



# Aligning Voluntary Carbon Markets with the 1.5°C Paris Agreement Ambition

## ABOUT VCMI

The Voluntary Carbon Markets Integrity Initiative (VCMI) is a multistakeholder platform to drive credible, net zero aligned participation in voluntary carbon markets (VCMs). VCMI's goal is to ensure VCMs make a significant and meaningful contribution to climate action and limit global temperature from rising to 1.5°C above pre-industrial levels, while also supporting the achievement of the UN Sustainable Development Goals (SDGs).

Through consultation with stakeholders from civil society, the private sector, Indigenous Peoples, local communities, and governments, VCMI intends to develop and communicate guidance on how carbon credits can be voluntarily used and claimed by businesses and others as part of credible, net zero decarbonization strategies. It also engages countries to support development of strategies to access VCMs to drive ambitious climate mitigation.

The UK Government is supporting VCMI, as announced by COP26 President-Designate Alok Sharma at the Climate and Development Ministerial on 31 March 2021. To date, VCMI has been led by Meridian Institute, a US-based not-for-profit organization, and supported by consultants (hereafter referred to as the VCMI Consortium).

The VCMI Consortium's role is to refine the scope, governance and processes that will underpin VCMI in its future phases. The Initiative is co-funded by the Children's Investment Fund Foundation (CIFF) and the UK Department for Business, Energy and Industrial Strategy (BEIS).

## ABOUT THIS PAPER

**Aligning VCMs with the 1.5°C Paris Agreement Ambition: A Global Consultation Report of VCMI** (hereafter simply the Consultation Report or CR) is a product of the VCMI Consortium. As described in more detail below, the intent of the paper is to spur dialogue and an exchange of ideas to inform the development of VCMI guidance during the next phase of the VCMI process, which will be overseen by the VCMI Steering Committee.

The subject matter addressed in this Consultation Report relies upon a complex, evolving, and interrelated set of key terms. In an effort to be clear about the definitions used, the VCMI Consortium has developed a Glossary of Key Terms (Annex A).

# Contents

I.	Overview	5
II.	High Integrity Voluntary Carbon Markets Can Accelerate Credible Climate Action	9
III.	The Role of VCMI	13
IV.	Principles for High Integrity and High Ambition Voluntary Corporate Climate Action	17
V.	Key Issues for High Integrity Supply Real and verified carbon credits Capacity building to support supply-side access	21
VI.	Key Issues for Transparent Accounting Double counting and real or perceived risk of “double claiming”	25
VII.	Key Issues for High Integrity Demand Credible corporate climate commitments The role of carbon credits in corporate climate commitments	29
VIII.	Preliminary Proposal for Categorization and Utilization of VCM-Related Claims The need for clear and transparent claims Transparent claims Commitment claims and achievement claims Mitigation contributions	35
IX.	Integrity Assurance of VCMs	45
X.	Next Steps and Future Priorities	51
XI.	Annex A: Glossary of Key Terms	55





Image: Atul Lokte for Panoos Pictures/Food and Land Use Coalition

# I. Overview



## Overview

The Voluntary Carbon Markets Integrity Initiative (VCMI) aims to coalesce stakeholders around a shared vision for high integrity use of carbon credits for voluntary purposes and work together to realize this vision. As companies and other non-state actors set climate targets, there is growing interest in voluntary carbon markets (VCMs). Provided the carbon credits purchased are of high integrity, VCMs provide an opportunity to channel private sector finance into mitigating climate change, protecting nature and supporting sustainable livelihoods at a time when finance is urgently needed.\*

VCMI is looking to connect with and align and amplify those initiatives that share VCMI's vision for high integrity VCMs. In addition, VCMI will focus on a few key areas where there is a clear need for additional work.

As such, this Consultation Report (CR) is intended to serve as a foundation for an intensive consultation process that will be initiated alongside the official launch of VCMI. More details on this process are described below. The Report proposes areas of engagement that are complementary to existing initiatives that seek to enhance the integrity of VCMs. As such, we are looking for input and feedback from a large and diverse group of stakeholders. This Report draws on extensive discussion and consultations with practitioners, civil society, businesses, governments, and academics, and is supplemented with a number of working papers that can be found [here].

### This document:

- Provides an overview of the opportunity for VCMs to make a meaningful contribution toward the Paris Agreement ambition to limit global warming to 1.5°C above the pre-industrial era;
- Proposes a role for VCMI and offers what we hope will be a compelling vision for the future of VCMs, along with ten principles to enable high integrity and high ambition voluntary corporate actions;
- Takes a more in-depth look at a number of critically important issues for high integrity supply and demand in VCMs;
- Proposes an option for how to categorize different types of claims, utilizing claims in relation to corporate engagements in VCMs;
- Proposes options for strengthening oversight of VCM integrity through a spectrum of potential private assurance arrangements and;
- Discusses the governance arrangements for VCMI itself and our planned next steps.

\*Companies may provide payments for the transfer of verified emission reductions and removals as carbon credits on a registry platform, or otherwise provide payments for those verified emission reductions and removals but without necessarily requiring transfer. Both activities are described in this report as the "purchase of" or "payments period of" carbon credits.





Climeworks operates machines that remove CO<sub>2</sub> from the air.  
This is Climeworks' direct air capture plant in Hinwil, Switzerland.  
The air-captured CO<sub>2</sub> can either be recycled and used as raw  
material or completely removed from the air by safely storing it.



## II. High Integrity Voluntary Carbon Markets Can Accelerate Credible Climate Action





Image: Atul Lokte for Panos Pictures/Food and Land Use Coalition

## High Integrity Voluntary Carbon Markets Can Accelerate Credible Climate Action

Under the Paris Agreement, 197 Parties to the United Nations Framework Convention on Climate Change (UNFCCC) committed to avoiding the catastrophic impacts of climate change by limiting global warming to well below 2°C, with best efforts to not surpass 1.5°C, compared to pre-industrial levels.<sup>1</sup> Current climate pledges would result in 2.4 °C of warming above pre-industrial levels this century – far above the defined “safe upper limit” of 1.5°C of warming.<sup>2,3</sup> While action to mitigate climate change and adapt to its impacts is urgently needed, global finance flows are further entrenching unsustainable economic pathways.<sup>4,5</sup> The United Nations Intergovernmental Panel on Climate Change (IPCC) reports that an additional investment of US \$2.4 trillion is needed each year in the energy system alone until 2035 to limit warming to 1.5°C.<sup>6</sup>

Many companies are stepping up to support global climate action. Despite the disruptions of the COVID-pandemic, in 2020, the number of corporate “net zero” climate commitments more than doubled.<sup>7</sup> Companies are under increasing pressure from consumers, investors, and governments to show they can constructively contribute solutions to the climate problem. At the time of writing, more than 3,000 companies have signed up to the United Nations Race to Zero campaign,<sup>8</sup> and more than 1,500 companies have committed to set science-based greenhouse gas (GHG) emission reduction targets as part of the Science Based Targets initiative (SBTi).<sup>9</sup> More than 700 businesses – with a combined revenue of US \$4.3 trillion and employing 10 million people globally – are urging governments to adopt policies to reverse nature loss in this decade.<sup>10</sup>

VCMs provide an opportunity to direct private finance, at speed and scale, to mitigate climate change. They can channel significant private sector finance over the next three decades into investment-ready carbon saving activities, which can also have positive ‘co-benefits’ such as energy access, biodiversity conservation, and sustainable economic development. The market size was US \$320 million in 2019 but could be worth between US \$5 – 30 billion per year by 2030,<sup>11</sup> with perhaps two thirds of this channeled into nature-based solutions (NBS).<sup>12</sup> As an illustration of the potential scale of impact, if the Fortune Global 500 companies committed to compensating 100% of their unabated Scope 1 and 2 emissions by 2025, voluntary demand for carbon credits would reach 5 GtCO<sub>2</sub>e in that year alone. At an illustrative price of US \$10/tCO<sub>2</sub>e, this would cost the Global 500 US \$25 billion – less than 0.1% of their total revenues and less than 1.5% of total profits.<sup>13</sup>

But integrity is crucial. VCMs have faced criticism in the past, e.g. around poor environmental integrity, greenwashing, or mis-selling. Without integrity, VCMs will not fulfil their potential to channel finance in line with the Paris Agreement temperature goal. They could incentivize companies to ‘offset’ rather than reduce their emissions, undermining decarbonization efforts and leading to misleading claims. A shift is needed to address risks to integrity – on both demand and supply sides – and build trust and credibility in VCMs that are fit for the future.

“Businesses need to get serious and ensure their climate commitments and strategies are ambitious, credible, and aligned with Paris. The days of buying cheap, low-quality credits and delaying feasible decarbonization options are over.”

Rachel Kyte, VCMI Co-Chair





Image: Shutterstock

### III. The Role of VCMI

## The Role of VCMI

VCMI is an umbrella initiative that aims to engage key stakeholders in pursuing a shared mission that aims to ensure the use of VCMs strengthens – rather than undermines – global action towards achieving the goals of the Paris Agreement. This mission will require a deep collaboration among civil society, public institutions, and private companies. VCMI will seek to connect, align, and amplify efforts that minimize integrity risks and maximize the proposed vision for the future of VCMs.

