a graphical representation of the cost and scale of GHG reduction projects, which can be used to assess, compare and prioritize options. While there are many more aspects to consider beyond scale and cost, they are useful tools to guide corporate decision making among a variety of GHG reduction projects.

Monitoring progress

To promote effective monitoring of reduction efforts, an organization should establish a suite of Key Performance Indicators (KPIs) which are measured and reported by appropriate individuals, including senior leaders. Whilst annual emissions reductions should be prioritized as a KPI, this may not be achieved consistently. For example, in the instance where an organization experiences an unplanned disruption in its supply chain, the use of a new supplier to maintain business continuity might lead to temporarily higher emissions. Similarly, investment into new capital assets for a manufacturing facility may be emissions-intensive in the near-term but ultimately lead to a lower-emission manufacturing process over the lifetime of the asset. In certain cases, changes to the organization which increase GHG emissions, such as an acquisition of a new subsidiary or group, require a re-evaluation of baseline emissions. In such cases, a consistent year-on-year reduction would not have been achieved – so the most important KPI for an organization should be whether or not it is on track to reach its long-term reduction goals.

Step 4: Reduce

Part 2: External reductions

Parallel to delivering internal reduction efforts, organizations should also finance mitigation outside their value chain to contribute towards societal net zero.

There are several activities that can be categorized as external mitigation, which is sometimes referred to as Beyond Value Chain Mitigation (BVCM). Organizations may choose to set a BVCM budget by applying a carbon price per tonne to its value chain GHG inventory.

The most established mechanism for external mitigation is through carbon credits, which provide a measured outcome and verified impact. Additionally, organizations may support the research and development of new solutions, investing in scaling up new technologies such as Direct Air Capture and Storage (DACS), which remove GHGs directly from the atmosphere. These mechanisms are more nascent and less likely to provide a measured outcome and verified impact, however may have more transformative potential. Other BVCM activities may have a less direct focus on carbon mitigation and instead seek to deliver broader impact such as supporting certain Sustainable Development Goals and other co-benefits. To enhance confidence and credibility, established frameworks and independent assurance should be used where possible. Organizations should consider all options to contribute to global net zero.

The use of verified carbon credits to neutralize emissions or contribute to emissions reductions outside an organization's value chain underpins the majority of climate-related claims. The volume of carbon credits is usually related to the carbon footprint of the organization or the subject of the claim. This is also known as a 'tonne for tonne' approach.

Guidance on use of carbon credits
Where a claim includes the application of carbon instruments, the quality of the instrument must be considered. There are two leading organizations which consider fundamental criteria for a high-quality carbon instrument:

- International Carbon Reduction & Offset Accreditation (ICROA) which maintains its Code of Best Practice[1]
- Integrity Council for Voluntary Carbon Markets (ICVCM) which maintains its Core Carbon Principles.[2]

In addition to these basic quality principles, organizations should partner with third party providers which undertake additional due diligence review of carbon credit projects. This review is critical to understanding many complex issues beyond just the delivery of a carbon reduction or removal tonne, and underpin the credibility of corporate climate action claims. An organization should consider the following when selecting which carbon instruments to apply:

- Project type: whether a carbon instrument functions by removing carbon from the atmosphere or by avoiding emissions that would otherwise occur. Net zero claims generally require removal credits.
- SDG benefits: some emissions projects have many co-benefits beyond the direct climate impact which correspond to one or more of the UN Sustainable Development Goals.
- Alignment with the organization's goals: emissions reduction or removal projects can be selected to complement the organization's operations, geographic alignment, or activities. For example, a construction company may select projects which contribute to development of sustainable construction materials.

1. https://icroa.org/wp-content/uploads/2023/07/ICROA_Code_Best_Practice_v2.1_04072023.pdf
2. https://icvcm.org/the-core-carbon-principles/

Table 5: Comparison of internal abatement requirements across standards

Requirements	CERTIFIED CARBON NEUTRAL® Global Standard	ISO Carbon Neutrality 14068	VCMI Carbon Integrity	ISO Net Zero	SCIENCE BASED TARGETS THE NET ZERO STANDARD
Justification of progress towards near-term reduction target	✓	✓	✓	✓	✓
Achievement of absolute or intensity emissions reduction versus a base year	X*	✓	✓	✓	✓
Achievement of 90% absolute emissions reduction	X	X	X	✓	✓

* The CarbonNeutral Protocol applies a 'comply or explain' requirement

Table 6: Comparison of external mitigation requirements across standards

	Requirements	CERTIFIED CARBON NEUTRAL® Global Standard	ISO Carbon Neutrality 14068	VCMI Carbon Integrity	ISO Net Zero	SCIENCE BASED TARGETS THE NET ZERO STANDARD
Amount	Carbon credits equal to 100% of the subject/organization's footprint	✓	✓* (Organizations, Financial Institutions)	✓ (Platinum)	✓	✓
Amount	Carbon credits equal to 50-100% of the organization's footprint	X	X	✓ (Gold)	X	X
Amount	Carbon credits equal to 20-50% of the organization's footprint	X	X	✓ (Silver)	X	X
Amount	Carbon credits must increase as a percentage of total remaining emissions in each subsequent year	X	X	✓ (Silver, Gold)	X	X
Mitigation type	Carbon credits must be removals only	X	X*	X	✓	✓‡ except for BVCM activities
Criteria	Carbon credits meet a defined set of principles listed by the claim	X	✓	X	✓	X
Criteria	Carbon credits are approved by a particular accreditation body	✓** ICROA	X	✓*** IC-VCM's CCPs from 2026	X	X
Criteria	Carbon credits are ex-post	✓	✓	✓	✓	X
Criteria	The end of the vintage of the carbon credits is less than five years prior to the start of the claim period	X	✓	X	X	X
Criteria	Carbon credits are retired no later than 12 months after the end of the claim reporting period	X	✓	X	X	X

For the standards and initiatives referenced here, external mitigation refers to the application of carbon credits in support of a climate claim. The table above compares the requirements of the amount, type, and criteria of credits which can be applied in each case.

*ISO 14068 carbon neutrality allows for avoidance or reduction credits until the point at which residual emissions are achieved, meaning no further reduction is possible. At that point, removal credits are required. In practice, this mirrors the point at which an organization has reached its science-aligned target.

**CarbonNeutral certification permits the use of credits from all ICROA-endorsed standards with the exception of ART Trees, City Forest Credits, BioCarbon, and Cercarbono.

***VCMI requires that:
– from 2026, the use of credits approved under the IC-VCM's Core Carbon Principles (CCPs)
– prior to 2026, entities must do one of the following:
a) disclose how their due diligence process for identifying credits aligns with the IC-VCM's CCPs
b) when an activity type has not yet been assessed by the IC-VCM, must use CORSIA Eligible Emission Units
c) when an activity type has been assessed by the IC-VCM, must use CCP-Approved credits

‡ Carbon credits purchased as part of BVCM activities on the pathway to net zero can be reduction or avoidance-type credits

Step 5: Inform

Overview: The fifth step is to deliver accurate and transparent communications about your climate action to stakeholders, which often involves making a climate claim related to the organization or a specific subject. As public pressure for significant action to address climate change grows, so does scrutiny of companies' climate action, coming from a range of stakeholders including: individuals, media, campaigners, NGOs and other civil society organizations, and authorities that regulate consumer-facing advertising and marketing claims. This fifth step is important to proactively address and respond to that increased scrutiny. It's important that all communication linked to a climate-related claim is clear, factually based, and transparent. Organizations must comply with relevant laws and regulations, and it is strongly recommended that organizations making climate-related claims regularly seek legal advice to ensure such claims are, and continue to be, in compliance with all applicable laws and regulations, and meet the evolving initiatives and frameworks referenced in this Climate Action Protocol.

When preparing communications, it's important to consider who your main audience and stakeholders are, as this is likely to affect the information provided. The level of understanding and subject matter expertise can vary between stakeholder groups and individuals.

The common audiences of a climate-related claim include:

- Members of the public, including product consumers
- Business clients and customers
- Employees
- Investors.

Organizations are able to make claims and report information about their climate action and programs to these different audiences in a number of places. Often, ESG information is reported in one or more of the following formats:

- An organization's website
- Product advertising and marketing materials
- Annual reports or annual ESG or sustainability reports
- A CDP (formerly Carbon Disclosure Project) submission
- A GRI (Global Reporting Initiative) report
- Newsletters and press releases
- Social media posts
- Email signatures.

The content of the communications generally consists of the same elements – governance, measurement, definitions, targets and reductions – of climate action programs set out in the preceding sections. As you can see from Table 7: Comparison of disclosure requirements across standards, all but one of the claims' communication requirements relate to those five elements. The level of quality assurance measures taken is the only outlier.

Additionally, many organizations are required to report select information under regulatory requirements.

Climate-related claims are increasingly regulated by national and supra- national laws, which may impose additional restrictions, requirements and disclosures beyond the requirements of the standards, initiatives and frameworks referenced within this Climate Action Protocol. To find out general information about relevant laws and regulations across the largest jurisdictions, please refer to the Climate Claims Regulation Tracker published by Climate Impact Partners[1]. This information is intended as a general information resource for guidance purposes only and does not constitute legal advice, nor is it a complete and comprehensive list of all applicable laws and regulations.

In part owing to the complexities set out above, the task of organizing and delivering communications around carbon credit-related claims is a challenging one. It requires expert insight, continuous improvement and adapting to new developments. Organizations should resource their sustainability teams accordingly or seek help from specialists. Businesses should seek to access further guidance about how they can give consistent, clear and accurate communications about their climate action programs and how to maximize business value, as well as technology to support that.

