

*Final Technical Analysis : "Operationalizing
compensation or/and neutralization in the ES
PRO 30-006*

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List of acronyms

ASI: Assurance Services International

BBOP: Business and Biodiversity Offsets Programme

BCA: Biodiversity Credit Alliance

BVCM: Beyond Value Chain Mitigation

CB: Certification Body

CCB: Climate, Community & Biodiversity Standards

CCP: Core Carbon Principles

CDP: Carbon Disclosure Project

CORSIA: Carbon Offsetting and Reduction Scheme for International Aviation

CSRD: Corporate Sustainability Reporting Directive

ESP: Ecosystem Services Procedure FSC-PRO-30-006

ESG: Environmental, Social and Governance

FSC: Forest Stewardship Council

GHG: Greenhouse Gas

GRI: Global Report Initiative

GBF: Global Biodiversity Framework

IPBES: Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

ICAO: International Civil Aviation Organization

ICVCM: Integrity Council for the Voluntary Carbon Market

IFRS: International Financial Reporting Standards

ISSB: International Sustainability Standards Board

IP: Indigenous people

LC: Local communities

MRV: Measurement, Reporting, and Verification

NbS: Nature based solutions

P&C: Principles and Criteria

SBT: Science Based Targets

SBTi: Science Based Target Initiative

SBTN: Science Based Target Network

SDGs: Sustainable Development Goals

TNFD: The Taskforce on Nature-related Financial Disclosures

VCMI: Voluntary Carbon Markets Integrity Initiative

V/V: Validation and Verification

VVB: Validation and Verification Body

WEF: World Economic Forum

Executive summary

The document responds to FSC's need to operationalise motion 49/2021, approved at the Bali general assembly. This motion seeks to give FSC greater relevance within the growing market for climate mitigation within and beyond value chains. FSC has developed the Ecosystem Services Procedure (ESP) to validate and verify the positive impacts of responsible forest management. Still, it is necessary to evaluate and align this tool to respond to markets requiring measures for compensating and neutralising residual emissions inside and outside the value chain.

This document has collected information and evaluated important concepts to define FSC's ESP's strengths and gaps in serving this growing market.

The first important concept for this case is the mitigation hierarchy, which is the basis of many assessment frameworks, standards, and programs. When analysing this concept, which had been developed for several decades, it was understood that ESP addresses the first stages of the hierarchy (avoiding, minimising, and restoring), but not the concept of compensation. Likewise, it was found that this mitigation hierarchy is a fundamental concept in the disclosure frameworks, such as TFND and GRI, which are some of the most important frameworks worldwide for reporting companies' sustainability impacts, so the alignment with the ESP is important to highlight.

But of course, it is undoubtedly a reality that the most developed ecosystem service in terms of market tools is carbon, so it was necessary to analyse how the most important principles of this market are aligned or not with the ESP. To achieve this, the criteria of ICVCM, VCMi and ICAO were used to identify gaps in the FSC ESP to make FSC a credible scheme in the carbon offset markets. This assessment concludes that there are significant gaps that the FSC system must address in order to become a provider of high-quality carbon offset titles.

Similarly, the concepts related to biodiversity credits were examined. Although they have not yet been fully developed compared to the carbon market, it is important to analyse them. This is especially true because biodiversity differs significantly from the carbon market in terms of its fundamental principles, quantification, and commercialization methods. In this way, it was understood that biodiversity credits could be an option for FSC by aligning it with climate or biodiversity contribution claims, but without neglecting that it is necessary to align the requirements of the declarations with the key principles of VCMi in order to generate a credible, transparent and greenwashing-avoiding declaration.

Associated with these issues, it is clear that in the event that FSC becomes a compensation scheme, it will be necessary to make significant adjustments to its system, such as developing an assurance system that responds to the V/V scheme and a platform and registration system that strengthens the transparency and credibility of the system, aligned with the high integrity criteria.

Introduction

The growing concern about the fight against the climate emergency and biodiversity loss has led to many initiatives in both the private sector and civil society to combat these problems. Thus, the members of the FSC, through the general assembly, have approved motion 49/2021 that seeks to allow the use of claims generated from the Ecosystem Service Procedure (FSC-PRO-30-006) to demonstrate progress towards achieving net-zero and net-positive targets for climate, biodiversity, and water at all stages of the mitigation hierarchy.

FSC has developed the Ecosystem Services Procedure (ESP) FSC-PRO-30-006 V2 to demonstrate the positive impact of responsible forest management practices on ecosystem services. This procedure helps generate verified ecosystem services impacts and enables the possibility of claiming these impacts to promote and communicate verified ES impacts.

The present analysis looks to identify the gaps between the ESP as a tool to accomplish the mandate of motion 49/2021.

Objectives

- A. Provide analysis of technical requirements to address the requirements of the M49/2021 in the ESP as related to:
 1. Mitigation hierarchy, compensation and neutralisation of residual impacts within and beyond value chains.
 2. Use of FSC verified ES impacts for making claims towards achieving science-based targets at all stages of the mitigation hierarchy, including water neutrality, net-positive or no-net-loss biodiversity, net-zero climate impacts, and integrated nature-positive strategies.
- B. Provide analysis and options to reflect the technical requirements in the ESP, considering the risk of the options.

Background and definitions

In addition to the approval of motion 49/2021 previously mentioned, FSC is performing the revision process of the ESP, with the primary objectives:

- Streamline the procedure to ease implementation and accelerate demand.
- Make it more comprehensive, while increasing clarity and simplicity.
- Lower the costs and make it easier to access, especially for smallholders and communities.
- Facilitate and enable further impacts and quantitative measurements for the impact demonstration while enhancing qualitative approaches.