To guide this collective action, VCMI proposes the following as a vision for the future of voluntary carbon markets:

Voluntary carbon markets will make a significant, measurable, and positive contribution to the transition of the global economy to a 1.5°C future while also promoting inclusive, sustainable development in line with the United Nation's Sustainable Development Goals (SDGs).

During the Inception Phase of VCMI, the VCMI Consortium gathered insights, ideas, and concerns through over 50 interviews with nearly 200 stakeholders representing perspectives from civil society, the private sector, governments, and Indigenous Peoples representatives. In addition, the VCMI Consortium, in collaboration with the UN Development Programme's Climate and Forest Team, participated in two group sessions with 85 participants from 32 forest countries in Africa, Asia-Pacific, Latin America, and the Caribbean.

Two initial priorities for VCMI in the coming months include:

- 1. Promoting demand-side integrity.** VCMI intends to propose a categorization scheme for legitimate voluntary use of carbon credits and related claims to ensure that stakeholders can easily understand the climate impact of a company's actions. Linked to this, VCMI will promote the associated "business cases" for voluntary purchases of carbon credits to help scale high integrity VCMs.
- 2. Promoting supply side integrity and access.** The VCMI's focus on the supply-side will be to engage with countries to develop policy options and strategies and build technical capacity to promote access to high integrity VCMs. The VCMI will also seek to engage in and monitor supply-side integrity efforts to ensure transparency and assurance of high-quality carbon credit supply.

Figure 1 – Proposed Role of the VCMI in Supporting Global Efforts to Achieve the Paris Agreement

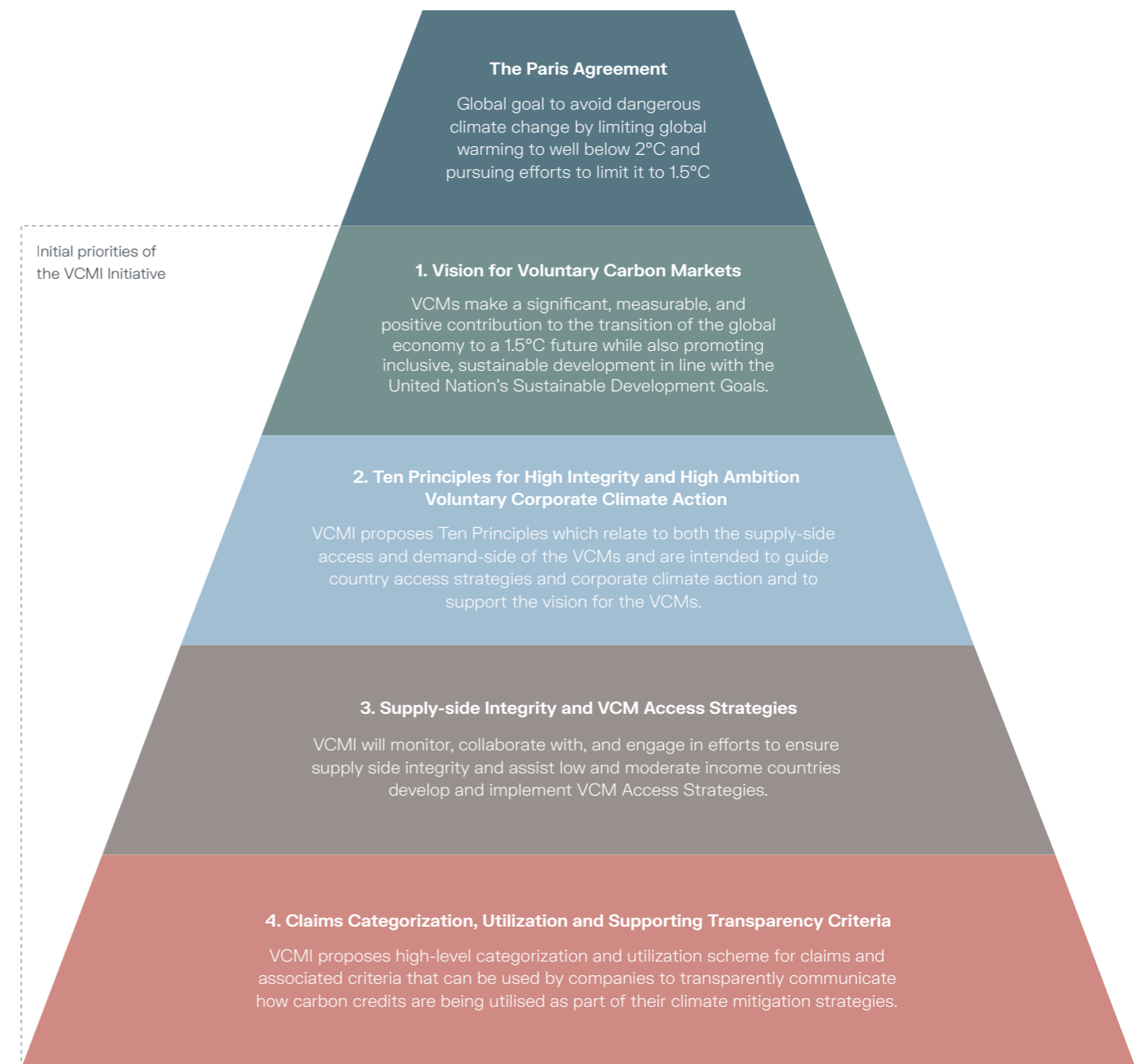






Image: Sumarji, Partnerships for Forests

## IV. Principles for High Integrity and High Ambition Voluntary Corporate Climate Action



# Principles for High Integrity and High Ambition Voluntary Corporate Climate Action

VCFI proposes ten overarching principles for high integrity and high ambition voluntary climate action. The principles relate to both the supply-side and demand-side of the VCFIs and intend to guide private sector climate action. They reflect input received during VCFI's initial inception phase and build upon the excellent work of a number of organizations and initiatives including – but

not limited to – the Science Based Targets initiative, the Science Based Targets Network, the Natural Climate Solutions Alliance, the Oxford Principles for Net-zero Aligned Carbon Offsetting, the Greenhouse Gas Protocol, the Climate Disclosure Standards Board, the Taskforce on Climate-related Financial Disclosures, and Climate Action 100+.

## Ten Principles for Voluntary Corporate Climate Action



### 1. Science-based action

Company strategies, targets, activities, and engagement in VCFIs are underpinned by the latest scientific consensus on safe upper limits for global warming. As such, the 1.5°C Paris Agreement temperature target (with no or limited overshoot) is the North Star.<sup>14</sup> Companies align with the science-based mitigation hierarchy which means delivering emission reductions within their value chains as a first-order priority.

### 2. Comprehensive action

Private sector climate targets and action are built upon accurate and complete greenhouse gas inventories in line with the requirements set out in the GHG Protocol.<sup>15</sup>

### 3. Equity-oriented action

Private sector climate action is consistent with achievement of broader Sustainability Development Goals (SDGs)<sup>16</sup> and the concept of a “just transition”.<sup>17</sup> As such, business activities ensure social safeguards and support healthy, inclusive, and resilient livelihoods and economies.

### 4. Nature-positive action

Private sector climate action, including actions taken through VCFIs, is aligned with the need to bend the curve on nature and biodiversity loss and move toward a nature-positive state of recovery and renewal.<sup>18</sup>

### 5. Rapid action

Companies take immediate action on climate recognizing that this decade is critical if we are to avert potential tipping points – for example, where carbon sinks turn into sources due to temperature rises.<sup>19</sup> In recognition of this, businesses set and take action to realize short-term targets (e.g. 5 years) – as well as ambitious mid- and longer-term targets.

### 6. Scaled-up Action

Businesses raise their ambition to make significant investments in climate mitigation outside their value chains – for example, through voluntary purchases of high integrity carbon credits.

### 7. Transparent action

Companies are transparent about the scope, boundary, use of carbon credits, and terminologies relating to their commitments and activities and should publicly report on progress and learnings.

### 8. NDC-enabling action

Companies contribute to the finance flows needed to achieve and enhance climate ambition in Nationally Determined Contributions (NDCs) under the Paris Agreement.

### 9. Consistent action

Companies require climate action plans that fully align their businesses with net zero. This spans everything from their investments, governance structures and their lobbying efforts and the advocacy of affiliated membership of industry associations.

### 10. Collective and predictable action

Companies align VCFI engagement with host country policies and work in partnership with other corporates, NGOs, local stakeholders, and communities to collectively maximize the climate and sustainable development benefits of carbon markets.





Image: Partnerships for Forests

## V. Key Issues for High Integrity Supply





Image: Shutterstock, solar hybrid power plant in Somalia

## Real and Verified Carbon Credits

Currently, companies and investors rely on carbon standards developed and maintained by private sector and NGO entities (which are elaborated upon below) that set out the criteria and requirements for the issuance of carbon credits. This includes an assessment of the activities and methodologies generating carbon credits in relation to common quality features: (i) robust baselines; (ii) additionality; (iii) permanence of emission reductions or removals; (iv) addressing leakage; and (v) absence of double counting.<sup>20</sup> Carbon methodologies endorsed by standard setting bodies require those quality features, in addition to the requirements set forth in the standards themselves. Some standards will also assess and certify other attributes such as biodiversity conservation and sustainable livelihoods.<sup>21</sup> And although all reputable carbon standards seek to verify carbon credits reliably, they vary in their approach to securing these quality features (i–v above), leading to different quality outcomes.