1 www.climateimpact.com/climate-claims-regulation-tracker

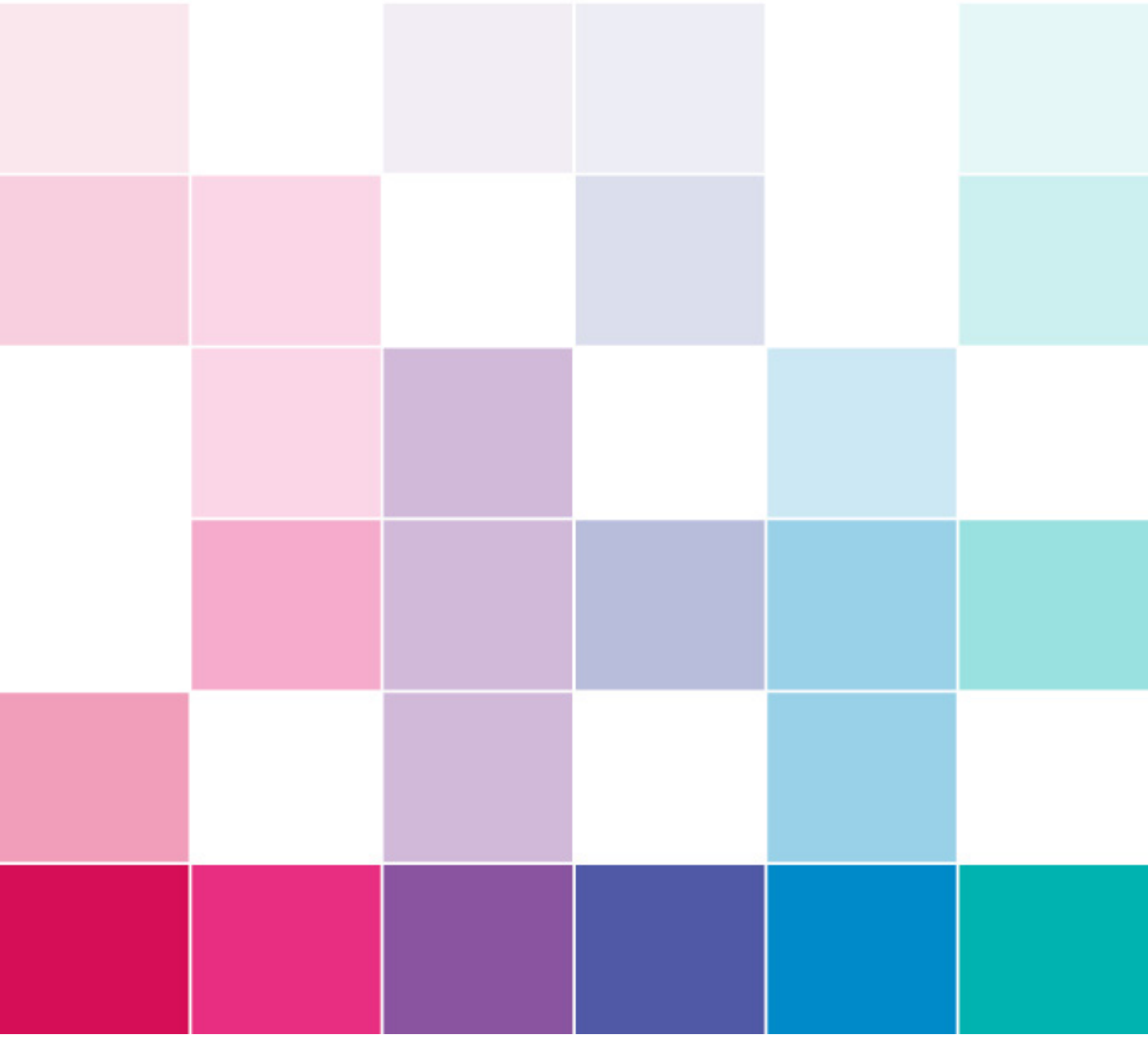
Table 7: Comparison of disclosure requirements across standards

	Disclosure Requirements	CERTIFIED CARBON NEUTRAL Global Standard	ISO Carbon Neutrality 14068	VCMI Carbon Integrity	ISO Net Zero	SCIENCE BASED TARGETS THE NET ZERO STANDARD
Governance	Detail of advocacy activities	X	X	✓	X	X
Define	Detail of subject boundary	✓	✓	✓	✓	✓
Measure	Estimated GHG footprint of subject	✓	✓	✓	✓	✓
	Estimated organization-wide GHG footprint	✓	✓	✓	✓	✓
Target	Detail of near-term targets	✓	✓	✓	✓	✓
	Detail of net zero commitment	X	✓	✓	✓	✓
	Internal abatement strategy	✓	✓	✓	✓	✓
Reduce	Progress against reduction targets	✓	✓	✓	✓	✓
	Financial data on reduction activities	X	X	✓	X	✓
	Number of carbon instruments applied to claim	✓	✓	✓	X	X
	Carbon project information including retirement details	✓	✓	✓	X	X
Other	Requires third party assurance or verification of claim*	X**	✓	✓	X	X

*Refers to assurance or verification of the claim itself in accordance with the standard, which is in addition to and separate to assurance or verification of the GHG footprint as outlined in Step 2: Measure

**Compliance of the claim and requirements with The CarbonNeutral Protocol is undertaken by the certifier – the organization providing CarbonNeutral® certification in accordance with the requirements of The CarbonNeutral Protocol.

Detailed requirements



Foundation: Governance
Detailed requirements

CarbonNeutral® certification

The CarbonNeutral Protocol

The CarbonNeutral Protocol states that leadership should establish appropriate governance processes, procedures and controls to enable delivery of its broader environmental and social goals.

It gives examples of aspects of a strong governance framework at the Board level, including:

- Board engagement and reporting
- Linking ESG performance to executive pay
- Building climate targets into financial decisions
- Consideration of impacts beyond GHG emissions such as social impact, human rights, biodiversity and the just transition.

Finally, it states that organizations' communication and public policy advocacy should be aligned with their climate and ESG goals – including the global transition to a low-emissions economy in line with the Paris Agreement.

ISO 14068 Carbon Neutrality

ISO 14068-1:2023

ISO 14068 requires that the organization maintains comprehensive documented information in support of its carbon neutral commitments and related claims. These documentation requirements are extensive, and so for brevity the relevant sections of the ISO 14068 Standard have been referenced, not fully stated, across the five stages within the Climate Action Protocol.

ISO 14068 requires that top management of the entity implements a long-term commitment to carbon neutrality and is prescriptive of its requirements.

Requirements and guidance about documented information on the commitment to carbon neutrality can be found in subclause 6 of the ISO 14068 Standard.

VCMI Carbon Integrity

Claims Code of Practice

VCMI's Carbon Integrity Claims Code, under its Foundational Criterion 3, states that the company must demonstrate it is making progress on financial contributions, governance, and strategy towards meeting its near-term emission reduction target. The Claims Code of Practice requires companies to disclose:

1) The board-level governance structure, policies and actions related to oversight of their climate strategy which should include information on at least one of the following:
   - Board-level compensation is linked to climate performance indicators
   - Board members climate-related capabilities or expertise
   - Board-level progress reviews on meeting near-term emissions reduction targets
2) A public statement describing how advocacy activities are consistent with the Global Standard on Responsible Corporate Lobbying's categories - Policy and Commitment, Governance, Action, and Specific Disclosure.

ISO Net Zero

Net Zero Guidelines

ISO Net Zero Guidelines states that the leadership of all organizations should ensure alignment between policies and actions, including public policy and advocacy. The leadership should ensure this commitment is not undermined by conflicting targets.

In Subclause 7.1, the standard recommends that the leadership of the organization should demonstrate commitment to net zero by:

- Providing strategic direction and resources, and incorporating net zero targets into core governance documented information
- Operating transparently by publicly communicating transition plans and progress, committing to achieve targets as soon as possible, and disclosing shareholder voting records on climate-related issues
- Appointing competent members of the organization's leadership to take responsibility for actions and clearly defining leadership responsibilities
- Implementing incentives for delivering net zero targets.

Subclause 7.3 lays out the accountability of the leadership in planning, managing and delivering a net zero strategy and associated activities.

Clause 12 details how the organization should consider wider impact, equity and empowerment in relation to its net zero goals including how its strategy:

- Aligns with the United Nations Sustainable Development Goals (SDGs)
- Takes into account the principle of equity and justice when determining fair share and how it should contribute to a just transition to global net zero
- Empower others to contribute to global net zero.

SBTi Net Zero

Corporate Net Zero Standard

The SBTi corporate manual gives guidance on information and disclosures for the organization's climate transition plan and progress to indicate corporate actions that will be undertaken to align to their net zero pathway.

The SBTi encourages organizations to publish information related to their transition plan annually, and recommend the inclusion of the following:

- Governance structure which oversees the climate transition plans
- Incentive structures such as executive compensation
- Financial indicators such as capital and operating expenditure towards the net zero transition
- Skills and human resource development related to climate change
- Disclosures on public advocacy, lobbying and policy engagement
- Contribution to the just transition and social impact
- Consideration of natural ecosystem conservation.

Step 1: Define
Detailed requirements

CarbonNeutral® certification

The CarbonNeutral Protocol

The CarbonNeutral Protocol provides for a number of different CarbonNeutral® certifications corresponding to different possible entities, products and activities.

For each certification type, emissions categories are defined as 'required' or 'recommended' and as a minimum, all required emissions sources must be measured to meet the requirements of The CarbonNeutral Protocol.

These certifications are grouped into three classes:

1) Entities: Defined by legal status and spatial boundaries, which includes certifications such as CarbonNeutral® company and building

2) Products: Defined as an article, substance, capital asset or combination of product and service produced, manufactured or refined for the purpose of onward sale, which includes certifications such as CarbonNeutral® product and brand

3) Activities: Defined by the delivery of utility through a combination of mobile and stationary activities, which includes certifications such as CarbonNeutral service, delivery and event.