The Ecosystem Services Procedure: Impact Demonstration and Market Tools FSC-PRO-30-006 V2-0 offers a way to demonstrate the positive impact of responsible forest management practices on ecosystem services¹, thereby generating verified ecosystem services impacts and the possibility to claim these impacts to promote and communicate about verified ES impacts.

The procedure considers two approaches for their operationalisation:

- Storytelling approach, which includes the minimum requirements for a credible impact demonstration; and
- Performance approach, which includes additional requirements needed for certain market uses:
 - o Demonstrate progress towards net-zero or other quantifiable science-based or mitigation hierarchy aligned sustainability targets **within its value chain** or
 - o Report on its ecosystem services footprint and/or
 - o Report on its progress towards its sustainability **targets within its value chain**; or
 - o As evidence to benefit from a nature-related fund.

1. [Disclosure Frameworks](#)

1.1. Taskforce on Nature-related Financial Disclosures – TNFD

TNFD is a global initiative that delivers a rigorous reporting framework that will support the needed increase in financial flows to reach net positive outcomes. The TNFD has developed a set of recommendations and guidelines to support their implementation based on four disclosure pillars² (Governance, Strategy, Risk and impact management, Metrics and targets) and 14 recommended disclosures.

The TNFD refers to 4 concepts as nature-related issues:

- Dependencies – of the organisations on nature;
- Impacts – on nature caused, or contributed to, by the organisation;
- Risks -to the organisation stemming from their dependencies; and
- Opportunities – for the organisations that benefit nature through positive impacts or mitigation of negative impacts on nature.

For the TNFD, the opportunities can occur when:

- The organisations avoid, reduce, mitigate or manage nature-related risks, for example, connected to the loss of nature and its associated ecosystem services that the organisation and society depend on; or

¹ Seven (7) Ecosystem Services are considered in this version: Biodiversity conservation, Carbon sequestration and storage, Watershed services, Soil conservation, Recreational services and Cultural practices and values; Air quality is subject to approval from public consultations.

² Consistent with ISSB's IFRS Sustainability Disclosure Standards. IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information and IFRS S2 Climate-related Disclosures.

- Through the strategic transformation of business models, products, services, markets and investments that actively work to halt or reverse the loss of nature, including implementing conservation, restoration and nature-based solutions, or support for them through financing or insurance.

In response to these opportunities, TNFD adopts the mitigation hierarchy principles, in particular, the AR3T framework of SBTN (Avoid, Reduce, Restore, Regenerate) to allow the organisations to make and implement decisions to avoid and reduce negative impacts on nature, regenerate and restore ecosystems and transform business practices. Likewise, the TNFD seek that the organisations disclose the metrics and targets to assess and manage the 4 nature-related issues. Investors and other stakeholders are interested in understanding an organisation's performance concerning nature-related issues, including progress towards any targets the organisation has set and how it measures and monitors its nature-related dependencies, impacts, risks and opportunities. TNFD provides a range of core global and core sector metrics³; these metrics should cover the organisation's impact drivers associated with each material dependency. The organisation also needs to disclose the targets in their scope, which should include, among others:

- Targets for changes to impact drivers.
- Targets to improve or maintain the flow of ecosystem services.
- Targets to halt and reverse nature loss and improve or maintain the state of nature.
- Other targets to address nature-related dependencies, impacts, risks or opportunities.

1.2. Carbon Disclosure Project – CDP

CDP is responsible for developing the methodology⁴ for different companies and industries to report the status of their carbon emissions. The main objective of the Carbon Disclosure Project is to contribute to the fight against climate change, promoting the implementation of emission reduction plans based on the measurements mentioned above. The Carbon Disclosure Project questionnaire is completed by companies on an annual basis and includes the following axes:

- Carbon Emissions Measurement and environmental issues and Disclosure.
- Identification of risks and opportunities associated with such measurements.
- Implementation of corporate strategies to manage reported emissions.

³ Recommendations of the Taskforce on Nature-related Financial Disclosures (2023) Annex 1, 2 and 4.

⁴ <https://www.cdp.net/en/the-sustainable-economy-glossary>

The general scoring methodologies for each of CDP's programs have been designed to incentivize actions that are applicable to a certain extent to all companies, sectors, and geographies. The sector-specific methodologies incentivise actions applicable only to companies operating within that sector across all geographies.

Organisations are assessed across four consecutive levels representing the steps a company moves through as it progresses towards environmental stewardship. The levels in ascending order are⁵:

- Disclosure
- Awareness
- Management
- Leadership

The leadership level has two categories (A and A-), and Category A has the highest level of achievement. CDP recognises organisations awarded a high leadership score via inclusion in the A List of their respective program. For a company to achieve A-List status, it must ensure several items are included within its response and pass several checks carried out by CDP after submitting the response and aligning with other disclosures. The list has specific criteria for each theme of CDP: Climate Change, Water Security and Forests.