Investors and companies do not currently have the tools to easily compare quality features and/or cost of carbon credits. While VCM registries\* enable the public to view some details about projects and carbon credits, divergences between the

way registries collect and organize data can make comparison difficult.<sup>†</sup> In addition, this data is not always detailed enough to enable independent assessments of carbon credit quality features across the full spectrum of their carbon methodologies. Price may be indicative of the quality of carbon credits,<sup>22</sup> but not always due to the fragmented and relatively opaque nature of VCMs. While some exchanges<sup>‡</sup> provide an indication of carbon credit prices, these are not always publicly accessible and do not necessarily disaggregate between different carbon credit types or represent prices across VCMs.

The development of new tools and access to more information, such as credit-level data, would help increase supply-side transparency and help drive higher prices for quality features. For example, the Taskforce on Scaling Voluntary Carbon Markets (TSVCM) identified concerns with carbon credit quality as key to buyers' hesitancy in engaging with carbon markets<sup>23</sup> and are developing a set of Core Carbon Principles to label carbon credits that comply with specific quality criteria and attributes. VCM will continue to engage in, collaborate with, and monitor the TSVCM's activities on supply-side integrity and governance.

\* For example, Verra Registry, Gold Standard Registry, Climate Action Reserve Registry, American Carbon Registry, Clean Development Mechanism, and Plan Vivo.

† The World Bank and HIS Markit are collaborating to develop a meta-registry that intends to consolidate data across registries.

‡ For example, the GEO spot and futures contracts can be traded on CBL's exchange. Each GEO contract corresponds to a tonnage of CO<sub>2</sub>e offset, thereby enabling price discovery in the voluntary market.

## Capacity Building to Support Supply-Side Access

Strong technical and institutional capacity across entities involved in VCMs is a key requirement and enabler for generating a pipeline of high quality carbon credits. While VCM will recognize this is not the only requirement, it will seek to focus and support capacity building efforts. This is in recognition of the importance of connecting a dialogue on high integrity voluntary demand with supply-side contexts.

To support countries to strategically engage in VCMs, VCM will work with country stakeholders to develop an initial series of VCM Access Strategies. These VCM Access Strategies aim to support countries in their efforts to maximize their return on investments that will be necessary to generate high integrity supply (i.e. emission reductions and removals that are aligned with national climate strategies, contribute to – and go beyond – the NDCs, and support overall global climate action). The VCM Access Strategies will aim to identify high integrity buyers so countries and their potential private sector partners can enter into effective and constructive partnerships to identify and accelerate purchases of high

integrity carbon credits through VCMs and facilitate multi-stakeholder partnerships by COP26 and beyond.

In short, the VCM Access Strategies developed under the auspices of VCM will identify opportunities for accessing direct investment into country-specific mitigation action, aligning VCMs finance flows with national climate policy and finance priorities. These strategies will take into account countries' prior experiences and particular circumstances, including existing carbon finance mechanisms and infrastructure. An initial portfolio of VCM Access Strategies will be developed with a diverse range of countries that illustrate different approaches. Some of these will be aimed at facilitating forest countries' engagement with VCMs; others will be aimed at other types of emission reductions and removals.

VCM will also engage a group of countries who are supporting VCM's goals and objectives. These countries will offer strategic insights, perspectives, and feedback on issues relevant to the VCM's work.



Image: Ian Teh for Panos Pictures/Food and Land Use Coalition





Image: © Feri Latief/Partnerships for Forests

## VI. Key Issues for Transparent Accounting





Image: Partnerships for Forests

## Double Counting and Real or Perceived Risk of “Double Claiming”

Avoiding “double counting” – i.e. counting the same emission reduction twice – is a widely accepted integrity requirement for VCMs. A related concept often conflated with “double counting” is that of “double claiming”. There are situations in which both the host country where the credit was generated and the purchasing company make some use of the emission reduction or removal represented by the carbon credit. For example, the host country may report them as pertaining to government action, while the company uses the same emission reduction or removal to make claims about their climate performance. This is referred to as “double claiming” and may impact on the uniqueness of the claim, and there are concerns that double claiming matters for the integrity of VCMs.

Double claiming does not result in double counting of GHG emission reductions under the Paris Agreement, as long as only one country counts a relevant emission reduction or removal as having taken place within its territory at any given time, including after any international transfer. In the context of international transfer of emissions reductions or removals, such as those envisaged under Article 6 of the Paris Agreement, the host country would make a “corresponding adjustment” to its own accounts to ensure that it no longer counted the abatement, which was now being used by the acquiring country. In the context of VCMs, the host country would count the GHG emissions reduction or removal.

When it comes to the overall merits of corresponding adjustments for VCMs, there is a debate over whether they would increase overall mitigation efforts and result in a net climate benefit. Those in favor of applying corresponding adjustments in VCMs argue they increase the credibility of VCMs transactions, for example by managing real or perceived risk of double claiming. These views are countered by concerns that demands for corresponding adjustments under VCMs, and the associated institutional capacity requirements and understanding regarding implications for NDCs, would limit VCM purchases and private finance flows. Questions and approaches concerning the appropriate application of corresponding adjustments in VCMs will therefore depend not only on purchasing and usage contexts, but also on transitional considerations which allow for the finalization of Article 6 and institutional capacity building.





Image: Marcelo Camargo / Agência Brasil / Partnerships for Forests

## VII. Key Issues for High Integrity Demand



## Credible Corporate Climate Commitments

Shareholders and other stakeholders are increasingly expecting that companies align the ambition of their private climate commitments with Paris Agreement temperature goals.\* This means first prioritizing Scopes 1, 2, and 3 emission reductions in line with limiting global warming to 1.5°C compared to pre-industrial levels and reaching 'net zero' by 2050 or earlier.†

### What does Net Zero emissions mean?

The IPCC defines net zero as the point when “anthropogenic emissions of greenhouse gases to the atmosphere are balanced by anthropogenic removals over a specified period”. The Paris Agreement sets out the need to achieve this balance by the second half of this century.

The 'net zero' terminology has acted as a magnet for voluntary corporate climate commitments, with companies, cities, and investors rushing to make announcements ahead of COP26 in Glasgow this November.<sup>28</sup> At the same time, stakeholders have expressed concern about the lack of clarity of those commitments, with widespread confusion linked to the discrepancy in their calculation and communication. For example, commitments include different emission sources and gases, different scopes or target boundaries, different timelines, different emission reduction trajectories, and different approaches to the use of carbon credits.<sup>29</sup> This is in part because there is no widely agreed-upon definition of net zero at the corporate entity level.



Image: Partnerships for Forests

## The Role of Carbon Credits in Corporate Climate Commitments

Credible climate commitments demand clear pathways to 'net zero' and a clear and legitimate role for the use of carbon credits as part of corporate climate action plans which align their businesses with net zero. The imperative for overall and absolute emissions reductions globally, to keep 1.5°C within reach, necessarily means the end to 'traditional' **offsetting** – where carbon credits are purchased instead of reducing avoidable emissions within the value chain of a company [see Box 1 below]. It is no longer sufficient or legitimate to achieve long-term 'equivalence' through counterbalancing emissions with carbon credits. Instead, the use of carbon credits should be additional to abatement and should be carefully managed to avoid replacing other forms of public and private action. As a result, proposals for different and more nuanced ways of using carbon credits and associated claims are emerging.

For example, the SBTi has proposed terminology that describes the use of carbon credits when used in addition to setting a science-based net zero transition pathway as follows:

- The term “**compensation**” refers to: (i) a company’s efforts to prevent, reduce or eliminate emissions outside of its value chain; (ii) companies in all sectors can catalyse action in VCMs as part of an effort to counterbalance as-yet-unabated emissions as they transition toward a state of net-zero emissions; and (iii) these efforts should not be counted as part of a company’s net zero efforts.

- The term “**neutralization**” refers to: (i) a company’s efforts (which can either take place within or outside of its value chain) to remove carbon from the atmosphere in order to counterbalance any residual emissions that are not feasible to abate; and (ii) such neutralization efforts could be counted as part of a company’s net zero efforts as they approach their net zero date.‡

The diversity of possible usages, claims, contexts, carbon credit attributes, sectoral decarbonization pathways, and combinations therein means there is unlikely to be – and should not necessarily be – a one size fits all approach for high integrity VCMs, especially in the short-term. But common integrity guardrails, transparency, and assurance mechanisms are essential. This provides the basis for a shift in the role VCMs can play to accelerate credible climate action and is where VCMI will seek to develop common solutions to promote thriving, trusted, and impactful VCMs, starting with a focus on promoting transparent claims.