ISO 14068 carbon neutrality

ISO 14068-1:2023

In Annex B, ISO14068 sets out requirements for its use against specific subjects. It defines the requirements for the following classifications:

1) Organizations: Under this scope, quantification of GHG emissions should include Scope 1 and 2 emissions, and the following Scope 3 categories: upstream purchasing, downstream sold products including the use phase and end-of-life phase, goods transportation, travel, and financial investments

Where a claim under ISO 14068 is made for an organization which is part of a larger organization, this should be seen in the context of the larger organization. Further, a long-term carbon neutrality pathway for the larger organization should be developed.

2) Products: For business-to-consumer claims, the GHG footprint of a product must cover the full lifecycle of the product (also known as cradle to grave) and functional unit

However, ISO 14068 allows for a partial GHG footprint for business-to-business claims with documentation of appropriate rationale and description of all GHG emissions attributable to the product.

3) Events: The boundary of events are required to include the planning, preparation, event and post-event phases in the calculation of GHG emissions

4) Financial Institutions: In addition to organizational emissions, financial institutions must also include GHG emissions financed by its activities or assets, as classified as Scope 3, Category 15, Investments, in the GHG Protocol.

ISO 14068 does not permit a claim of carbon neutrality for investments that do not support the transition for global carbon neutrality.

Requirements and guidance about documented information on the selection of the subject and its boundary can be found in subclause 7.2 of the ISO 14068 Standard.

VCMI Carbon Integrity

Claims Code of Practice

With the introduction to the Claims Code of Practice, it states that the Claims Code sets out how companies can make assurable enterprise-wide claims, which reflect the credible voluntary use of carbon credits in contributing towards efforts to reach global net zero no later than 2050.

The Claims Code of Practice is intended for organizations making enterprise-wide claims, and allows for three different levels of claims: Silver, Gold and Platinum. The boundaries of each 'tier' of claim are fundamentally similar, each requiring the measurement of enterprise wide GHG emissions. The claims differ in relation to quantity of carbon credits purchased and retired in the Step 4: Reduce stage.

ISO Net Zero

Net Zero Guidelines

In section 6, the ISO Net Zero Guidelines outline that boundaries can be set at different levels including territorial, sectoral, organizational, portfolio or asset levels. It is anticipated that companies referring to the information within this document will refer to organizational level boundaries. The Guidelines refer to The GHG Protocol Corporate Accounting and Reporting Standard and Value Chain (scope 3) Accounting and Reporting Standard for guidance on boundary setting at the organiational level.

The ISO Net Zero Guidelines state that Scope 1, Scope 2 and Scope 3 emissions (direct and indirect emissions) should be included in net zero targets and cover the full boundary that has been established for the organization, ensuring all relevant GHG emissions are covered. Organization should collaborate with other organizations to determine responsibility and actions to address GHG emissions over which no single organization exercises direct control, such as those Scope 3 emissions associated with the use of purchased products and services.

SBTi Net Zero Standard

Corporate Net Zero Standard

The SBTi Net-Zero Standard is intended for large organizations, though it can be used by SMEs. A simplified route for net zero targets is made available.

The SBTi Net-Zero Standard does not cover net zero targets for financial institutions and is developing a separate standard which has not yet been released as of the date of publication of this document.

Companies are required to have a comprehensive emissions inventory that covers at least 95% of company-wide Scope 1 and 2 GHG emissions and includes a complete Scope 3 inventory.

Step 2: Measure
Detailed requirements

CarbonNeutral® certification

The CarbonNeutral Protocol

The CarbonNeutral Protocol lays out two requirements for the measurement of GHG emissions for CarbonNeutral certification.

Part 1: Measurement of the defined subject's carbon footprint, which must be presented in a third party GHG Assessment, in line with the requirements and boundaries set out at the 'Step 1: Define' stage.

Part 2: Measurement of the organizational carbon footprint on an annual basis in accordance with The GHG Protocol, including Scope 1 and 2 emissions, as well as Scope 3 emissions for all emissions sources, according to the minimum boundary established for each of the 15 Scope 3 categories according to the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

ISO 14068 carbon neutrality

ISO 14068-1:2023

As set out in Clause 8 of the ISO 14068 Standard, an organization must follow the principles, requirements and guidance set out in ISO 14064-1 for organizations and ISO 14067 for products when calculating the GHG emissions of the subject of the claim.

Different criteria are permitted, however this must be justified and explained in related reporting, including how the selected criteria are consistent with the relevant International Standards.

Requirements and guidance about documented information on the quantification of GHG emissions and removals can be found in subclause 8.2 of the ISO 14068 Standard.

VCMI Carbon Integrity

Claims Code of Practice

Measurement requirements are described in Foundational Criterion 1: Maintain and publicly disclose an annual greenhouse gas emissions inventory. This includes requirements to:

- Make an enterprise-wide GHG emissions inventory publicly available on the company's website and update it annually
- Report its GHG emissions inventory in accordance with the GHG Protocol and relevant supporting guidance
- Include Scope 1 and 2 emissions, using both location-based and market-based approaches for Scope 2
- Explain and estimate how any structural changes to the company, calculation methodologies, activity data or emissions factors have affected the most recent year's inventory.

ISO Net Zero

Net Zero Guidelines

In section 11, the ISO Net Zero Guidelines state that the organization should determine indicators and tools to measure, monitor and calculate baselines and the impact of its mitigation actions. It refers to The GHG Protocol Standards, ICVCM and standards such as ISO 14064-1 (for organizations) and ISO 14064-2 (for projects) which provide further information and guidance on measuring and monitoring.

All GHG emissions within its boundaries (Scope 1 and 2) and wider value chain (Scope 3) must be separately measured, monitored and reported). This should additionally include measurement and monitoring of GHG increases, reductions, removals and use of credits, again both within organizational boundaries and the wider value chain.

Clause 11.2 of the ISO Net Zero Guidelines gives further guidance on the use of indicators and tools in the measurement of the GHG emissions of the organization.

SBTi Net Zero Standard

Corporate Net Zero Standard

As specified in Subclause 4.2 of the SBTi Net Zero Standard, companies are required to have a comprehensive emissions inventory that covers at least 95% of company-wide Scope 1 and 2 GHG emissions and includes a complete Scope 3 inventory.

The SBTi Net Zero Standard highlights the following points of importance:

- Ensure the target boundary is aligned with the GHG inventory boundary by applying a consistent consolidation approach
- Determine how to treat subsidiaries by including emissions from subsidiary operations where the organization is a parent company
- Exclude the use of carbon credits which do not count as reductions towards meeting a science-based target
- Exclude avoided emissions as positive GHG impacts of products which may occur are outside of the product's lifecycle and therefore do not count as a reduction
- Include all mandatory Scope 3 emissions by developing a complete Scope 3 inventory in line with the GHG Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting standard
- Determine how to treat optional Scope 3 emissions by including those emissions within the target boundary where they are significant and are addressable
- Review any sector-specific guidance published by the SBTi.

Step 3: Target
Detailed requirements

CarbonNeutral® certification

The CarbonNeutral Protocol

The CarbonNeutral Protocol requires the organization to set a short-term science-aligned internal abatement target to ensure the subject's emissions decrease over time. The target may be expressed as an absolute GHG emission reduction or as a decrease in GHG intensity, with absolute GHG reduction targets preferred. The organization is encouraged to set a long-term abatement target and net zero commitment.

The CarbonNeutral Protocol does not require application of a specific framework for setting science-aligned targets but acknowledges that currently, the Science Based Targets initiative is the only established framework and likely to be used. In this case, the organization is not required to submit the target for validation to the SBTi.

An organization's near-term target must have been set and/or reviewed by a qualified third party which has appropriate experience in setting or evaluating the integrity of science aligned targets.

ISO 14068 carbon neutrality

ISO 14068-1:2023

Throughout the ISO 14068 standard, and specifically in section 9, an entity is required to establish, implement and maintain a carbon neutrality management plan for the subject of the claim.

There are additional requirements for the development of a carbon neutrality management plan within Annex B, depending on the subject of the claims as follows:

- Organizations: When the subject is an organization that is part of a larger organization, for example a subsidiary, the carbon neutrality of the subject should be seen in the context of the entire carbon footprint of the larger organization. In this case, a long-term pathway for carbon neutrality should be developed for the larger organization.
- Products: Where practical, an entity should seek to achieve carbon neutrality for all products it produces, and where this is not the case states that the entity should develop a plan at the entity level which covers the other products.
- Events: The carbon neutrality management plan should identify actions to manage GHG emissions of an event during the planning phase, and where those events are recurring, the plan should be developed for future events.

Section 5.3 of the Standard states that the carbon neutrality pathway must describes how the carbon footprint of the subject will be minimised. It must include short- and long-term targets, as well as a target year by which only residual GHG emissions will remain. The Standard notes that short-term is typically 5 years to 10 years, long-term is typically at least 20 years.

The pathway needs to be based on a commonly accepted science-aligned pathway, using sector specific guidance and requirements where appropriate. The Standard gives examples of commonly accepted pathways, including the Intergovernmental Panel on Climate Change (IPCC), the International Energy Agency (IEA), the Assessing low-Carbon Transition (ACT), the Science Based Targets Initiative (SBTi).

Requirements and guidance about documented information on the carbon neutrality management plan can be found in subclauses 9.1-9.4 of the ISO 14068 Standard.

VCMI Carbon Integrity

Claims Code of Practice

Foundational Criterion 2: Set and publicly disclose science-aligned near-term emissions reduction targets, and publicly commit to reaching net zero emissions no later than 2050

Near-Term Targets

Companies are required to:

1) Set and publicly disclose near-term emissions reduction targets covering Scopes 1, 2, and 3, using the SBTi framework or equivalent.