Climate Change only A list of criteria:

1. Verification of 100% of Scope 1 and 2 and at least 70% of a minimum of one Scope 3 category emissions
2. Disclosure of Scope 1 and 2 emissions figures for the reporting year
3. Report a transition plan that has the following components:
 - a. Is 1.5°C aligned.
 - b. Publicly available
 - c. With board-level oversight and management responsibility
 - d. A feedback mechanism in place or plans to implement a mechanism within the next two years.
4. Indicate engagement with suppliers.
5. Report a near-term emissions target that has been validated by the Science Based Targets Initiative or meets the following:
 - a. Company-wide coverage
 - b. Coverage of 95% of Scope 1 and 2 base year emissions
 - c. A target year that is within 5-10 years of the year the target was set.⁶

⁵ <https://www.cdp.net/en/scores/cdp-scores-explained>

⁶ 2024 onwards CDP will be implementing a Climate Change A list criteria that assesses the presence of a viable Net Zero target (https://cdn.cdp.net/cdp-production/cms/guidance_docs/pdfs/000/000/233/original/Scoring-Introduction.pdf?1615800532)

Water security only A list of criteria:

1. Demonstrate comprehensive water accounting by indicating that more than 75% of your sites/facilities/operations are regularly monitored for the following aspects in question:
 - a. Water withdrawals - total volume
 - b. Water discharges - total volume
 - c. Water discharge quality - by standard effluent parameters
2. Demonstrate lower or stable withdrawals from water-stressed areas compared to the previous reporting year (only applicable to responders with withdrawals from water-stressed areas).

Forest only A list of criteria:

1. Report on the sources of origin for full commodity production/consumption volumes and for all forest-risk countries.
2. Demonstrate that a comprehensive and thorough risk assessment of all operations and supply chains has been undertaken.
3. Demonstrate action towards deforestation and forest degradation-related commitments.

1.3. Global Report Initiative – GRI

The GRI and the GRI Standards provide a set of tools that lead the global market related to the sustainability reporting process; the standards cover a wide range of environmental, social and economic aspects that the organisations report in terms of their impacts and performance. The GRI standards are developed through a multistakeholder process that includes inputs from different organisations from different backgrounds: businesses, civil society groups, labour unions, academics, and others.

The GRI standards have a particular focus on creating credibility mainly through the transparency of the system, the reason why organisations require to disclose their information in an accessible way, as a way to help the different stakeholders to understand and evaluate the sustainability approach of the organisation.

The GRI standards have three sections:

- **Universal Standards** cover topics such as governance, strategy and management systems.
- **Sector Standards** that provide specific information for particular sectors, such as agriculture and financial services.
- **Topic Standards** guide specific topics such as climate change, human rights and biodiversity.

The GRI Universal standards consist in:

- GRI 1: Foundation 2021 (GRI 1) outlines the purpose of the GRI Standards, clarifies critical concepts, and explains how to use them. It lists the requirements that an organisation must comply with to report in accordance with the GRI Standards. It also specifies the principles—

such as accuracy, balance, and verifiability—fundamental to good-quality reporting.

- GRI 2: General Disclosures 2021 (GRI 2) contains disclosures relating to details about an organisation's structure and reporting practices, activities and workers, governance, strategy, policies, practices, and stakeholder engagement. These give insight into the organisation's profile and scale and help in providing a context for understanding an organisation's impacts.
- GRI 3: Material Topics 2021 (GRI 3) explains the steps by which an organisation can determine the topics most relevant to its impacts and its material topics, and describes how the Sector Standards are used in this process. It also contains disclosures for reporting its list of material topics, the process by which the organisation has determined its material topics, and how it manages each topic.

The GRI Reporting Process

According to GRI⁷, *"reporting is for an organisation to identify and prioritise its impacts on the economy, environment, and people to be transparent about their impacts."* With this aim, the organisation that would report their sustainability impacts needs to follow these steps:

- Preparation: The organization shall define the scope of the sustainability report, list its stakeholders, and validate their concerns and expectations.
- Identifying and assessing impacts: The organisation needs to identify its impacts and assess their significance, considering these impacts and deciding whether these impacts apply to it^{8,9}.
- Materiality assessment: conduct a materiality assessment to identify the sustainability topics that are most important to its stakeholders and its operations.
- Reporting disclosures: the organisation should draft the sustainability report, including the management approach and the performance data for each identified topic. The draft needs to be reviewed to ensure accuracy and should seek feedback from stakeholders. The disclosures needed are listed in the Sector Standard, need to be cross matched with the Topic Standard for reporting. Together with the disclosures from GRI 2: General Disclosures and GRI 3:Material Topics, they provide a structured way of reporting this information. The report must content a GRI content index, that improve the traceability among the credibility and transparency of the report.The GRI standards provide the following benefits:
- Increase transparency.

⁷ A short introduction to the GRI standards
(<https://www.globalreporting.org/media/wtaf14tw/a-short-introduction-to-the-gri-standards.pdf>)

⁸ GRI 2 aids in this process by specifying disclosures in detail for different aspects of an organization's activities (reporting practices, governance)

⁹ GRI 3 explains step-bystep how to identify and assess impacts together with their significance.

- Enhance stakeholder engagement.
- Continuous improvement approach.

GRI Climate Change and Biodiversity

Currently, the GRI is working on a multistakeholder project to change climate change standards¹⁰. The objective is to review and revise GRI climate change-related standards and/or incorporate new issues that reflect stakeholder expectations on climate change impacts beyond energy consumption and GHG emissions. As part of the revision of GRI climate change-related Standards, the content of GRI 302: Energy 2016, GRI 305: Emissions 2016 (Disclosures 305-1 to 305-5) has been updated, while GRI 201: Economic Performance 2016 (Disclosure 201-2: Financial implications and other risks and opportunities due to climate change) has been integrated in the Climate Change exposure draft.