\* See e.g., the foundations published by the Science Based Targets initiative: <https://sciencebasedtargets.org/resources/files/foundations-for-net-zero-full-paper.pdf> and commentary by the WRI: <https://www.wri.org/insights/corporate-financing-nature-based-solutions-what-next>

† TSVC, CPLC, SBTi etc

‡ It is worth noting that neutralization does not necessarily require purchasing of carbon credits, as emissions can be directly neutralized by a company and accounted for as Scope 1 removals.





Image: Kemal Jufri for Panos Pictures/Food and Land Use Coalition

---

### Box 1: 'Traditional' Offsetting: Context

One of the first carbon transactions was brokered in 1989, but offsetting only properly took off with the Kyoto Protocol's flexible mechanisms, particularly the Clean Development Mechanism, which registered its first project in 2004. Compliance carbon markets that included the use of "offsets" were, to different degrees, developed at the regional level – with the EU Emissions Trading Scheme – as well as at national and subnational levels, such as in Canada and California, during the 2000s.

In parallel, albeit at a slower pace and smaller scale, VCMs grew. Different private carbon standards emerged in the 2000s – such as the Climate Action Reserve, the Gold Standard, the Verified Carbon Standard, and the American Carbon Registry. By voluntarily purchasing carbon credits registered under these standards, companies, individuals, and NGOs have been able to counterbalance a portion of their carbon footprint. In regulated markets, offsetting has been used to claim compliance with mandatory GHG reduction obligations, whereas in VCMs offsetting has predominantly been used to claim **carbon neutrality** for a particular year of operation, event, or product.

The intention of using a carbon credit as an offset is that it can enable "equivalent" environmental outcomes to be achieved in a cost-efficient manner and deliver finance where it is often most needed. Moreover, some types of carbon credits used for offsetting can support environmental and social co-benefits, particularly those generated from nature-based solutions (NBS).

Despite these advantages, the role of offsetting to deliver environmental solutions is clearly limited. Concerns exist that simply counterbalancing emissions potentially carries a disincentive for actual and steady emission reductions within corporate boundaries. The major risk has always been that offsetting would turn into a cheap license for companies to continue polluting and delaying their own GHG reductions.

---





Image: Kemiri Sunan plantation. Flores/Partnerships for Forests

## VIII. Preliminary Proposal for Categorization and Utilization of VCM- Related Claims



## The Need for Clear and Transparent Claims

Today, thousands of companies are making a variety of claims associated with their carbon credit purchases, their current GHG emissions performance, and future climate commitments.\* This proliferation of carbon credit-related claims comes with an assortment of different usages – offsetting, compensating, neutralizing, insetting, and financing additional mitigation contribution – as well as concepts, including carbon neutral, climate neutral, net zero, carbon negative, and climate positive. The lack of transparency has resulted in limited public confidence in corporate claims for several reasons:

**Precision:** Often, claims are formulated with vague or imprecise language. Even the most commonly employed terms – such as net zero and carbon neutral – are used by different companies to mean different things and represent different actions. This creates confusion about what exactly a company is claiming and leaves room for misinterpretation, even when there is no intention to mislead shareholders, investors, or consumers. In addition, there is no clear framework for understanding which claims imply greater or lesser climate action. This section of the Consultation Report is a starting point for the development of a categorisation and common typology of high integrity claims that would help to address this issue.

**Transparency:** The activities, inputs, or processes upon which claims are based – including the nature of any purchased carbon credits that provide the basis for the claim – are often internal to a firm’s operations and largely unobservable to outsiders. Companies do not always disclose their use of carbon credits. In addition, there is no common

mechanism for understanding the quality of the carbon credits that have been used in support of these claims. While a number of climate-related disclosure initiatives are emerging to shed light on companies’ climate strategies, the quality, consistency, completeness, and granularity of information provided remains patchy.

**Assurance:** The absence of robust or independent assurance can allow companies to disguise or strategically overstate their climate performance for reputational gains and market share – an approach that has been dubbed ‘greenwashing’.

But this does not mean that companies should refrain from engaging in VCMs. On the contrary, VCMs provide a valuable opportunity to contribute to mitigating global climate change. If the carbon credits purchased are real and verifiable, this can deliver critical finance for climate mitigation and promote international and cross-sector partnerships.

To fully maximize this potential, it is important that any claims made based on engagement in VCMs accurately reflect the nature of the engagement. It is essential that companies are not using carbon credits to make claims that would mislead their stakeholders – including investors and customers – into thinking that the organization is taking more ambitious mitigation action than they are in reality. In addition, the array of claims should be clearly structured according to their potential climate impact and accuracy in framing the use of carbon credits, including what is required from a company to merit each claim. Finally, the data underlying these claims should be disclosed and, where possible, independently verified.

\* About one-fifth of the world’s 2,000 largest publicly listed companies – covering over 60% of global emissions and representing US\$ 14 trillion in sales – have committed to a ‘net-zero’ emissions target. [click here for more info](#)

## Transparent Claims

Given the diversity in corporate climate commitments and the various ways that carbon credits can be claimed against such commitments, it is important that companies know exactly what it is they have committed to and how to responsibly communicate it. A number of quality criteria apply to all claims (see Box 2)

### Box 2: Criteria of Transparent Claims

High-integrity claims that relate to the voluntary purchase of carbon credits should meet the following criteria:

- a) must be true and accurate.
- b) must be clear and relevant to their target audience.
- c) must be substantiated with objective, transparent, and up-to-date data.
- d) must avoid overstating the beneficial environmental impacts of the activities.
- e) must avoid creating a false impression or hiding trade-offs.
- f) must refer to voluntary actions or achievements that go beyond complying with existing legislation or standard business practice.

Beyond these general criteria, various criteria could apply to corporate climate-related claims resulting in categorisation of claims, which VCMI may further develop in the future.

Image: Kemal Juffri for Panos Pictures/Food and Land Use Coalition





## Commitment Claims & Achievement Claims

As previously referenced in this report, companies make a range of claims about how and why they are using carbon credits. The types of claims companies can legitimately make are a function of the purpose for which companies have purchased carbon credits and how carbon credits are ultimately integrated into and accounted for in corporate climate strategies and emission reductions pathways.

There are numerous ways to categorize claims, including distinguishing between claims made at a corporate level versus at the brand, service, or product level. Another way to describe and categorize claims is to organize them according to the time-point in which the action or benefit underpinning the claim is realized:

- Claims about what a company pledges to do, i.e. a future commitment, are referred to as **commitment claims**, such as reaching net zero by 2050.
- Claims about changes to the status quo, i.e. what has been achieved, are referred to as **achievement claims**, such as claiming to be carbon neutral today.

Commitment claims are normally communicated in companies' sustainability reports and media announcements, while achievement claims are generally made through labelling, advertising, or other promotional materials (see Figure 2).

**Commitment claims** communicate a corporate climate target – typically an intention to reduce emissions within a company's value chain and/or balance unabated value chain emissions – by a certain year in the medium- to long-term. These claims are, by definition, aspirational in nature and often convey an intention to pursue a defined decarbonization trajectory to reach the announced target.

Commitment claims refer to a pledge to reach a carbon or climate-relevant target over time, such as a science-based net zero target or a future carbon neutrality target. The commitment in question may involve establishing a path to reduce emissions within a company's value chain, and/or an intention to balance unabated value chain emissions with carbon credits at a future date.



Image: © Andrea Carlini/Partnerships for Forests

Figure 2: Overview of Commitment and Achievement Claims

**PROMISES AND REPRESENTATIONS TOWARDS INSTITUTIONAL STAKEHOLDERS AND CONSUMERS**  
The carbon credit is used by a company to offset or compensate for emissions at organizational or product level

### 1. COMMITMENT CLAIM

<b>Nature</b>	Communicates an intent to reach a particular climate target by a certain year in the medium to long term. Aspirational in nature.
<b>Primary audience</b>	International community as a whole, including investors, shareholders, consumers and civil society organizations.
<b>Examples of claims</b>	2040 net zero commitment, 2030 carbon neutral commitment.

### 2. ACHIEVEMENT CLAIM

<b>Nature</b>	Highlights a climatic feature or attribute that has already been measured and achieved. Conveys a statement of fact.
<b>Primary audience</b>	Consumers and investors.
<b>Examples of claims</b>	Carbon neutral company, carbon neutral coffee.

While some companies may choose to only make one type of claim about their interaction with the VCM, others may wish to make achievement and commitment claims at different times in their emissions pathway.



Table 1: Examples of Commitment Claims

<u>Commitment</u>	<u>Claim</u>
To become a net zero company by a certain year	We announce our plan to reduce our GHG emissions by half by 2030 and achieve net zero by 2050.  Our pledge is to be net zero by 2050, even as the company continues to grow. This pledge has been guided and validated by a third party and relates to the climate goals set out in the Paris Agreement.
To become carbon neutral by a certain year	We are committed to the goals set out in the Paris Agreement, and we aim to become a carbon neutral organization by 2050.  Our entire group will become carbon neutral by 2050, including vehicles, offices, plants, and processes.
To operate carbon-free by a certain year	We are committing to operating carbon-free by 2030.