2) Companies must follow the most up-to-date SBTi criteria for setting the target boundary and emissions coverage, following sector-specific guidance for power companies. The current criteria is specified as 95% coverage of Scopes 1 and 2 emissions, and 67% coverage of Scope 3 emissions if Scope 3 emissions represent over 40% of the inventory from all Scopes.

3) Where an existing near-term target has not been validated by the SBTi, the company is required to submit a target for validation by the SBTi within 24 months, and provide evidence of the SBTi commitment letter.

Long-Term Targets

Companies are required to:

1) Make a public commitment to achieve net zero emissions no later than 2050, including Scopes 1, 2 and 3 GHG emissions, as well as land-based GHG emissions where applicable

2) Disclose the definition of net zero they have adopted, in line with globally recognized sustainability frameworks or guidance

3) Use the same base year for the long-term net zero target as that used for the initial near-term target.

ISO Net Zero

Net Zero Guidelines

Subclause 8.1 of the ISO Net Zero Guidelines gives guidance on actions to be taken by an organization when setting and monitoring emissions reductions progress against a baseline. It defers to ISO 14064-2 for guidance on determining a baseline.

Targets should be consistent with 50% global reduction of emissions by 2030 (from a 2018 global baseline), achieving net zero by 2050 at the latest, and supporting global efforts to limit global warming to 1.5 °C above pre-industrial temperatures.

The Guidelines state that:

- Net zero targets should include emissions related to all relevant GHGs and all Scope 1, Scope 2 and Scope 3 emissions, as appropriate
- The organization should ensure targets are set separately for Scope 1, Scope 2 and Scope 3. Where Scope 1 emissions are limited, Scope 1 and Scope 2 targets may be combined
- In addition to net zero targets, the organization should set additional, separate targets to have a neutral or positive impact on nature (e.g. a biodiversity net gain target, enhanced land regeneration).

Where appropriate, organizations should set interim and long-term targets and determine residual emissions using sector-specific science-based pathways. Subclause 8.2.2 gives examples which are aligned to the SBTi Net Zero Standard.

Subclauses 8.2.3-5 outline requirements for target setting for Scope 1, Scope 2 and Scope 3 categories.

The ISO Net Zero Guidelines refer to ISO 14064-1 and The GHG Protocol Corporate Value Chain (scope 3) Accounting and Reporting Standard for further guidance on Scope 3 emissions.

Subclause 8.2.6 gives guidance on setting interim targets which should be set every two to five years. Examples given include a target to halve GHG emissions every decade and reduce emissions by at least 30% by 2030.

SBTi Net Zero Standard

Corporate Net Zero Standard

In section 3.3, the standard lays sector specific reduction pathways for companies operating in the power generation sector, maritime transport sector and the FLAG sectors. All other companies may use a cross-sector pathway for their reduction targets, or a mix of approaches where appropriate. For example where an organization's supply chain operates in a heavy-emitting sector, such as construction.

The SBTi requires both near-term and long-term targets to be set, defined as follows:

Near-term:
These are 5-10 year GHG mitigation targets in line with 1.5°C pathways. New near-term science-based targets must be set once the existing target is met, each serving as milestones towards a long-term science-based target.

Long-term:
These targets show companies how much they must reduce value chain emissions to align with reaching net zero at the global or sector level in eligible 1.5°C pathways by 2050 or sooner.

Organizations should refer to the latest SBTi guidance for current sector-specific pathways that are available.

The SBTi provides a summary of pathways in the following format in section 3.3:

A summary of how the cross-sector pathway and sector-specific pathways can be applied

	Which companies can use these pathways?		What types of targets can be modelled?	
	Near-term	Long-term	Near-term	Long-term
Cross-sector pathway	All companies, except those in the power generation sector, maritime transport sector and FLAG sectors		Absolute	
Sector-specific pathways	For Scope 1: typically, companies in heavy-emitting sectors or a FLAG sector For Scope 3: companies with Scope 3 emissions dominated by one or more heavy-emitting sectors or FLAG sectors		For the FLAG sectors: absolute or intensity For the ICT sector: absolute For all other sectors: intensity	Absolute or intensity[4]

[4] Companies setting targets on upstream Scope 3 emissions that arise from high-emitting sectors should review relevant sector guidance to understand when it is appropriate to set absolute or intensity targets using sector-specific pathways (i.e., a professional services firm setting intensity targets on air travel emissions should review aviation sector guidance).

In section 4 of its guidelines, the SBTi recommends a five-step approach for setting science-based targets:

1) Select a base year
The baseline should be representative of the company's typical GHG profile and no earlier than 2015, and allow for accurate and verifiable emissions data.

2) Calculate the company's emissions
According to Step 2: Measure.

3) Set target boundaries
The SBTi Net Zero Standard sets out the requirements separately for near-term and long-term targets.

Near-term targets:
- Must cover at least 95% of company-wide Scope 1 and 2 emissions
- Where Scope 3 emissions make up 40% or more of total emissions, targets must set reduction targets that collectively cover at least two-thirds (67%) of total Scope 3
- Must include specific emissions sources where the company is in certain heavy-emitting sectors, according to the SBTi's sector-specific guidance.

Long-term targets:
- Must cover at least 95% of company-wide Scope 1 and 2 emissions
- Must cover at least 90% of company-wide Scope 3 emissions.

Additional FLAG targets are required for organizations operating in sectors of forest and paper products, food production, food and beverage processing, food and staples retaining and tobacco. These FLAG targets are also required for companies in other sectors with FLAG emissions which represent more than 20% of their overall emissions across all Scopes. In this case, those companies must include Land Use Change (LUC) emissions according to the Greenhouse Gas Protocol's Land Sector and Removals Guidance.

4) Choose a target year
Near-term targets: Must have a target year 5-10 years from the date of submission to the SBTi.

Long-term targets: Must have a target year of 2050 or sooner; or 2040 for companies in the power sector and maritime transport sector.

Targets must be reviewed, and if necessary recalculated and revalidated at a minimum of every five years.

5) Calculate targets
The SBTi Net Zero Standard outlines science-based target methods below according to sector and Scope, summarized as follows:

A summary of eligible methods for near-term and long-term targets

	Near-term targets	Long-term targets	Eligibility
Absolute reduction	Cross-sector pathway: ■ Scopes 1 and 2: Minimum 4.2% p.a. dependent on choice of base year ■ Scope 3: minimum 2.5% p.a. dependent on choice of base year	Cross-sector pathway: 90% reduction Sector-specific pathways: ■ Agriculture: 72% reduction ■ Cement, iron and steel, residential buildings, and service buildings: >90% ■ Other sector-specific pathways to be added	■ Scopes 1-3 ■ Default option
Sector-specific intensity convergence	Requirements vary dependent on sector-specific and commodity-specific pathways	Requirements vary dependent on sector-specific and commodity-specific pathways	■ Scopes 1-3 ■ Most commonly used by heavy-emitting and FLAG sectors
Renewable electricity	Use of renewable energy certificates (RECs) or virtual power purchase agreements (vPPAs): ■ 80% minimum by 2025 ■ 100% minimum by 2030	Use of RECs or vPPAs: 100% by 2030	■ Scope 2
Engagement	Suppliers or customers to set SBTs at a minimum ambition of well-below 2°C	N/A	■ Scope 3 near-term
Scope 3 economic intensity reduction	At least 7% year-on-year reduction of emissions per unit value added	97%	■ Scope 3
Scope 3 physical intensity reduction	At least 7% year-on-year reduction for a company-defined physical emissions intensity metric	97%	■ Scope 3

Step 4: Reduce
Detailed requirements

Part 1: Internal abatement

CarbonNeutral® certification

The CarbonNeutral Protocol

The CarbonNeutral Protocol requires organizations to demonstrate that both company-wide and subject-specific GHG inventories are decreasing over time compared to the prior period and to the baseline year.

Additionally, the organization must consider itself on-track to achieve its near-term science aligned target.

Where an organization has not realized a reduction in any given year or does not consider itself on-track to deliver its target, it must explain why and how this will be addressed. CarbonNeutral certification may be withdrawn from organizations which are unable to achieve annual reductions over longer timeframes.

ISO 14068 carbon neutrality

ISO 14068-1:2023

According to clause 10, ISO 14068 requires that an organization has achieved a reduction of GHG emissions of the subject in either absolute or intensity terms before claiming carbon neutrality. Where reductions have been demonstrated on an intensity basis, this must be considered and justified with respect to how absolute GHG emissions are reduced in the long term.

An organization's achieved GHG emissions reductions should meet or exceed its targets within its carbon neutrality management plan. Ultimately the organization shall continue improvement of the carbon footprint until only residual emissions remain. ISO 14068 acknowledges that non-linear reductions may be achieved with multiple step-changes and plateaus.

ISO 14068 also gives guidance for enhancing GHG removals within the supply chain within subclause 10.2.

Requirements and guidance about documented information on GHG emission reductions and removal enhancements can be found in subclause 10.3 of the ISO 14068 Standard.

VCMI Carbon Integrity

Claims Code of Practice

Foundational Criterion 3 is: Demonstrate that the company is making progress on financial contributions, governance and strategy towards meeting its near-term emission reduction target.

The VCMI Claims Code of Practice sets out a set of reporting requirements which it deems to be representative of whether an organization is making appropriate progress towards meeting its near-term reduction targets. This is laid out under two categories: financial allocation and strategy and governance.

Financial contributions

Companies are required to disclose total financial allocation towards GHG mitigation in the most recent reporting year across the value chain. This can either be the percentage of annual revenue, or the percentage of capital and operating expenses (CAPEX and OPEX) which has been allocated to GHG mitigation.