Regarding Biodiversity, GRI recently launched the revised version of the Biodiversity Standard GRI 101, which helps companies reporting through GRI understand and disclose their biodiversity impacts and define eight disclosures that companies with significant biodiversity footprints must report on, including biodiversity policies, commitments and impact management approaches. This version of the standard requires that the organisations report the types of biodiversity offsets used, in which phase of the offsetting process and the co-benefits and the trade-offs associated with the offsets.

The GRI 101 also requires that the organisation apply the mitigation hierarchy on their biodiversity impact management, including impacts in their supply chain and mention that the organisation should describe actions taken to improve traceability, mentioning that third-party certification can provide information on whether the products sourced adhere to sustainable management practices, but need to explain how these certification schemes or standards help manage impacts on biodiversity.

2. Mitigation Hierarchy and the Ecosystem Service Procedure

In the previous section, it was observed that TNFD and GRI use the concept of mitigation hierarchy as a core basis related to the impacts of climate change and biodiversity loss. The concept of mitigation hierarchy was developed already last century and is used intensively by environmental scientists in several industries' environmental impact assessments (EIA). [WWF \(2020\)](#)¹¹ mentioned that the general steps of the Mitigation Hierarchy are "*generally Avoid, Reduce, Restore, Compensate/Offset, however, adapted for the system to which they are applied*". Now, in the middle of the climate and biodiversity crisis, this concept remains central to maintaining and recovering the health of the ecosystems, with a particular focus on the forest.

¹⁰ <https://www.globalreporting.org/media/lcznznf0/gri-topic-standard-project-for-climate-change-exposure-draft.pdf>

¹¹ WWF (2020). WWF Discussion Papers. Mitigation Hierarchies. WWF.

As adapted from the Business and Biodiversity Offsets Programme (BBOP)¹², mitigation hierarchy concept, as per M49/2021, defines a mitigation hierarchy based on the following aspects:

- *Avoidance: measures taken to avoid creating impacts from the outset, (including direct, indirect and cumulative impacts), such as careful spatial or temporal placement of elements of infrastructure, in order to completely avoid impacts on certain components of biodiversity.*
- *Minimisation: measures taken to reduce the duration, intensity and / or extent of impacts (including direct, indirect and cumulative impacts, as appropriate) that cannot be completely avoided, as far as is practically feasible.*
- *Rehabilitation/restoration: measures taken to rehabilitate degraded ecosystems or restore cleared ecosystems following exposure to impacts that cannot be completely avoided and / or minimised.*
- *Offset: measures taken to compensate for any residual significant, adverse impacts that cannot be avoided, minimised, and/or rehabilitated or restored, in order to achieve no net loss or a net gain of biodiversity. Offsets can take the form of positive management interventions such as restoration of degraded habitat, arresting degradation, or averting risk, protecting areas where there is imminent or projected loss of biodiversity. The companies use compensation and neutralisation measures for offsetting their emissions.*
 - *Compensation: Claims which convey to audiences that the organization has delivered BVCM proportional to a stated percentage of unabated value chain emissions and that the BVCM outcomes counterbalance or "net out" that stated percentage of unabated value chain emissions. The draft GHG Protocol Land Sector and Removals Guidance describes "compensation targets" related to the use of carbon credits as "a target for achieving mitigation external to the target boundary through purchasing and retiring GHG credits (also called offsets or carbon credits) to compensate for annual or cumulative unabated emissions in the target boundary, if allowed under the relevant target setting program or target setting policy." An example of a compensation claim is the carbon neutrality claim¹³.*
 - *Neutralisation: Measures that companies take to counterbalance the climate impact of unabatable (i.e., residual) GHG emissions which are released into the atmosphere at and after net-zero target date through permanent removal and storage of CO2 from the atmosphere¹³.*

The hierarchy above, from 2018, keeps evolving in terms of what the different concepts entail for the different organisations and contexts, and some terms

¹² BBOP (2018). Business Planning for Biodiversity Net Gain: a Roadmap. Business and Biodiversity Offsets Programme (BBOP). Forest Trends, 2018, Washington, D.C.

¹³ Above and Beyond: An SBTi Report on the Design and Implementation of BVCM.

are sometimes used interchangeably (e.g. offset and compensation). In general terms, with the right justification and support from other tools, such as the FSC restoration toolbox, the FSC FM and ESP can contribute to most of the steps, except for a one-to-one offset for which the scheme is not currently set up.

Mitigation Hierarchy stage	Ecosystem Services Procedure aspect
Avoidance	ESP states that for the performance approach, the ES verified impact, the sponsor shall demonstrate that it follows the mitigation hierarchy aligned approaches (identify negative impacts, set a target and implement action to avoid, and minimise the negative impact).
	Avoiding certain practices that led to the loss of IFL or good soil conditions could help demonstrate the forest's management's positive impact.
Minimisation	Similar to the Avoidance stage.
	Minimising certain practices that led to the loss of good quality water flow and soil stabilisation could help demonstrate the positive impact of forest management activities.
Rehabilitation/restoration	In the case of Rehabilitation/Restoration, the ESP directly helps to demonstrate and claim the positive impact of the forest management activities by verifying forest restoration impacts. The ESP states that the verified ES impacts and claims may be used, among other things, to provide third-party verified evidence of positive impacts in mandatory or voluntary non-financial sustainability disclosures (GRI, CDP, TNFD, and others) and track progress towards science-based nature targets by the organisation or by sponsors, where the restoration of impact areas could be a requirement.
	Likewise, the verified impacts and associated ES claims may be used for the sponsors beyond value chain contributions. Currently, the ESP allows the use of the ES claims when they are not used to compensate or neutralise residual negative impacts.