Table 2: Examples of Achievement Claims

<u>Level</u>	<u>Achievement claim</u>
Product	Our company has been delivering carbon neutral products since 20XX. This is possible thanks to emissions reductions and purchasing carbon credits.
	The production of our products X and Y has become balance sheet carbon neutral.
	We announce that from today, carbon neutral products will be available in our most important markets.
Service	We have been delivering 100% carbon free electricity to our clients.
	From now on, the service we provide is carbon neutral. We achieved this by optimizing our internal processes and buying enough carbon credits to compensate for the unavoidable emissions.
Organisation	Our whole organization has become carbon neutral by cutting our emissions, procuring renewable electricity, and purchasing carbon credits.

According to emerging consensus (championed notably by the SBTi) to achieve net zero, companies must align the ambition of their private targets with the Paris Agreement temperature goal. This translates into reducing their value chain emissions at a specific rate and by a specific date with interim targets that together form a ‘net zero abatement pathway’, with any residual emissions removed by mid-century (or even before for more ambitious targets). VCMi encourages companies to go further than this where they can, through purchasing additional carbon credits in recognition of their current and future expected unabated emissions and/or historical emissions.

**Achievement claims** are assertions made by companies that their products already display certain climatic attributes, or that

their business (or specific brands) has already achieved a specific climate target or ambition. VCM-relevant achievement claims define a positive climate or carbon performance of a product, service, event, brand, or company. The most common carbon credit achievement claim is that of “carbon neutrality” or “climate neutrality” made at point of sale of products, or in relation to specific brands or businesses being “carbon” or “climate neutral” today.<sup>36</sup>

Achievement claims refer to consumer-facing claims made by companies at point of sale using labels and promotional material to state that a product, brand, or the entire organization has achieved (or maintained) carbon or climate neutrality, or what some refer to as ‘climate-positive’ status.

VCMi proposes that a high integrity “carbon/ climate neutral” achievement claim should be made alongside a net zero commitment that is validated by the SBTi or an equivalent scheme (where the company is on track to meet that commitment). For example, companies that have a valid pathway to net zero may wish to make a claim about their additional climate ambition while on a “Net Zero Pathway”, highlighting they are “on track” for net zero and they have also compensated as-yet-unabated emissions at that point in time. Companies may go further and overcompensate for unabated emissions, making them “climate positive”, as long as they also have a valid net zero pathway and are on track to meet it.

In the absence of a valid net zero transition pathway (i.e. SBTi or equivalent), VCMi encourages companies to consider other appropriate claims when purchasing carbon credits. This is because there is a risk that a “carbon neutral” claim could mislead stakeholders to believe that an organization has aligned its ambition with the global temperature goals agreed under the Paris Agreement. VCMi proposes there should be other appropriate claims companies without net zero transition pathways can make about positively supporting climate change outcomes through the purchase of carbon credits and will seek to further develop such claims.



These proposals are put forward in the spirit of consultation, and with the recognition that different permutations and sub-categories need to be further elaborated. In particular, consideration needs to be given to companies that want to make a net zero commitment but operate in sectors for which a credible net zero pathway has not yet been articulated. VCMI anticipates that

there is space for a variety of legitimate and credible claims along the ambition spectrum and that these will need to consider a range of additional attributes, such as emissions coverage, types of carbon credits and any co-benefits, and – where applicable and in due course – appropriate application of corresponding adjustments.



Image: © RLU/Partnerships for Forests

## Mitigation Contributions

At present, most commitment and achievement claims rely on payments for the transfer of verified emission reductions and removals as carbon credits to a company's registry account with the purpose of counterbalancing<sup>37</sup> some portion of its emissions. Companies may also opt to provide payments to finance those verified emissions reductions and removals but without transfer as carbon credits to the company's registry account. This may be for the purpose of supporting additional climate and/or other SDG-commitments without claiming a counterbalancing effect on the company's emissions.

Thus, "mitigation contribution" claims can represent an investment in emission reductions or removals outside a company's value chain without necessarily requiring a transfer of title of carbon credits.<sup>38</sup> They allow companies to support results-based action without the requirements attached to using carbon credits to counterbalance emissions within a company's value chain as part of net zero claims.

There are different potential ways companies can communicate and frame a mitigation contribution in VCM purchases (either as a commitment or an achievement claim). For instance, the World Wildlife Fund (WWF) recommends, as one possible approach, that companies set aside a "corporate climate finance target" and communicate a commitment to "investing in effective decarbonization and climate resilience efforts outside of their company boundaries".<sup>39</sup> Carbon Market Watch suggests that a contribution approach could also be framed as "contributing to countries' efforts towards meeting their climate targets under the Paris Agreement". It observes that, while this way of framing may sound less attractive to businesses, it can promote stronger ties between companies and countries and give more credibility to companies' commitments.<sup>40</sup> Many have raised questions about the potential demand or "business case" for mitigation contribution claims.<sup>41</sup> Further work needs to be done to assess the potential for mitigation contribution claims, including around communication and incentives.





## IX. Integrity Assurance of VCMs



## Integrity Assurance of VCMs

VCMs – being voluntary – are largely privately governed. For over two decades, the “rules” that form the basis for creating and issuing a valid “carbon credit” (i.e. an emission reduction or removal that is verifiably real and additional and has monetary value in existing VCMs) have been set by a number of private sector and non-profit entities. These entities serve as the *de facto* private governance system for VCMs.

On the supply-side, standard-setting/ carbon crediting bodies develop and approve methodologies that project developers must adhere to if their aim is to be issued a “carbon credit” from that entity. Several of these have recently been approved by the International Civil Aviation Organization (ICAO) to issue carbon credits under the mandatory Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). Verification and validation bodies exist to help project developers by assessing whether their projects are compliant with the rules of the relevant standards. Standard setting/ carbon crediting entities include mechanisms for grievances to be raised and resolved, as per the International Standards Organization (ISO) requirements for such bodies.

Many of these standard setting/ carbon crediting entities develop their proprietary standards in accordance with procedures for setting international standards that are defined and governed by the ISO. These standards, protocols, methodologies, and monitoring frameworks have provided the underlying quality assurance function of VCMs for the past 15+ years.

On the demand-side, there are few, if any, private sector standards that provide an assurance mechanism for determining the credibility of any claims made relating to the voluntary use of carbon credits. The ISO is in the process of developing a “carbon neutrality” standard to go alongside other international standards it has established for

GHG management and related activities.<sup>42</sup> This process is expected to take at least a year or two before the standard is operational. The SBTi is in the process of setting the first global standard for corporate net zero target setting but is currently not intending to develop standards for making claims associated with either the setting and/or achievement of such targets.

Further guidance is needed to ensure carbon credit-related claims are made in a responsible manner, preventing greenwashing, and ensuring companies indeed merit such claims. There are different possible private assurance models to ensure accuracy of both commitment and achievement claims. In addition, there are public assurance models (i.e. existing or new laws and regulations) that can and should be considered, particularly those related to “truth-in-advertising” and the prevention of greenwashing. However, such public assurance mechanisms will take time to develop and apply to this complex and rapidly evolving space. Thus, VCMI is introducing a framework for analysing the pros and cons of a spectrum of interim private assurance models ranging from decentralized (or principles-based) to more centralized (or rules-based). Table 3 provides a summary of these assurance models.

A principles-based model would focus on developing high-level criteria, recommending only broad sets of actions to align commitment claims with the actions being taken by companies. This is often implemented as a less centralized model, leaving greater discretion for the interpretation of principles and recommendations in the different contexts. A principles-based model may be directed at companies making commitment claims or at standard-setters guiding companies in their VCM actions and in setting and achieving their climate goals.

At the other end of the spectrum, a rules-based system would ensure that more detailed and prescriptive rules are developed for the application of the agreed principles and criteria. This option is akin to designing an independent standard, including not only a set of rules but also a validation and fact-finding system to verify commitment claims and ensure these are fully consistent with the actions being proposed and implemented by companies. This more centralized option

tends to leave little room for differing interpretations. It is thus more likely to avoid greenwashing and deceptive claims, while promoting and incentivizing those claims underpinned by more ambitious actions. However, a fully-fledged standard also requires much more time and effort to be developed. It may also overlap with assurance functions that could be more effectively undertaken by other existing standards.