Additionally, the company must also disclose total planned financial allocation dedicated to GHG mitigation, using the metric of percentage of annual revenue, or the percentage of capital and operating expenses.

Where the company is not able to make the above disclosures it must explain why, and a qualitative description of financial allocation made.

Strategy and governance

See Governance.

As stated in Step 2 of the VCMI Claims Code of Practice, organizations can demonstrate reductions on an intensity or absolute basis. Companies must provide an explanation or description of whether and why they consider themselves to be making progress towards their near-term targets, acknowledging that for many companies emissions reductions do not occur linearly.

ISO Net Zero

Net Zero Guidelines

Under clause 9 of the ISO Net Zero Guideline, an organization must establish a comprehensive GHG mitigation plan that at its top level:

- Prioritizes emissions reductions;
- Is assessed using recognized accounting standards;
- Is based on realistic and credible baselines;
- Includes details of how they will be monitored and reported and how they will be verified by a competent third party;
- Includes removals that are permanent or sufficiently long-lasting, with storage duration comparable to the lifespan of the GHG emission;
- Takes into account and mitigates the potential risk of a consequent rise in emissions beyond its boundaries;
- Ensures safeguards against social or environmental harm, or negative impacts that arise as a consequence of mitigation actions.

Subclause 9.1.2 gives guidance on the recommended content of an organizations net zero transition plan.

Clause 9.2 gives guidance on actions that may be taken by an organization to address and reduce emissions.

SBTi Net Zero Standard

Corporate Net Zero Standard

Within section 2, the SBTi Net Zero Standard states that a company cannot claim to have reached net zero until the long-term science-based target for all scopes is achieved and the company has neutralized residual emissions.

The Standard maintains a 'mitigation hierarchy' which states that companies should set near- and long-term science-based targets to address value chain emissions, prioritizing those internal reductions above mitigating emissions outside of the value chain.

Step 4: Reduce
Detailed requirements

Part 2: External reductions

CarbonNeutral® certification

The CarbonNeutral Protocol

The CarbonNeutral Protocol requires that, as a minimum, the unabated emissions of the subject of certification are compensated using either reduction or removal carbon credits.

All carbon credits used must meet a set criteria which includes the following principles:

- Additional
- Legally attributable
- Measurable
- Permanent
- Unique
- Independently verified.

Approved carbon credit standards and project types are listed within the Technical Requirements section of Step 4 within the CarbonNeutral Protocol.

Carbon credits used for a CarbonNeutral certification must be retired within 12 months from the latter of the delivery or purchase date. Where carbon credits have been purchased which are in advance of their verification and issuance, the organization must have a contractual guarantee of delivery or replacement.

The CarbonNeutral Protocol gives further guidance of exceptions and excluded project types, as well as guidance on Energy Attribute Certificate standards.

ISO 14068 carbon neutrality

ISO 14068-1:2023

The ISO 14068 standard states under Clause 11 that where offsetting is needed to achieve carbon neutrality, an organization must purchase carbon credits for the reporting period.

The standard provides quality criteria for carbon credits, stating that credits must be generated from GHG emission reductions or GHG removal enhancements that are:

a) Real GHG emission reductions or real GHG removal enhancements

b) Additional

c) Measurable

d) Permanent

e) Certified.

Carbon neutrality under ISO 14068 applies additional requirements on the use of carbon credits, which include:

- A vintage period of no more than 5 years before the period for which the entity is claiming carbon neutrality
- Retirement of no later than 12 months after the end of the reporting period
- Only ‘ex-post’ carbon credits can be used.

Additional criteria on appropriate carbon crediting programs are given in section 11.3 of the ISO14068 Standard.

Requirements and guidance about documented information on offsetting the carbon footprint can be found in subclause 11.4 of the ISO 14068 Standard.

VCMI Carbon Integrity

Claims Code of Practice

Within section 2 of the Claims Code of Practice, the VCMI has defined three tiers of Claims that c ompanies and other non-state actors can make. All represent action above and beyond companies' internal decarbonization efforts:

Carbon Integrity Silver requires the purchase and retirement of high-quality carbon credits in an amount equal to or greater than 10%, and less than 50%, of a company's remaining emissions once it has demonstrated progress towards its near-term emissions reduction targets.

Carbon Integrity Gold requires the purchase and retirement of high-quality carbon credits in an amount equal to or greater than 50%, and less than 100%, of a company's remaining emissions once it has demonstrated progress towards its near-term emissions reduction targets.

The amount of carbon credits to be purchased and retired as a percentage of total remaining emissions must increase in each subsequent year a company makes a VCMI Silver or Gold Claim.

Carbon Integrity Platinum requires the purchase and retirement of high-quality carbon credits equal to or greater than 100% of a company's remaining emissions.

Within section 3 of the Claims Code of Practice, the VCMI defines quality thresholds for the use of carbon credits.

It states that companies shall purchase and retire credits that have been approved under the ICVCM's Core Carbon Principles (CCPs) when they become available.

The Claims Code of Practice acknowledges that CCP-approved credits are not yet available at the time of writing, and they will likely be limited in supply in the near term. It provides two alternative approaches until CCP-Approved credits are more widely available, as follows:

1) Purchase and retire CORSIA eligible credits

2) Disclose how existing due diligence processes align with ICVCM's CCPs.

VCMI Claims from 1 January 2026 must transition to purchase and retiring CCP-Approved credits and option 2, above, will no longer be permitted.

ISO Net Zero

Net Zero Guidelines

Under section 10, ISO Net Zero Guidelines state that carbon instruments should only be applied to counterbalance residual emissions and not towards achievement of interim targets. It states that avoided emissions should not be used to counter-balance residual emissions, so 'removal-type' carbon instruments are required.

The Guidelines refer to the ICVCM Core Carbon Principles which set out the basis for identifying high-quality carbon credits.

In clause 10.1 It sets out that any carbon instruments used to counterbalance residual emissions:

- Are based on credible accounting standards;
- Are additional, based on realistic and credible baselines;
- Are monitored, reported and verified by a competent third party;
- Are based on removals that are permanent or provide sufficiently long-term storage;
- Are not double counted;
- Avoid or limit the risk of a consequent rise in GHG emissions in other locations;
- Do no social or environmental harm;
- Are from activities that provide social safeguards, promote equity and benefit both ecosystems and local communities;
- Are sourced from activities that address urgent and transformational climate priorities that are beyond the reasonable reach of unilateral action by a single country or territory.

Clauses 10.1 and 10.2 include additional considerations for the use of carbon credits and for the protection of social and environmental integrity.

SBTi Net Zero Standard

Corporate Net Zero Standard

Within section 2 of the SBTi Net Zero Standard, four key elements are set out which make up a corporate net-zero target. Two of those elements relate to external reductions, which are:

- Beyond Value Chain Mitigation (BVCM)
- Neutralization of any residual emissions

The SBTi Net Zero Standard recommends that companies deliver BVCM and report on BVCM activities but this is not a requirement. Companies are required to neutralize residual emissions once the long-term science based target has been achieved and thereafter.

Beyond Value Chain Mitigation

In February 2024, the SBTi provided additional suggestions and recommendations on BVCM activities in its report, *Above and Beyond: An SBTi Report on the Design and Implementation of Beyond Value Chain Mitigation (BVCM).*

In the *BVCM: Definition and Rationale* section of the report, two goals are laid out as follows:

1) Deliver additional near-term mitigation outcomes to achieve the peaking of global emissions in the mid-2020s and the halving of global emissions by 2030.

2) Drive additional finance into the scale-up of nascent climate solutions and enabling activities to unlock the systemic transformation needed to achieve net zero by mid-century globally.

The report proposes a set of Principles that companies can consider during the decision-making process of selecting the portfolio of activities to support. The four principles are:

1) Scale: Maximize mitigation outcomes

2) Financing need: Focus on underfinanced mitigation

3) Co-benefits: Support the SDGs

4) Climate justice: Address inequality.

Annex B gives illustrative examples of BVCM activities under each principle.

The report includes a section for *Recommendations for Designing and Implementing a BVCM Strategy* which includes defining a budget for BVCM activities, acknowledging the varying 'ability to pay' for BVCM across sectors.

The SBTi considers best practice is aligned with the 'polluter pays' principle and recommends the following approach for:

1) Apply a science-based carbon price to unabated Scope 1, 2 and 3 emissions annually to determine an annual budget

2) Use the annual budget to fund a combination of near-term BVCM outcomes and long-term BVCM finance.

The SBTi recommends, as a guide, that companies use a portion of the budget each year "to deliver ex-post, quantified mitigation outcomes..., equivalent to at least 50% of the company's unabated scope 1, 2 and 3 emissions". It recommends that these emissions reductions and removals are verified by third parties using standardized methodologies and that they adhere to high-quality criteria. The SBTi specifies that the mitigation outcomes should take place from 2021 onwards.

This recommendation represents the application of carbon credits with a vintage of 2021 or more recent, proportional to the organizational GHG inventory.

Neutralization of any residual emissions

As stated in section 2.3, the SBTi Net Zero Standard requires that unabated emissions after the achievement of long-term reduction targets must be neutralized, using permanent removals, to reach net zero emissions and a state of no impact on the climate from GHG emissions.

The SBTi Net Zero Standard does not give detailed quality requirements for carbon credits, however in its BVCM report the SBTi mentions it "will provide further guidance on eligible solutions/technologies... of neutralization in future iterations of the Corporate Net-Zero Standard".

Step 5: Inform
Detailed requirements

CarbonNeutral® certification

The CarbonNeutral Protocol

The CarbonNeutral Protocol requires that organizations provide accurate and transparent information on how CarbonNeutral certification has been achieved.