	Also, the verified restoration positive impacts, could be used as evidence for a Payment for Ecosystem Services (PES) by a sponsor.
	Some examples of the application of the mitigation hierarchy are for example: Enhancing of functional biodiversity (ES 1.10) where the required result is the improvement of the condition, which could be ecological functions such as pollination rates or seed dispersal.
Offset	The ESP doesn't address the concept of offset.
Compensation/Neutralisation	The ESP doesn't define the concept of compensation/or how to meet neutralisation.

Table 1 Relationship between Mitigation Hierarchy and FSC ESP

As mentioned in the mitigation hierarchy, it is essential to avoid, minimise, and restore the impacts of an activity. ESP, as evident from Table 1, already delivers the tools to avoid, minimise and restore and therefore is providing partial solution for organizations following this pathway (see inseting section below). Additionally, ESP already allows the claims to be used against contribution targets (although further alignment with expected GHG protocol guidance might be needed in the future; please see discussion below in Section BVCM). The missing aspect of the mitigation hierarchy is compensation and neutralization (using offsetting).

Delving deeper into the concepts of offsetting and compensation to help the ESP fit into the mitigation hierarchy's stages of offsetting and compensation, as required by the M29/2021 the mitigation hierarchy stated that offset is *"measures taken to compensate for any residual significant, adverse impacts that cannot be avoided, minimised and / or rehabilitated or restored ..."*, similar to the neutralisation of residual emission that is used for the Corporate Net-Zero Standard *"Measures companies take to remove carbon from the atmosphere and permanently store it, counterbalancing the impact of emissions that remain unabated after the long-term science-based target is achieved. Emissions that were excluded from the long-term target boundary and GHG emissions inventory must also be neutralized"*; the reality is again that this hasn't been the case and offsets have been used often when avoidance and minimisation had not reached their limit yet. It's worth noting that these limits are difficult to set objectively anyway, and this is still a work in progress to be established more broadly. The FSC then has a role to play in this sense until a more uniform system is established for it and a clear distinction for offsets and compensation is accepted. Likewise, the ESP need to define the concept of compensation as BBOP's define and incorporate them in the Terms and Definitions section of the procedure.

The offsetting and compensation tools, methodologies, standards, and frameworks are developed for climate change mitigation or carbon markets instead of the rest of the ecosystem services addressed by the FSC ESP, to operationalise these concepts in the ESP will necessarily adjust the FSC system to comply with the regulatory requirements of the voluntary carbon markets, the main risk associated with adopting these requirements is related to the criticism surrounding carbon markets, lack of transparency, challenges in delivering sufficient safeguards, and concerns about the possibility of 'greenwashing', nevertheless is also clear that the market needs high-quality projects to offset, neutralise and compensate the impacts in all the ecosystem services, the reason why currently was developed a series of tools and frameworks to help to achieve results in the fight against climate change.

3. The Net-Zero standard framework

The Corporate Net-Zero Standard was developed to guide corporates towards a state of net-zero in a way consistent with societal climate and sustainability goals and within the biophysical limits of the planet. The SBTi Net-Zero Standard defines corporate net-zero as:

- Reducing scope 1, 2, and 3 emissions to zero or a residual level consistent with reaching net-zero emissions at the global or sector level in eligible 1.5°C-aligned pathways; and
- Permanently neutralising any residual emissions at the net-zero target year and any GHG emissions released into the atmosphere thereafter.

In other words, net-zero means cutting carbon emissions to a small amount of residual emissions that can be absorbed and durably stored by nature and other carbon dioxide removal measures, leaving zero emissions in the atmosphere.

The Corporate Net-Zero Standard sets out four key elements that make up a corporate net-zero target:

1. Near-term science-based target: 5-to-10-year emission reduction targets in line with 1.5°C pathways. These emissions reductions are not interchangeable with long-term targets.
2. Long-term science-based target: Target to reduce emissions to a residual level in line with 1.5°C scenarios by 2050. This target drives economy-wide alignment and long-term business planning to reach the level of global emissions reductions needed to meet climate goals based on science.
3. Neutralisation of any residual emissions refers to the GHGs released into the atmosphere when the company has achieved its long-term SBT, which must be counterbalanced through the permanent removal and storage of carbon from the atmosphere; 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 neutralised residual emissions, and

4. Beyond value chain mitigation (BVCM). Defined as the mitigation action or contributions outside the company value chain, including activities that avoid, minimise or remove and store GHGs from the atmosphere.

The Net Zero standard states that using carbon offset credits should be publicly disclosed and easily accessible, companies should refrain from using any misleading wording, and it should be clear that target progress does not include carbon offset credits.

In that sense, even the SBTi Corporate Net-Zero Standard doesn't provide a clear recommendation on eligible solutions or technologies to ensure the permanence of neutralisation; in the FSC ESP, it is possible to identify that one of the potential verified impacts is the Enhancement of carbon stocks (Impact ES2.2), that could potentially fulfil the requirements of neutralisation of companies that achieve their long-term science-based target within or beyond their value chain.

In this framework, the ESP does have the potential to become an offsetting scheme to neutralise unabated emissions and reach net zero, following the changes that will be proposed later in the document.

4. Beyond Value Chain Mitigation (BVCM)

Recently, the Science Based Target Initiative (SBTi) released a clear pathway to encourage businesses and financial institutions to set science-based greenhouse gas emissions reduction targets aligned with the leading global objective to a residual level in line with 1.5°C scenarios by 2050 through the guidance of the SBTi Corporate Net-Zero Standard.