Table 3: Proposed Broad Options for Assurance Models

INTEGRITY ASSURANCE MODELS			
General characteristics	Principles-based (Decentralized)	Hybrid model	Rules-based (Centralized)
<b>Description</b>	Based on general principles and criteria. Less centralized and with greater room for interpretation / application.	Principles and criteria are further developed and refined via a code of best or good practices. If desired, a third-party may be engaged to provide independent verification of commitment claims.	Based on a concrete set of rules and verification system to ensure commitment claims are framed consistently. Akin to a full fledge standard.
<b>Covered entities</b>	Companies and/or standard-setting bodies	Companies and/or standard-setting bodies	Companies
<b>Membership</b>	Multistakeholder	Multistakeholder	May be multistakeholder or not
<b>Examples following similar approaches</b>	EDF's Mobilizing Voluntary Carbon Markets	ISEAL or the Operating Principles for Impact Management (hosted by IFC)	Certification by the Roundtable on Sustainable Palm Oil (RSPO) or the Round Table on Responsible Soy Association (RTRS)



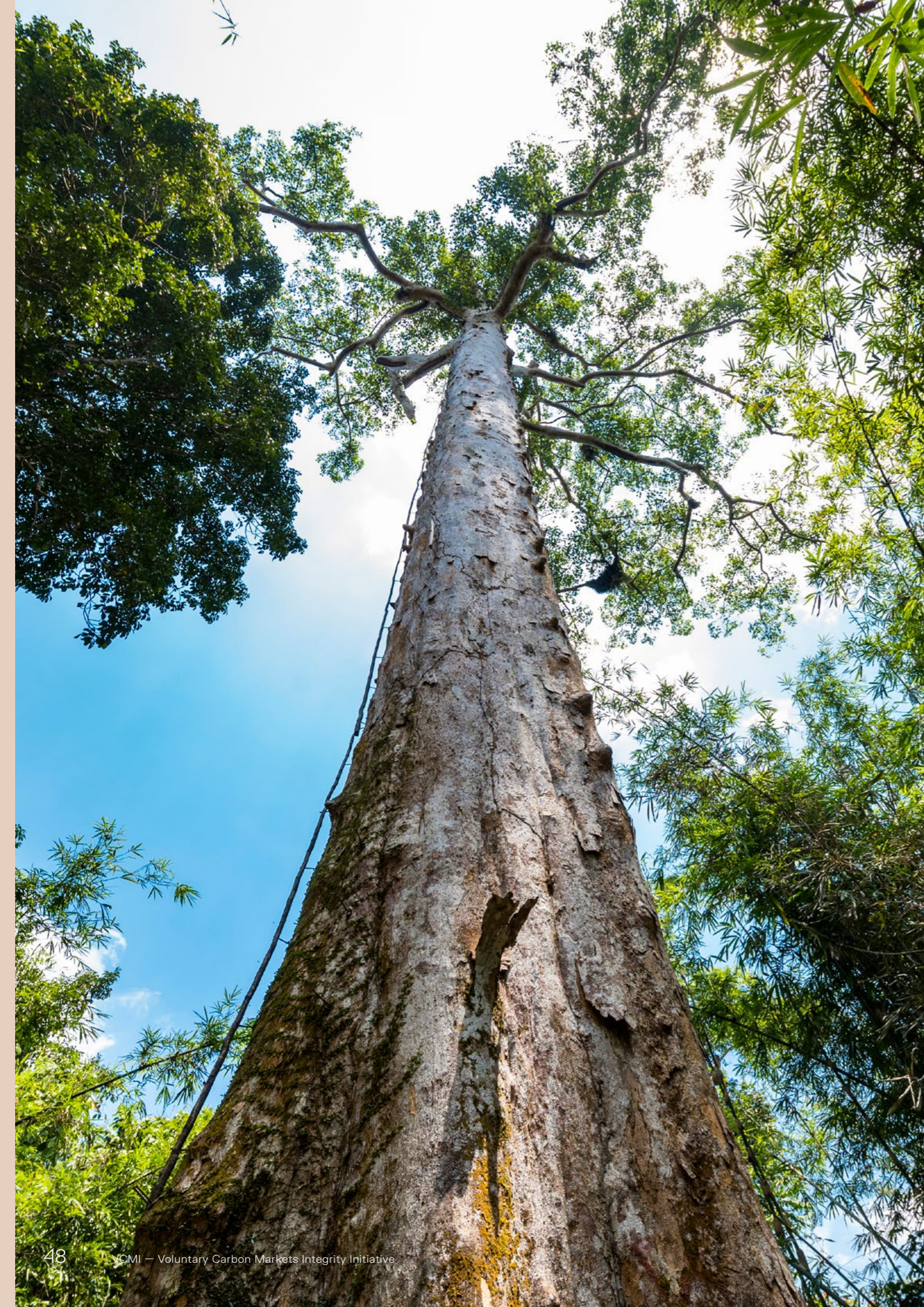


Image: © Feri Latief/Partnerships for Forests

In the middle of this assurance spectrum lies a hybrid approach, in which principles and criteria are followed by additional guidance – e.g. a code of best or good practices – that is widely consulted, refined, and published regularly (e.g. every three years). This option can provide greater certainty in the desired application of principles and criteria, while steering away from becoming yet another standard to be observed by companies. The refinement of criteria and publication at regular intervals would ensure that guidance remains relevant and consistent with the evolution of VCMs and the key technical concepts and terminologies. If later a need is identified to ensure greater centralization, a third party could be designated to independently verify the framing of commitment claims in line with the guidance provided.

Another key consideration – on both demand- and supply-sides – is the need to ensure complementarity between VCMs and regulated market-based mechanism, and other forms of climate regulation. Interactions between voluntary and regulated markets are increasingly common. For example, some existing interactions between VCMs and compliance-based market mechanisms include:

- The Clean Development Mechanism contains a formal body, operating under international law, with the responsibility of approving individual projects to generate “Certified Emissions Reductions” (CERs). CERs may be purchased voluntarily to meet self-imposed climate targets.

- Under CORSIA, some voluntary carbon credit standards and methodology types have been approved as eligible for use by airline operators to fulfil their compliance obligations.<sup>43</sup>
- At a domestic level, California’s emissions trading system (ETS) enables companies to use carbon credits certified by certain voluntary standard setting/carbon crediting entities to contribute towards their obligations.
- Colombia employs a carbon neutrality mechanism as part of its carbon tax, which allows companies to reduce their tax burdens by purchasing carbon credits from domestic conservation and restoration projects that are certified by recognized pre-designated private standard setting/carbon crediting entities. A portion of the tax revenues are also used to invest in nature-based solutions.<sup>45</sup>

As VCMs continue to grow and scale-up, greater assurance will be needed. Additional independent oversight would help build and secure trust in the market in the short- to medium- and long-term. This goal will require careful consideration of quality assurance and private and public sector assurance systems and arrangements.





Image: Kemal Juffri for Panos Pictures/Food and Land Use Coalition

## X. Next Steps and Future Priorities

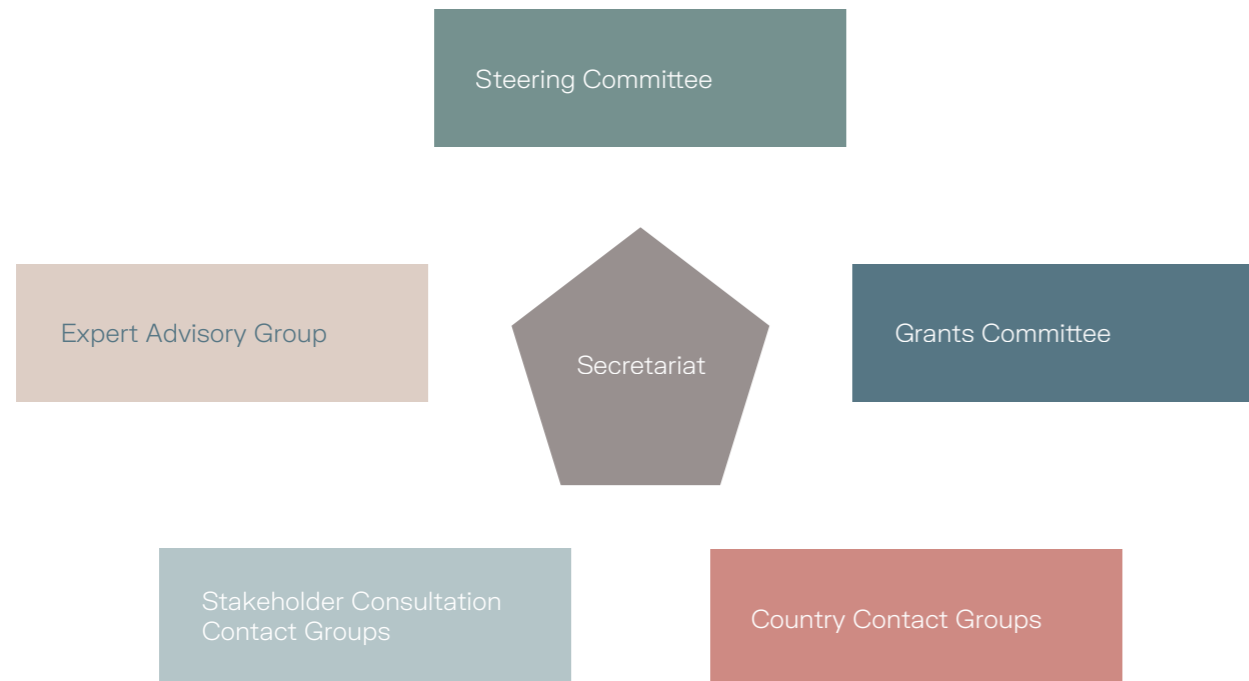


## Next Steps and Future Priorities

From July 2021, VCMI will be led by a Steering Committee. The Steering Committee will determine the strategic direction of VCMI based on stakeholder feedback. The Committee will

also serve as the high-level decision-making body of VCMI. It will be supported by an Expert Advisory Group and a Secretariat (see Figure 3).