A list of mandatory disclosures is provided, which includes:

- Detail of the subject of the claim and boundaries
- The GHG footprint of the subject
- The GHG footprint of the organization's value chain
- Details of emissions reductions targets
- Detail of internal reductions achieved
- Whether the organization considers itself on track to achieve its reduction targets
- Details of carbon credits applied to the certification, including project details and retirement information.

ISO 14068 carbon neutrality

ISO 14068-1:2023

According to clause 13 of the ISO 14068 standard, a claim can be made only when fulfilling the following:

- All requirements of the ISO 14068 Standard document are met
- The claim is based on and refers to the carbon neutrality report
- The claim is verified in accordance with ISO 14064-3 or an equivalent verification standard
- An executive summary of the carbon neutrality report is published for each reporting period.

ISO requires documentation and publication of a carbon neutrality report, and background information forming an executive summary of the carbon neutrality report. A full list of the requirements is given within clause 12 of the standard.

Carbon neutrality report

At high-level, the requirements of the report include:

- Description and explanation of the subject and boundary
- Emissions reductions targets and strategy
- The carbon footprint of the subject
- Detail of emissions reductions and removals achieved
- Detail of carbon credits used, including project details and retirement details
- Explanation of how carbon neutrality will be maintained in the future.

Executive summary of the carbon neutrality report

At high-level, the executive summary must include:

- Details of the carbon neutral subject boundary and pathway
- Details of the carbon footprint
- Detail of what has been offset
- The type of carbon credits purchased and retired
- Detail of third party verification.

VCMI Carbon Integrity

Claims Code of Practice

Within section 2 of the Claims Code of Practice, the VCMI lays out the requirements for making a claim. A company is required to publicly disclose a statement which includes the following:

- Confirmation that it has met the Foundational Criteria
- The percentage of emissions reductions achieved in the most recent reporting year compared to the baseline year, on an absolute or intensity basis
- An explanation of whether and why the company has made progress towards its near-term emissions reduction target.

Further information on communicating VCMI claims is given in the Supplementary Guide to the VCMI CCP[1].

Application of carbon credits

Section 3 of the Claims Code of Practice provides the requirements for reporting carbon credits. Companies are required to publicly disclose key information related to each carbon credit retired, including:

1. Number of credits purchased and retired that the company applied towards the VCMI Claim.
2. Certification standard name, project name, project ID, retirement serial number, retirement date.
3. Host country, credit vintage, methodology, and project type.
4. Whether or not the carbon credit is associated with a corresponding adjustment in accordance with Article 6 of the Paris Agreement. If the carbon credit is reported as being associated with a corresponding adjustment, applied presently or in the future, this shall be evidenced by authorization by a participating Party or Parties, including information on the authorized use or uses, and the timings of the authorization, and the application of the corresponding adjustment.
5. If associated with additional third-party certification regarding social or environmental integrity (e.g., SDGs label, SD VISta, Climate, Community and Biodiversity Standards, etc.), companies must provide information related to how the credit promotes equity and generates co-benefits to ecosystems and local economies.

Reporting Assurance requirements

The metrics that companies must report in the first year of making a VCMI Claim are listed in Annex F of the Annexes to the CCP[2].

Each metric must be:

- Made publicly available to stakeholders on a company's website or in organizational reporting
- Subject to an independent, third-party limited assurance which covers all the items which require assurance per the VCMI Monitoring, Reporting and Assurance (MRA) Framework.

1. https://vcmintegrity.org/wp-content/uploads/2023/06/Claims-Code-Supplementary-Guide.pdf
2. https://vcmintegrity.org/wp-content/uploads/2023/06/Claims-Code-Annexes.pdf

ISO Net Zero

Net Zero Guidelines

ISO Net Zero Guidelines state that an organization should report its progress on its mitigation plan and related activities at least annually and include information such as: its scope and reporting frequency; data collection methods, limitations, and improvements made; impact of emissions levels due to mitigation actions and future initiatives; and report authors.

Scope of Reporting

ISO Net Zero Guidelines state that the organization should define the scope of each report, including:

- A transition plan including targets, resources to achieve them, and progress against them
- Climate risks and opportunities
- Scope 1, Scope 2, and categories of Scope 3 emissions including justification for Scope 3 exclusions and data for all GHGs
- Information on offsets used
- Separate progress towards emissions reduction and removal targets
- Information on expected residual emissions and how these have been estimated
- Case studies and lessons learned
- Land-use change GHG emissions and removals, if relevant.

Reporting of Net Zero claims

ISO Net Zero Guidelines state that the organization should report the basis of its net zero claims at least annually.

To claim achievement of its net zero target, the organization should:

- Quantify full GHG emissions it generates and removes and explain methods used to do this
- Provide evidence that all potential reductions have been achieved and that removals or offsets fully counterbalance residuals
- Provide plan to maintain net zero over the long-term (at least multiple decades)
- Ensure data is independently verified or explain why verification is not possible
- Provide details of how double-counting of offsets and credits has been avoided.

SBTi NetZero Standard

Corporate Net Zero Standard

The SBTi Net Zero Standard provides specific guidance on communicating net zero targets. It considers that there are three components which make up net zero target wording:

- Overarching net zero target
- Near-term science-based target
- Long-term science-based target.

The SBTi has specific guidance for target wording to increase comparability and transparency across approved targets. Companies setting targets under the SBTi Net Zero Standard should refer to the latest guidance, recommendations and templates from the SBTi when communicating their targets.

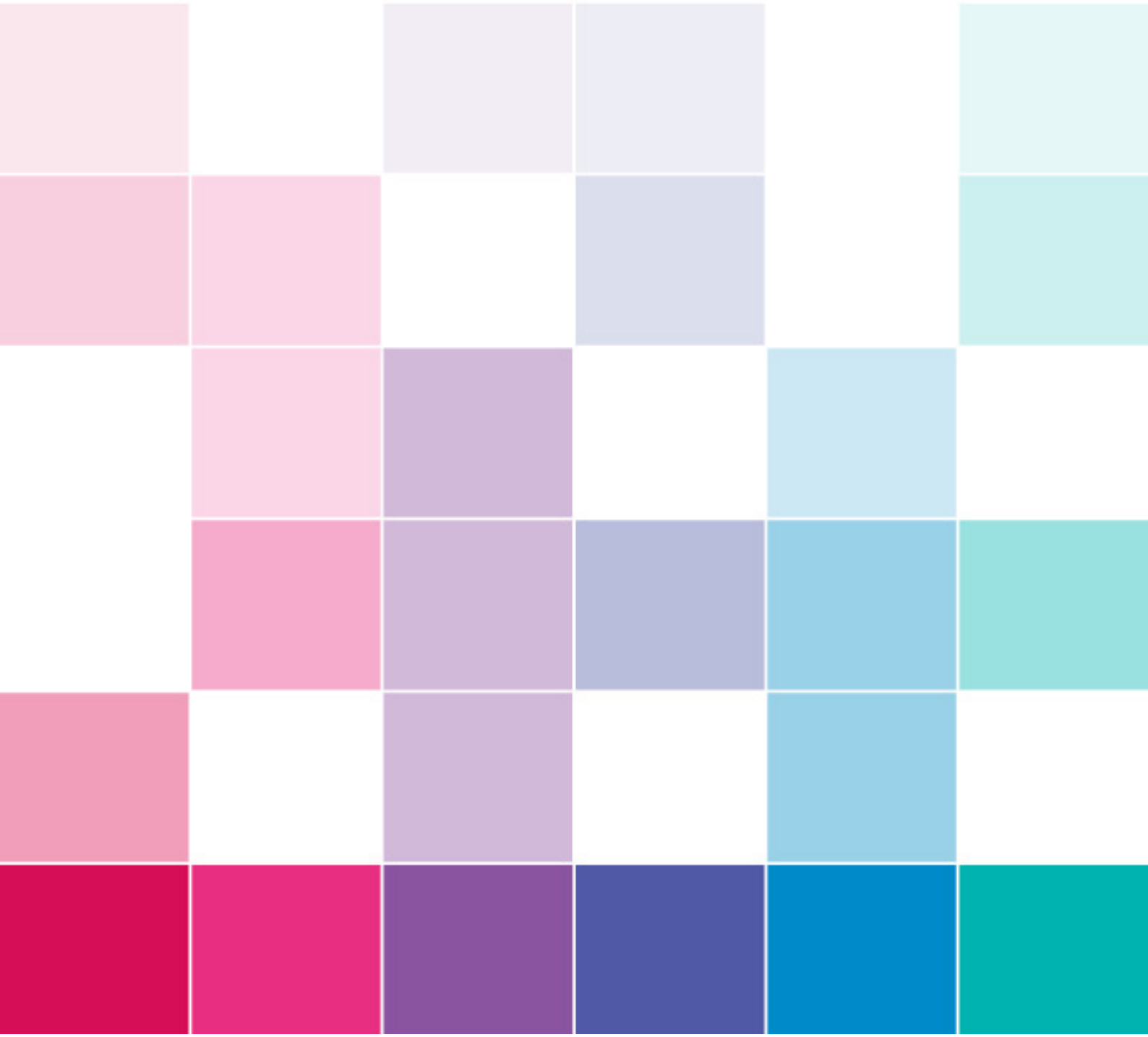
The SBTi Corporate Manual[1] in section 5 gives guidance on disclosures that companies should make in support of their science based targets. This covers:

- Target description
- Target progress
- Substantial emission variations and changes in target
- Actions towards meeting science-based targets
- GHG emissions inventory.

The Corporate Manual provides extensive guidance of disclosures to be made in support of science-based targets, under each of the headings above.

1. https://sciencebasedtargets.org/resources/files/SBTi-Corporate-Manual.pdf

Glossary of terms



Glossary of terms

This Glossary sets out the definitions of key terms and concepts as they apply to the Climate Action Protocol and initiatives herein.