The SBTi recommends that companies also deliver beyond value chain mitigation (BVCM) to accelerate global progress towards net-zero by supporting other economic and social actors to reduce and/or remove GHG emissions and by taking responsibility for their unabated emissions that contribute to climate change. BVCM activities and investments are not accounted for in the company's scope 1, 2 or 3 GHG inventory and, therefore, do not count towards achieving value-chain emission reduction targets and cannot claim any BVCM as part of their long-term emission reduction commitments.

According to the SBTi, the BVCM Goals are:

- Deliver additional near-term mitigation outcomes to achieve the peaking of global emissions in the mid-2020s and halving global emissions by 2030.
- 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 companies that decide to start a BVCM pledge should determine the business case and strategic objectives for the BVCM and define the timeline and budget of their pledge. Once the scope of the promise is stated, the

company needs to commit to minimum quality standards to ensure additionality, permanence and avoidance of leakage and avoidance of double counting where relevant, as well to establish and commit to disclosing safeguards to ensure that BVCM actions don't have an adverse social or environmental impact.

Similar to the case of the Net-Zero standard, the ESP had the potential to become a source of offsets following the changes that will be proposed later in the document.

Likewise, the companies must establish a BVCM Measurement, Reporting, and Verification (MRV) framework based on existing standards and reporting frameworks. The BVCM's outcomes need to be verified by third-party organisations that assure the accuracy and completeness of an emissions reduction or removal intervention, which will lead to the development of a transparent and accurate BVCM claim that should follow the VCMI Principles for Climate Mitigation Claims Credibility.

The funding methods used in BVCM could be through the use of carbon credits or grants and other financing methods, and the claims associated with these funding methods could be contributions claims or neutralisation claims (only once the organisation has successfully decarbonised to reach their long-term commitment). The contribution claims can show outcomes of indirect reductions or removals (capacity building, advocacy, R&D, etc) and/or direct emissions reductions; on the other hand, neutralisation claims could show temporary or permanent emission reductions as outcomes.

Contribution claim does not imply that the BVCM outcomes are netting out or counterbalancing the claimants' remaining value chain emissions. Instead, they are communicated as contributing to global climate mitigation efforts.

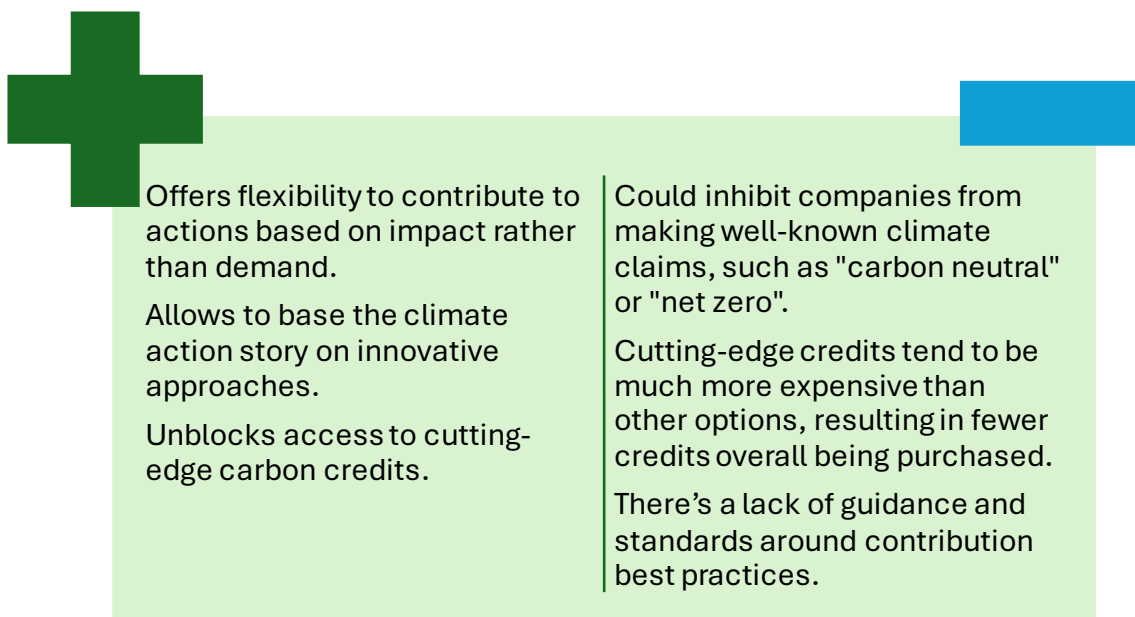


Figure 1. Pros and Cons of the use of contribution claims. (Adapted of WEF, 2023¹⁴)

For New Climate (2023)¹⁵, contribution claims offer a mechanism for companies to take a novel approach in which they can advertise their climate leading credentials through an unambiguous and transparent signal of their level of ambition. By reporting their full climate impact, applying a high carbon fee, and channelling funds to effective action in support of global climate goals, companies can build their brand and will limit the opportunities to mislead their stakeholders, which could otherwise undermine their overall climate impact and lead to legal or commercial risk.

SBTi(2024)¹³ recommends useful tools for the implementation of transparent and accurate compensation and contribution claims:

- VCMi Claims Code of practice: *VCMi's Carbon Integrity Silver, Gold or Platinum claims are BVCM claims where the purchase and retirement carbon credits are used for companies to go beyond science-based targets.*
- GHG Protocol's draft Land Sector and Removal Guidance includes a section on target setting on activities covered within the guidance and proposes a distinction between compensation and contribution targets.
- ISEAL's Making Credible Jurisdictional Claims Good Practice Guide.