Figure 3: VCMI Governance Framework



Under this framework, VCMI will pursue several areas of further work in partnerships with other initiatives, including:

1. Developing high integrity demand-side guidance for VCMs, including on corporate claims through engaging with and aligning, where applicable, with supply-side integrity initiatives.
2. Supporting “end-to-end” transparency tools to enable effective oversight and the development of “fit for purpose” VCMs integrity private/public assurance arrangements.

3. Supporting strategic country engagement to promote access to high integrity VCMs and to develop partnerships among and between countries to help shape both domestic and global high integrity VCMs.

Any additional areas of further work will be elaborated upon by the Steering Committee.

Figure 4: Indicative timeline of the VCMI Initiative

March 2021	Establishment of VCMI Initiative
March – June 2021	Inception phase (desk research, stakeholder mapping, interviews and analysis, report drafting)
July 2021	Launch of the Consultation Report
July – October 2021	Consultation and refinement phase
November	Communications around COP26
Post-COP26	Consolidation and implementation phase

Stakeholders are invited to submit feedback on the Consultation Report by 15 September 2021. Please visit our [Consultation Hub](#) for further details.





Image: Timothy K. splash

## XI. Annex A: Glossary of Key Terms



## Annex A: Glossary of Key Terms

TERM	DEFINITION
<b>Abatement</b>	Measures that companies take to prevent, reduce, or eliminate sources of GHG emissions within their value chains. <sup>1</sup>
<b>Additionality</b>	A key characteristic of carbon credits, ensuring that carbon emissions are lower than if the project had not been implemented. <sup>2</sup>
<b>Article 6</b>	The voluntary cooperation mechanisms that will assist governments in implementing their NDCs as part of the Paris Agreement. They include Internationally Transferred Mitigation Outcomes (ITMOs) between governments, an international carbon market, and the use of development aid. <sup>3</sup> The rulebook for Article 6 is the only part of the Agreement that is yet to be finalized; eligibility of forest units is an open question.
<b>Avoided emissions</b>	Emission reductions that occur outside of a product's life-cycle or value chain, but as a result of the use of that product. Avoided emissions is a relative metric estimated by comparing the climate impacts of a given product, activity, or service against the climate impacts of a reference product, activity, or service. <sup>4</sup>
<b>Baseline</b>	The business-as-usual scenario the mitigation activity is compared against. The baseline must be robust and realistic. It runs the risk of being inflated to generate more credits. <sup>5</sup>
<b>Cancellation of a carbon credit</b>	The definitions of cancellation and retirement vary between carbon standards and programs. For the purposes of this work, cancellation refers to a situation in which the carbon credit is put out of circulation without being used towards any particular carbon neutrality or GHG reduction goal. On the other hand, retirement refers to a situation in which the carbon credit is directly used towards a carbon neutrality or GHG reduction goal. See also the definition of retirement of a carbon credit below.
<b>Carbon credit</b>	An emissions unit that is issued by a carbon crediting program and represents an emission reduction or removal of greenhouse gases. Carbon credits are uniquely serialized, issued, tracked, and cancelled by means of an electronic registry. <sup>6</sup>

TERM	DEFINITION
<b>Carbon dioxide removal / greenhouse gas removal</b>	<p>Carbon dioxide removal (CDR) refers to the process of removing CO<sub>2</sub> from the atmosphere. Since this is the opposite of emissions, practices or technologies that remove CO<sub>2</sub> are often described as achieving “negative emissions”. The process is sometimes referred to more broadly as greenhouse gas removal (GHGR) if it involves removing gases other than CO<sub>2</sub>.</p> <p>There are two main types of CDR: either enhancing existing natural processes that remove carbon from the atmosphere (e.g. by increasing its uptake by trees, soil, or other “carbon sinks”) or using chemical processes to, for example, capture CO<sub>2</sub> directly from the ambient air and store it elsewhere (e.g. underground). All CDR methods are at different stages of development and some are more conceptual than others, as they have not been tested at scale.<sup>7</sup></p>
<b>Carbon neutrality</b>	In the global context, carbon neutrality is the same as net zero carbon dioxide (CO <sub>2</sub> ) emissions which are achieved when anthropogenic CO <sub>2</sub> emissions are balanced globally by anthropogenic CO <sub>2</sub> removals over a specified period. <sup>8</sup> But in the sub-global context, companies can achieve carbon neutrality through purchase of carbon credits from activities that reduce, avoid or temporarily capture GHGs equivalent to the volume of all CO <sub>2</sub> emissions. <sup>9</sup>
<b>Carbon offset</b>	A carbon offset broadly refers to a reduction in GHG emissions – or an increase in carbon storage (e.g., through land restoration or the planting of trees) – that is used to compensate for emissions that occur elsewhere. A carbon credit that is being used for the purpose of offsetting is a transferrable instrument certified by governments or independent certification bodies to represent an emission reduction of one metric tonne of CO <sub>2</sub> , or an equivalent amount of other GHGs. <sup>10</sup> VCMI recommends avoiding the conflation of offsets and carbon credits as carbon credits can be used for purposes other than offsetting, and offsetting can be accomplished through other mechanisms than purchasing carbon credits.
<b>Carbon Standard / Carbon Standard Setting</b>	The term carbon standard is often used to refer to an entity that develops and promulgates standards (i.e. methodologies, protocols, and requirements) that must be adhered to by project developers and applied third-party validators in order for a project to be issued a carbon credit. In this report, we have tried to distinguish between the entity – which we refer to as a carbon standard setting body or entity – and the standards that are promulgated by those entities. Carbon standard setting bodies are also often referred to as “carbon crediting entities” due to the fact they issue and maintain a registry of the carbon credits that they issue.















## Endnotes

1. <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>
2. <https://climateactiontracker.org/global/temperatures/>
3. [https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15\\_Full\\_Report\\_High\\_Res.pdf](https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15_Full_Report_High_Res.pdf)
4. <https://www.vivideconomics.com/wp-content/uploads/2021/02/Greennes-of-Stimulus-Index-5th-Edition-FINAL-VERSION-09.02.21.pdf>
5. <https://www.iea.org/reports/global-energy-review-2021>
6. [https://report.ipcc.ch/sr15/pdf/sr15\\_spm\\_final.pdf](https://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf)
7. <https://unfccc.int/news/commitments-to-net-zero-double-in-less-than-a-year>
8. <https://unfccc.int/climate-action/race-to-zero-campaign>
9. <https://sciencebasedtargets.org/companies-taking-action>
10. <https://www.businessfornature.org/advocate>
11. TSVCM Final Report, p.42
12. <https://www.wri.org/news/corporate-financing-nature-based-solutions-what-next>
13. [https://www.foodandlandusecoalition.org/wp-content/uploads/2020/12/FOLU\\_Nature-for-Net-Zero\\_Report\\_Final.pdf](https://www.foodandlandusecoalition.org/wp-content/uploads/2020/12/FOLU_Nature-for-Net-Zero_Report_Final.pdf)
14. <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>
15. <https://ghgprotocol.org/corporate-standard>
16. <https://sdgs.un.org/goals>
17. <https://unfccc.int/sites/default/files/resource/Just%20transition.pdf>
18. <https://capitalscoalition.org/wp-content/uploads/2021/04/Nature-Positive-The-Global-Goal-for-Nature-paper.pdf>
19. <https://advances.sciencemag.org/content/7/3/eaay1052>
20. <https://www.climatefocus.com/sites/default/files/A%20close%20look%20at%20the%20quality%20of%20RED-D%2B%20carbon%20credits%20%282020%29%20V2.0.pdf>
21. <https://www.ecosystemmarketplace.com/articles/whats-in-a-carbon-credit-new-tools-help-quantify-the-sustainable-development-benefits-of-carbon-offset-projects/>
22. <https://trove-research.com/research-and-insight/carbon-credit-demand-supply-and-prices-june-2021/>
23. <https://unfccc.int/climate-action/race-to-zero-campaign>
24. <https://media.nature.com/original/magazine-assets/d41586-021-00662-3/18965644>
25. Hawn, A. (2005) Horses for courses: Voluntary vs CDM projects in Mexico, ed. R. Bayon. San Francisco: Ecosystem Marketplace in Bumpus, A. & Liverman, D. (2008) Accumulation by Decarbonization and the Governance of Carbon Offsets, *Economic Geography*, 84:2 127-155 <https://doi.org/10.1111/j.1944-8287.2008.tb00401.x>; Belanger, S. (1999), AES Social Responsibility. [http://pdf.wri.org/2001summit\\_belangeraes.pdf](http://pdf.wri.org/2001summit_belangeraes.pdf)
26. [https://cdm.unfccc.int/press/releases/2004\\_02.pdf](https://cdm.unfccc.int/press/releases/2004_02.pdf)
27. [https://link.springer-com.vu-nl.idm.oclc.org/chapter/10.1007/978-3-319-39089-5\\_13](https://link.springer-com.vu-nl.idm.oclc.org/chapter/10.1007/978-3-319-39089-5_13)
28. [https://www.commscouncil.nz/downloads/Guidelines\\_for\\_carbon\\_claims\\_and\\_the\\_Fair\\_Trading\\_Act.pdf](https://www.commscouncil.nz/downloads/Guidelines_for_carbon_claims_and_the_Fair_Trading_Act.pdf) <https://www.gov.uk/government/publications/make-a-green-claim/make-an-environmental-claim-for-your-product-service-or-organisation#data-to-support-your-claims> <https://www.acm.nl/sites/default/files/documents/guidelines-suistainability-claims.pdf>
29. [https://c402277.ssl.cf1.rackcdn.com/publications/1310/files/original/WWF\\_position\\_and\\_guidance\\_on\\_corporate\\_use\\_of\\_voluntary\\_carbon\\_credits\\_EXTERNAL\\_VERSION\\_11\\_October\\_2019\\_v1.2.pdf?1591194127](https://c402277.ssl.cf1.rackcdn.com/publications/1310/files/original/WWF_position_and_guidance_on_corporate_use_of_voluntary_carbon_credits_EXTERNAL_VERSION_11_October_2019_v1.2.pdf?1591194127)
30. [https://carbonmarketwatch.org/wp-content/uploads/2020/12/CMW\\_Above-AndBeyondCarbonOffsetting.pdf](https://carbonmarketwatch.org/wp-content/uploads/2020/12/CMW_Above-AndBeyondCarbonOffsetting.pdf)
31. CPLC; feedback received on earlier drafts of this report
32. ISO - ISO 14025:2006 - Environmental labels and declarations — Type III environmental declarations — Principles and procedures
33. [https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/TAB%202020/ICAO\\_Doc\\_CORSA\\_Eligible\\_Emissions\\_Units\\_March\\_2020.pdf](https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/TAB%202020/ICAO_Doc_CORSA_Eligible_Emissions_Units_March_2020.pdf)
34. [https://icapcarbonaction.com/en/?option=com\\_etsmap&task=export&format=pdf&layout=list&systems%5B%5D=45](https://icapcarbonaction.com/en/?option=com_etsmap&task=export&format=pdf&layout=list&systems%5B%5D=45)
35. <https://www.nature.com/articles/d41586-020-00324-w>