A

Abatement: See Internal emission reductions.

Additional (also additionality): A criterion applied to greenhouse gas (GHG) emission reduction projects, stipulating that project-based GHG reductions should only be quantified if the project activity "would not have happened anyway". I.e., the project activity (or the same technologies or practices it employs) would not have been implemented and that, with the project, emissions would be lower than without the project (See The GHG Protocol for Project Accounting). An Emission Reduction Project is said to be additional when it can be demonstrated that in the absence of the availability of carbon finance, the project activity would not have occurred (the "baseline" scenario) and; that such a baseline scenario would have resulted in higher greenhouse gas (GHG) emissions. Each eligible carbon accounting standard under The CarbonNeutral Protocol provides tools for how additionality at a project level is tested and demonstrated.

Assessment: The process of quantifying the GHG emissions for a given subject, using robust and transparent methods that can be replicated.

Avoided emissions: The impact, measured in tCO_2e, of specific mitigation actions or projects that avoid GHG emissions to the atmosphere calculated against a reference baseline.

B

Baseline (also Baseline scenario – as applied to GHG accounting and reporting): A reference level of GHG emissions that have occurred, or which are expected to occur, prior to the introduction of any interventions that reduce emissions, to predict or determine the abatement achieved by the interventions.

Beyond Value Chain Mitigation (BVCM): Mitigating emissions outside an organization's value chain. The Science Based Targets initiative (SBTi) encourage companies to do this to support global efforts to limit global temperature rise to 1.5°C. The SBTi's 2023 consultation listed example of BVCM as companies "provide annual support to projects, programs and solutions providing quantifiable benefits to climate, especially those that generate additional co-benefits for people and nature". SBTi is expected to release further guidance on BVCM in 2024.

Boundary: The physical or spatial extent of the subject – the entity, product or activity – i.e., the sites involved (including mobile sites such as vehicles). By way of example, the boundary might encompass the office and vehicles of an entity, or the sites used for the manufacture, storage, and transportation of a product.

C

Carbon credit: A transactable, intangible environmental instrument representing a unit of carbon dioxide-equivalent (CO_2e) – typically one metric tonne – created either by regulatory schemes promoted by governments (e.g., cap & trade schemes) or by projects which are validated to a recognized carbon standard. Carbon credits are typically used to compensate for or neutralize unabated emissions occurring elsewhere by retiring or cancelling them in a registry.

Carbon dioxide equivalent (CO_2e): A unit of measurement that describes for a GHG the amount of CO_2 in tonnes that would have the same global warming potential, when measured over a 100-year timescale.

Carbon finance: Finance delivered to emission reduction projects derived from the sale of carbon credits from the project.

Carbon neutral: A state which is achieved when the GHG emissions associated with an entity, product or activity are offset to zero for a defined duration.

Carbon offsetting: The act of purchasing a carbon credit and retiring or cancelling the unit to compensate for one tonne of GHG emissions released to the atmosphere elsewhere. When the subject is said to be offset, the unabated emissions associated with the subject are equal to the amount of carbon credits retired or cancelled.

Carbon removals: See Removals.

Climate finance: A source of funding to mitigate or adapt to climate impacts. Includes terms such as: carbon finance, green finance, green bonds.

Compensation (in relation to offsetting): A term used to specify the retirement of carbon credits from mitigation projects that avoid or reduce the emission of GHGs (see Avoided emissions and Reduced emissions) when redressing the impact of unabated emissions.

Contribution claim: Where organizations finance GHG reduction and removals outside its operations and do not make a claim that the mitigation outcomes counterbalance unabated emissions; rather they communicate that their action contributes towards global climate mitigation efforts. Contribution claims often involve the purchase and retirement of carbon credits, but many other mechanisms are used.

Corresponding Adjustment: An accounting adjustment made at country level to ensure that an emission reduction is not double counted by two countries towards their commitments under the Paris Agreement. Making a corresponding adjustment means that when a country transfers a mitigation outcome (ITMO) internationally to be counted toward another country's mitigation pledge, this ITMO must be 'un-counted' in the greenhouse gas inventory of the country that hosts the mitigation project that provides the emission reduction.

Cradle-to-grave: A particular boundary for CarbonNeutral® product subjects. The cradle-to-grave boundary includes extraction and processing of raw materials (including any packaging materials), manufacture, storage, distribution to first customer, further distribution and storage, retail, use and end-of-life disposal.

D

Department for Environment, Food and Rural Affairs (DEFRA): Ministry of the United Kingdom Government, which has provided GHG measurement guidance that is referenced and applied internationally.

Delivery (referring to carbon credits): Refers to the receipt of legal title and ownership of verified and issued carbon credits by the provider of such reductions. Delivery can occur on a third-party external registry, or through written agreement.

E

Embodied carbon: The sum of the GHG emissions associated, directly or indirectly, with a material. For example, the embodied carbon in building materials when calculating the carbon footprint of a building.

Emission factor: An emission factor is a coefficient which enables the conversion of activity data into GHG emissions expressed as tonnes of CO_2 equivalent (e.g., MWh consumed into tCO_2e emitted). CarbonNeutral® certifications require emission factors published by reputable and independent sources that are up-to-date and which are most relevant to the subject's location and activities.

Emissions sources: The specific GHG-emitting activities or processes within the boundary of a Subject.

Energy Attribute Certificates (EACs): Transactable, energy tracking instruments representing proof that a unit (e.g. 1 megawatt-hour (MWh)) of energy was generated from an eligible renewable energy source and delivered through a shared power distribution system to serve power consumers. EACs provide a mechanism for power consumers to associate their purchased power with renewable energy delivered to the distribution system. Examples include Guarantees of Origin (GOs), Renewable Energy Certificates (RECs), International Renewable Energy Certificate (I-RECs) and Tradable Instruments for Global Renewables (TIGRs), which are recognized in The Greenhouse Gas Protocol Scope 2 Guidance as eligible instruments for documenting and tracking electricity consumed from renewable sources.

Environmental instruments: The broad category of transactable instruments that includes carbon credits, energy attribute certificates, and all other instruments designed to track the environmental attributes of project-based activities.

Estimated emissions: An emissions value for a particular emissions source which has been calculated based upon a reasonable estimate, extrapolation, model or benchmark, rather than based upon primary data collected. For example, water consumption of a site based upon floor area. This also includes emission sources which have been calculated based on collected data which needs to be converted using estimates before application of conversion factors. For example, emissions arising from business travel where data collected consisted of spend on airplane flights, which required conversion to flight distance using an assumption of flight cost per mile travelled.

Ex ante: As applied to carbon credits are emission reductions which are planned but which have not been verified under an accepted standard and listed in the related registry, which means they cannot be retired to compensate for unabated emissions.

Ex post: As applied to carbon credits when emission reductions have been verified under an accepted standard and listed in the related registry, which means they can be retired to compensate for unabated emissions.

G

Greenhouse gas (GHG): Gases identified in Protocols and Agreements established under the United Nations Framework Convention on Climate Change which when emitted to the atmosphere cause global warming and which are targeted for reduction. Recognized GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons, perfluorocarbons, sulphur- hexafluoride (SF6), and nitrogen trifluoride (NF3).

GHG inventory: An accounting of the amount of GHGs discharged into the atmosphere from sources and removed from the atmosphere by sinks within a specified boundary. Also commonly referred to as Carbon footprint.

GHG Protocol Corporate Standard: The World Business Council for Sustainable Development (WBCSD) and World Resources Institute's (WRI) Corporate Accounting and Reporting Standard (Corporate Standard). The GHG Protocol Corporate Standard is the most commonly used organizational GHG accounting methodology. It defines emissions reporting under three key scopes, ensuring comprehensive reporting.

GHG Protocol Product Standard: The World Business Council for Sustainable Development (WBCSD) and World Resources Institute's (WRI) Product Life Cycle Accounting and Reporting Standard (Product Standard). This document allows an entity to measure the GHG associated with the full life cycle of products including raw materials, manufacturing, transportation, storage, use and disposal.

GHG Protocol Scope 2 and 3 Guidance: Guidance published by the World Resources Institute as an complement to the GHG Protocol's Corporate Standard, providing updated requirements and best practices on Scope 2 and Scope 3 accounting and reporting. Scope 2 guidance introduces the concepts of 'location-based' and 'market-based' accounting for Scope 2 emissions from purchased energy.

Global Warming Potential (GWP): An index of the potency of a GHG, referenced to carbon dioxide (which therefore has a GWP of 1) over a given time horizon. As an illustration of this, over a 100-year horizon, methane has a GWP of 34 (Ref: IPCC Fifth Assessment Report (AR5), 2013, p714).

Guarantee of Origin (GO): An Energy Attribute Certificate (EAC) defined in Article 15 of the European Directive 2009/28/EC issued per MWh of energy generated from eligible renewable sources.

I

ICROA: The International Carbon Reduction and Offsetting Accreditation is a non-profit organization within the International Emissions Trading Association (IETA). Its primary aim is to deliver quality assurance in carbon management and offsetting through adherence to its Code of Best Practice.

Independent qualified third party (referring to GHG assessment providers): An individual or organization expert and experienced in GHG accounting that has no conflict of interest or financial gain in the outcome of the assessment used in CarbonNeutral® certifications.

Insetting: A specific application of offsetting when mitigation projects located within an entity's value chain and sphere of influence generate mitigation outcomes under recognized carbon standards which are used by the corporate to compensate for its unabated emissions. The focus on location-specific mitigation actions enables the corporate to gain multiple benefits, often delivering against both commercial and sustainability objectives.

Internal emission reduction: A reduction or abatement of GHG emissions made within the boundary of a subject (through for example, undertaking energy efficiency projects, on-site renewable energy, or fuel substitution) which is accounted for in the subject's GHG inventory.