## Glossary Endnotes

1. <https://sciencebasedtargets.org/resources/legacy/2020/09/foundations-for-net-zero-full-paper.pdf>
2. [https://www.forestresearch.gov.uk/documents/240/FCRP013\\_ySIQFWf.pdf](https://www.forestresearch.gov.uk/documents/240/FCRP013_ySIQFWf.pdf)
3. [https://unfccc.int/files/meetings/paris\\_nov\\_2015/application/pdf/paris\\_agreement\\_english\\_.pdf](https://unfccc.int/files/meetings/paris_nov_2015/application/pdf/paris_agreement_english_.pdf)
4. [https://ghgprotocol.org/sites/default/files/ghgp/Avoided%20emissions%20survey%20report\\_final%20draft.pdf](https://ghgprotocol.org/sites/default/files/ghgp/Avoided%20emissions%20survey%20report_final%20draft.pdf)
5. <http://www.cleanenergyregulator.gov.au/>
6. [https://c402277.ssl.cf1.rackcdn.com/publications/1342/files/original/What\\_Makes\\_a\\_High-quality\\_Carbon\\_Credit.pdf?1591405169](https://c402277.ssl.cf1.rackcdn.com/publications/1342/files/original/What_Makes_a_High-quality_Carbon_Credit.pdf?1591405169)
7. <https://www.ipcc.ch/sr15/faq/faq-chapter-4/>
8. <https://www.ipcc.ch/sr15/Section/glossary/>
9. <https://unfccc.int/sites/default/files/resource/CNN%20Guidelines.pdf>
10. <https://www.offsetguide.org/understanding-carbon-offsets/what-is-a-carbon-offset/>
11. <https://www.ieta.org/resources/Aviation/IETA%20IATA>
12. <https://www.wri.org/insights/what-you-need-know-about-article-6-paris-agreement>
13. <https://sciencebasedtargets.org/resources/files/foundations-for-net-zero-full-paper.pdf>
14. <https://www.wri.org/insights/corporate-financing-nature-based-solutions-what-next>
15. <https://www.wri.org/insights/corporate-financing-nature-based-solutions-what-next>
16. <https://www.theguardian.com/sustainable-business/2015/jan/09/carbon-offsetting-insetting-supply-chain>
17. <https://sciencebasedtargets.org/resources/files/foundations-for-net-zero-full-paper.pdf>
18. <https://www.icroa.org/Insetting>
19. [https://www.icroa.org/resources/Pictures/ICROA%20Insetting%20Report\\_v300.pdf](https://www.icroa.org/resources/Pictures/ICROA%20Insetting%20Report_v300.pdf)
20. <https://www.ndcs.undp.org/content/dam/LECB/docs/pubs-tools-facts/undp-ndcsp-faqs-itmo-article6.pdf>
21. <https://gctf.org/wp-content/uploads/2020/12/ending-tropical-deforestation-jurisdictional-approaches-redd.pdf>
22. Murray, Brian C.; McCarl, Bruce A.; Lee, Heng-Chi (2003): Estimating leakage from forest carbon sequestration programs, Research Report, No. 2004-3, The University of Western Ontario, Department of Economics, London (Ontario)
23. <https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions-ndcs/nationally-determined-contributions-ndcs>
24. <https://www.pnas.org/content/114/44/11645>
25. <https://docs.wbcsd.org/2020/12/WBCSD-Accelerating-Business-Solutions-for-Climate-and-Nature.pdf>
26. <https://www.iucn.org/theme/nature-based-solutions>
27. <https://capitalscoalition.org/wp-content/uploads/2021/04/Nature-Positive-The-Global-Goal-for-Nature-paper.pdf>
28. [https://www.nature.org/content/dam/tnc/nature/en/documents/REDDPlus\\_PathwaystoBridgeProjectandJurisdictionalPrograms.pdf](https://www.nature.org/content/dam/tnc/nature/en/documents/REDDPlus_PathwaystoBridgeProjectandJurisdictionalPrograms.pdf)
29. <https://www.ipcc.ch/sr15/Section/glossary/>
30. <https://www.ipcc.ch/sr15/Section/glossary/>
31. <https://sciencebasedtargets.org/resources/legacy/2020/09/foundations-for-net-zero-full-paper.pdf>
32. <https://sciencebasedtargets.org/resources/legacy/2020/09/foundations-for-net-zero-full-paper.pdf>
33. <https://www.ipcc.ch/sr15/Section/glossary/>
34. <https://www.iso.org/obp/ui/#iso:std:iso:14021:ed-2:v1:en:sec:3.1.12>
35. [https://carbonneutral.com/pdfs/The\\_CarbonNeutral\\_Protocol\\_Jan\\_2020.pdf](https://carbonneutral.com/pdfs/The_CarbonNeutral_Protocol_Jan_2020.pdf)
36. <https://www.wri.org/research/bottom-line-offsets>
37. <https://www.ifc.org/wps/wcm/connect/>
38. <https://www.forestcarbonpartnership.org/what-redd>
39. <https://www.ipcc.ch/sr15/Section/glossary/>
40. Moss, R.H. et al., 2008: Towards New Scenarios for Analysis of Emissions, Climate Change, Impacts, and Response Strategies. Technical Summary. Intergovernmental Panel on Climate Change (IPCC), Geneva, Switzerland, 25 pp.
41. Moss, R.H. et al., 2010: The next generation of scenarios for climate change research and assessment. *Nature*
42. <https://sciencebasedtargets.org/resources/files/foundations-for-net-zero-full-paper.pdf>
43. <https://sciencebasedtargets.org/resources/files/Net-zero-Criteria-Draft-for-Public-Consultation-v1-0.pdf>
44. <https://www.offsetguide.org/understanding-carbon-offsets/what-is-a-carbon-offset/>
45. <https://sciencebasedtargets.org/resources/files/foundations-for-net-zero-full-paper.pdf>
46. O'Neill, B.C. et al., 2014: A new scenario framework for climate change research: the concept of shared socioeconomic pathways. *Climatic Change*,
47. O'Neill, B.C., 2000: The Jury is Still Out on Global Warming Potentials. *Climatic Change*
48. O'Neill, B.C. et al., 2017: The roads ahead: Narratives for shared socioeconomic pathways describing world futures in the 21st century. *Global Environmental Change*
49. Riahi, K. et al., 2017: The Shared Socioeconomic Pathways and their energy, land use, and greenhouse gas emissions implications: An overview. *Global Environmental Change*.
50. <https://www.ipcc.ch/sr15/Section/glossary/>
51. <https://ghgprotocol.org/corporate-standard>
52. [http://moderncms.ecosystemmarketplace.com/repository/moderncms\\_documents/vcarbon\\_2010.2.pdf](http://moderncms.ecosystemmarketplace.com/repository/moderncms_documents/vcarbon_2010.2.pdf)
53. <https://www.goldstandard.org/blog-item/carbon-pricing-why-do-prices-vary-project-type>
54. <https://www.ecosystemmarketplace.com/marketwatch/carbon/>





The Voluntary Carbon Markets Integrity Initiative (VCMI) is a multi-stakeholder platform to drive credible, net zero aligned participation in voluntary carbon markets.

[vcmintegrity.org](https://vcmintegrity.org)

Designed by Jory&Co  
[www.joryand.co](https://www.joryand.co)