International Renewable Energy Certificate (I-REC): An Energy Attribute Certificate (EAC) defined by the International REC Standard issued per MWh of energy generated from eligible renewable sources.

ISO (organization): The International Organization for Standardization, an international organization composed of representatives from the national standards organizations of 170 member countries. Since 1947, it has brought together experts to develop voluntary, consensus-based, market relevant International Standards. See Introduction for further information.

ISO 14064-1: International Organization for Standardisation's specification for quantification and reporting of GHG emissions and removals at the organization level. Its approach is similar to the GHG Protocol Corporate Standard.

ISO 14064-2: International Organisation for Standardisation's specification guidance at the project level for the quantification, monitoring and reporting of activities intended to cause GHG emission reductions or removal enhancements.

ISO 14065: International Organisation for Standardisation's requirements for the accreditation of entities that validate or verify resulting GHG emission assertions or claims.

ISO 14067: International Organisation for Standardisation's specification for the quantification and reporting of the GHG inventory of a product. It specifies principles, requirements and guidelines for the quantification and communication of the carbon footprint of a product, based on international standards on LCA (ISO 14040 and ISO 14044) for quantification, and on environmental labels and declarations (including ISO 14025) for communication.

Issuance: The delivery of a specified quantity of carbon credits into a specified account on a registry. Issuance allows the title to carbon credits to be transferred and retired in that registry.

L

Life Cycle Assessment (LCA): The systematic analysis using internationally accepted standards (e.g. ISO 14040) of the potential environmental impacts of products or services across their supply-chain and during their life-cycle (typically, from cradle to grave).

Location-based: An accounting concept introduced in the GHG Protocol Scope 2 Guidance. It is a method to quantify the Scope 2 GHG emissions of an entity based on the average energy generation emission factor for defined geographic locations, including local, subnational, or national boundaries.

M

Market-based: An accounting concept introduced in the GHG Protocol Scope 2 Guidance. It is a method to quantify the Scope 2 GHG emissions of an entity based on GHG emissions emitted by the generators from which the entity contractually purchases electricity bundled with Energy Attribute Certificates (EACs), or EACs on their own.

Materiality: A materiality threshold is used to determine whether the aggregated error in, or omission from, an inventory constitutes a material discrepancy – that is, whether the error or omission results in a reported quantity of emissions that is sufficiently different from the true quantity of emissions (as determined by the verifier) that it will influence decisions made by the inventory's users.

The GHG Protocol Corporate Standard recommends 5% as a rule of thumb for a materiality threshold; however, it notes that a verifier should assess whether an error or omission of a smaller size may still be misleading given the purpose and context of the report. Errors or omissions must be corrected before the verification is complete unless they fall under the de minimis threshold. The concept of materiality therefore involves a professional judgment in the context of the information presented. While materiality thresholds should be applied according to the judgment of the verifier, we recommend alignment with the GHG Protocol by benchmarking materiality at 5% of the total inventory for the part of the organization being verified.

Mitigation: Actions that reduce emissions of GHGs to the atmosphere; that reduce the global warming potential of other constituents in the atmosphere; or, which remove or stabilize heat trapping GHGs or other constituents from the atmosphere.

Mitigation outcomes: Impact of mitigation activities, measured in CO_2e, including those that avoid and reduce greenhouse gas emissions to the atmosphere and those that remove greenhouse gases from the atmosphere. Transactable mitigation outcomes (see Carbon credit) are generated by mitigation projects established under recognized third-party standards. Retirement of carbon credits (see Carbon offsetting) enables entities to compensate or neutralize unabated emissions.

N

Net zero: The Paris Agreement introduced the concept of net zero at a global level as: "a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases."

For net zero at an organizational level, we refer to the UNFCCC's Race to Zero initiative, which defines net zero as: "An actor reduces its emissions following science-based pathways, with any remaining GHGs attributable to that actor being fully neutralized by like-for-like removals (e.g., permanent removals for fossil carbon emissions) exclusively claimed by that actor, either within the value chain or through purchase of valid offset credits."

The SBTi's Corporate Net-Zero Standard, launched in October 2021, defines corporate net-zero as: "Reducing Scope 1, 2, and 3 emissions to zero or to a residual level that is consistent with reaching net-zero emissions at the global or sector level in eligible 1.5°C-aligned pathways; and neutralizing any residual emissions at the net-zero target year and any GHG emissions released into the atmosphere thereafter." Its Standard includes the guidance, criteria and recommendations to deliver emissions reductions for a net zero targets consistent with limiting global temperature rise to 1.5°C. However, it does not include guidance or criteria about neutralising residual emissions.

O

Offsetting / offset: The act of compensating for unabated GHG emissions by retiring (cancelling) carbon credits.

P

Paris Agreement: A legally binding international treaty on climate change under the UN Framework Convention on Climate Change (UNFCC). It was negotiated and agreed by 196 countries at the UN Conference of the Parties (COP) meeting in Paris in December 2015 and came into force on 1st January 2021. The goal of the Paris Agreement is to limit global warming to well below 2°C, and preferably to 1.5°C, compared to pre-industrial levels.

PAS 2050: British Standards Institution's (BSI) Publicly Available Specification for the assessment of the life cycle GHG emissions of goods and services. The general principles of PAS 2050 are similar to the GHG Protocol Product Standard.

PAS 2060: British Standards Institution's (BSI) Publicly Available Specification for the demonstration of carbon neutrality. It specifies requirements to be met by any entity seeking to demonstrate carbon neutrality through the quantification, reduction, and offsetting of GHG emissions from a uniquely identified subject.

Primary data: Data collected or directly measured which can be converted to CO_2e emissions through the application of conversion factors, without the need to first apply estimates, extrapolations, models, or industry averages. For example, the quantity of electricity consumed on site, as recorded from an electricity meter, or from utility invoices.

Q

Quality assurance: Independent review conducted by an expert third party to check that the input data for GHG inventories or use of a CarbonNeutral® certification logo meets the requirements of a CarbonNeutral® certification and is in line with the approach and principles of The CarbonNeutral Protocol.

R

Reduced emissions: The impact, measured in tCO_2e, of specific mitigation actions to avoid GHG emissions to the atmosphere calculated against a reference baseline.

Registry: A database of carbon credits and their transactions used to assign legal title through a unique identifier, and where credits are retired (cancelled) upon being sold to offset an equivalent amount of GHG emissions.

Removals: The impact, measured in tCO_2e, of specific mitigation actions that remove GHG emissions from the atmosphere.

Renewable Energy Certificate (REC): An Energy Attribute Certificate (EAC) defined in North American regulations issued per MWh generated from eligible renewable energy sources.

Retire (Retirement): Refers to the permanent cancellation of carbon credits from future use in a third-party registry.

S

Science-aligned target: A target to reduce GHG emissions at a rate compatible with the models and pathways required to keep global warming below 1.5°C. This is typically in line with the recommendations of the Intergovernmental Panel on Climate Change (IPCC).

Science Based Targets initiative (SBTi): A collaborative initiative by CDP, World Resources Institute (WRI), the World Wide Fund for Nature (WWF) and the United Nations Global Compact (UNGC) that champions science-based internal abatement target setting and the adoption of net zero strategies to encourage and support companies in the transition to a low-carbon economy. See Introduction for further information

Scopes: The three "classes" of emissions sources identified in the GHG Protocol Corporate Standard, relevant to assessing and reporting the GHG emissions of entities.

Scope 1 emissions: Those GHG emissions directly attributable to the subject that occur from sources that are owned, leased or controlled by the entity seeking CarbonNeutral® certification, principally from the following types of activities: the combustion of fuels for the generation of electricity, heat, or steam, processing and/or manufacturing of materials or chemicals, transportation in company owned/controlled mobile combustion sources, and fugitive emissions from intentional or unintentional releases (e.g. equipment leaks and hydrofluorocarbon (HFC) emissions from refrigeration and air conditioning equipment).

Scope 2 emissions: Those emissions indirectly attributable to the subject from the generation of electricity, heat, steam or cooling that is acquired and consumed in owned, leased, or controlled equipment or operations.

Scope 3 emissions: All non-Scope 2 indirect emissions from upstream and downstream sources. The most common examples are emissions from: transport-related activities, transportation of purchased materials, goods, or fuels, employee business travel, employee commuting to and from work, transportation of sold products in third-party owned vehicles, and the transportation and disposal of waste and sold products at the end of their life.

Subject: The entity, product or activity to which a certification or claim is applied.

T

Taskforce for Scaling the Voluntary Carbon Market: A private sector-led initiative established in 2020 working to scale an effective and efficient voluntary carbon market to help meet the goals of the Paris Agreement, renamed in 2021 to the Integrity Council for the Voluntary Carbon Market (ICVCM) to mark the implementation phase of the initiative.

Tradable Instrument for Global Renewables (TIGR): A global Energy Attribute Certificate (EAC) administered by APX in the US issued per MWh generated from eligible renewable energy sources.

U

Unabated emissions: Remaining GHG emissions associated with a subject after internal emission reduction activities have been implemented.

V

Voluntary Carbon Market (VCM): The market for tradable carbon credits that facilitates international cooperation between private actors in developing and developed countries. It enables non-state actors to drive climate benefits beyond their own operations and supply chains.

Verification: Independent evaluation conducted by an expert third party with demonstrated experience to the requirements of an independent verification standard (such as ISO 14064:3) to check that the quality of input data, a GHG assessment, or that the use of a CarbonNeutral® certification logo meets the requirements of a CarbonNeutral® certification and is in line with the approach and principles of The CarbonNeutral Protocol.

Verification statement: A written statement by an expert third party with demonstrated experience declaring the results of a verification exercise.

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