¹⁴ Compensation vs contribution: Comparing climate spending models. Apr 17, 2023. World Economic Forum. https://www.weforum.org/agenda/2023/04/compensation-vs-contribution-comparing-climate-spending-models/?utm_source=flipboard&utm_content=user%2FWEF

¹⁵ Fearnough, H., Skribbe, R., De Grandpré, J., Day, T., Warnecke, C. (2023). A guide to climate contributions. Taking responsibility for emissions without offsetting. New Climate Institute. <https://newclimate.org/resources/publications/a-guide-to-climate-contributions-taking-responsibility-for-emissions>

- *Gold Standard's guidance on Fairly Contributing to Global Net-Zero: Considerations for credible claims*

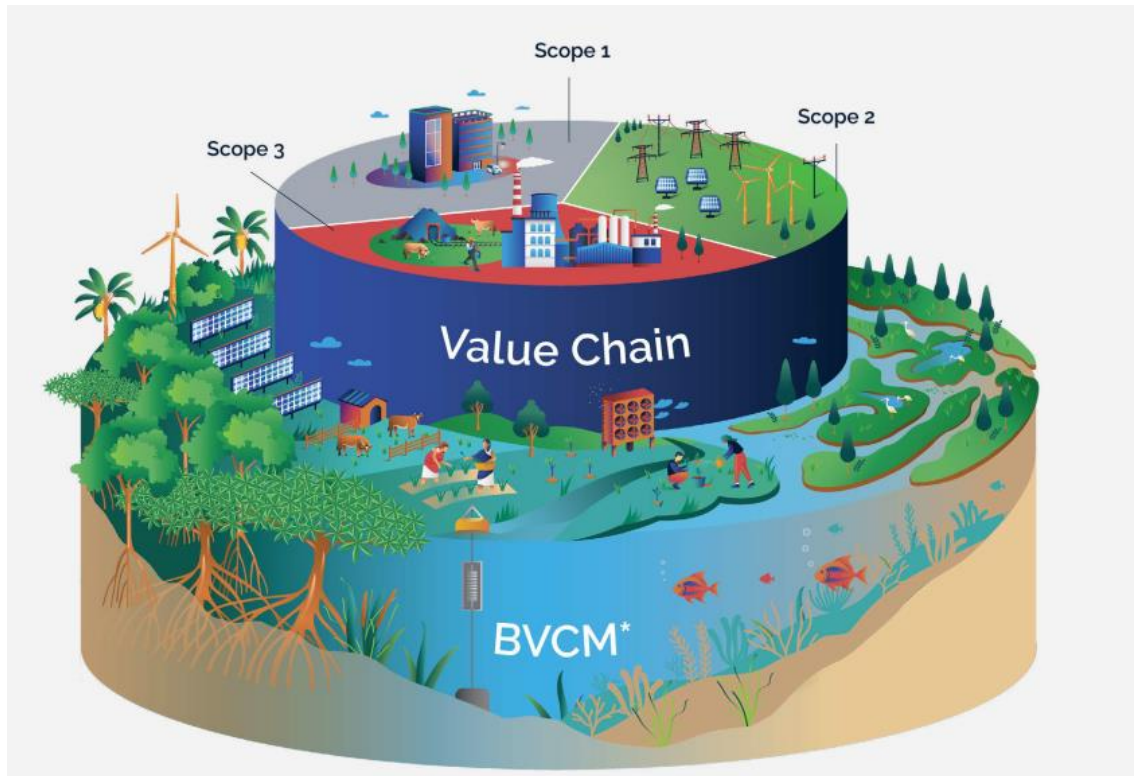


Figure 2. Beyond Value Chain Mitigation (BVCM) Illustration¹⁶

5. High integrity criteria for the carbon market

5.1. ICAO

The International Civil Aviation Organisation – ICAO serves as a multilateral platform for cooperation on international aviation environmental protection and, in the past years, has developed a market-based global scheme known as Carbon Offsetting and Reduction Scheme for International Aviation – CORSIA that offers a “harmonised way to reduce emissions from international aviation, minimising market distortion, while respecting the special circumstances and respective capabilities of ICAO Member States”¹⁷.

¹⁶ Above and Beyond: An SBTi Report on the Design and Implementation of BVCM.

¹⁷ <https://www.icao.int/environmental-protection/CORSIA/Pages/default.aspx>

One of the principle tools of CORSIA is the Emission Unit Eligibility Criteria, which consists of a set of principles by which the programmes are assessed for eligibility to supply emissions units to CORSIA. The eligibility criteria are¹⁸:

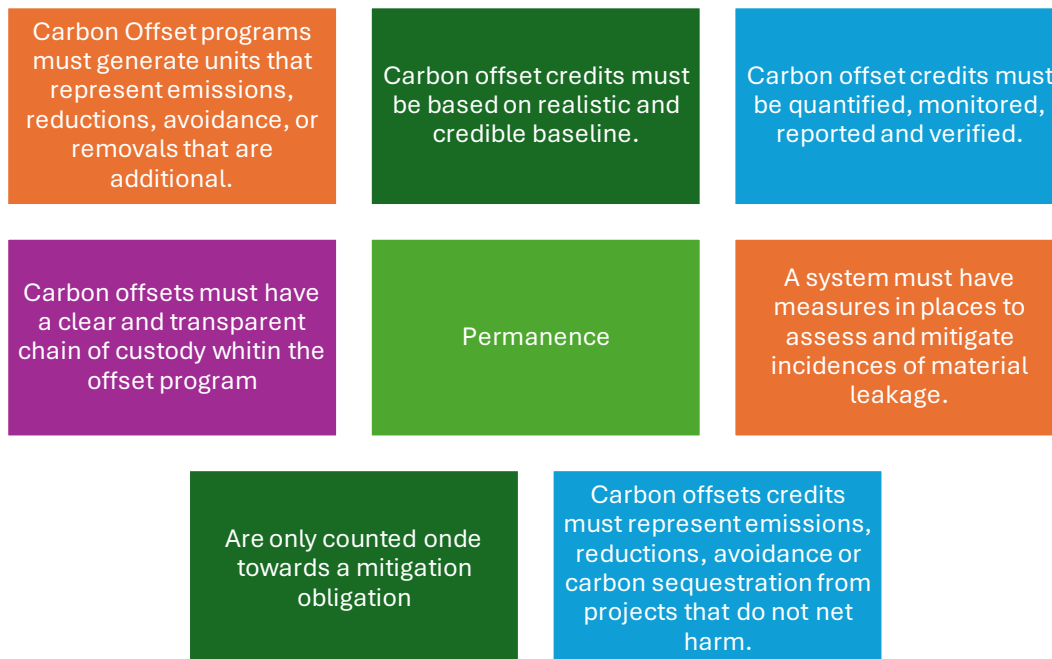


Figure 3. CORSIA Emissions Unit Eligibility Criteria (2019)

These criteria are considered as a basis for the Assessment procedure of the ICVCM Core Carbon Principles.

5.2. Core Carbon Principles of The Integrity Council for the Voluntary Carbon Market (ICVCM)¹⁹

The Integrity Council for the Voluntary Carbon Market (Integrity Council or ICVCM) is an independent governance body for the voluntary carbon market. The main tool developed for the ICVCM is the Core Carbon Principles (CCP); these are the 10 principles that should be considered for a real, additional, and verifiable carbon credit scheme that provides high integrity and safeguards to the voluntary carbon market.

The CCPs and the Assessment Framework associated have been developed through an open dialogue with carbon-crediting programs and other stakeholders and draw from multiple sources, including the Taskforce on Scaling Voluntary Carbon Markets (TSVCM), the Intergovernmental Panel on Climate Change (IPCC), the United Nations Framework Convention on Climate Change's Paris Agreement and Cancun Safeguards, Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) of the International

¹⁸ https://www.icao.int/environmental-protection/CORSIA/Documents/ICAO_Document_09.pdf

¹⁹ Core Carbon Principles, Assessment Framework and Assessment Procedure. ICVCM. January 2024. Version 2

Civil Aviation Organization (ICAO), and the work of Calyx Global and the Carbon Credit Quality Initiative.

The CCPs have requirements for carbon crediting programmes and requirements relating to the following categories: Governance, Emissions Impact and Sustainable Development.

Governance

- **Effective Governance:** *The carbon-crediting program shall have effective program governance to ensure transparency, accountability, continuous improvement and the overall quality of carbon credits.*
- **Tracking:** *The carbon-crediting program shall operate or make use of a registry to uniquely identify, record and track mitigation activities and carbon credits issued to ensure credits can be identified securely and unambiguously.*
- **Transparency:** *The carbon-crediting program shall provide comprehensive and transparent information on all credited mitigation activities. The information shall be publicly available in electronic format and shall be accessible to non-specialised audiences, to enable scrutiny of mitigation activities.*
- **Robust independent third party validation and verification:** *The carbon-crediting program shall have program-level requirements for robust independent third-party validation and verification of mitigation activities.*

Emissions Impact

- **Additionality:** *The greenhouse gas (GHG) emission reductions or removals from the mitigation activity shall be additional, i.e., they would not have occurred in the absence of the incentive created by carbon credit revenues.*
- **Permanence:** *The GHG emission reductions or removals from the mitigation activity shall be permanent or, where there is a risk of reversal, there shall be measures in place to address those risks and compensate for reversals.*
- **Robust quantification of emission reductions and removals:** *The GHG emission reductions or removals from the mitigation activity shall be robustly quantified, based on conservative approaches, completeness and sound scientific methods.*
- **No double counting:** *The GHG emission reductions or removals from the mitigation activity shall not be double counted, i.e., they shall only be counted once towards achieving mitigation targets or goals. Double counting covers double issuance, double claiming, and double use.*

Sustainable Development

- **Sustainable development benefits and safeguards:** *The carbon-crediting program shall have clear guidance, tools and compliance procedures to ensure mitigation activities conform with or go beyond*

- widely established industry best practices on social and environmental safeguards while delivering positive, sustainable development impacts.*
- **Contribution to net zero transition:** *The mitigation activity shall avoid locking-in levels of GHG emissions, technologies or carbon-intensive practices that are incompatible with the objective of achieving net zero GHG emissions by mid-century.*

The ICVCM, through the CCPs, looks to strengthen climate action, helping the carbon crediting programs set the right rules to deliver high-quality carbon credits. All carbon crediting programs have adopted requirements, procedures, and policies to address governance, decision-making, administrative, and operational considerations for developing and implementing mitigation activities, known as program documents.

ICVCM has also developed the Assessment Framework. According to ICVCM²⁰, this framework enables the Integrity Council to assess carbon-crediting programs against its criteria and requirements. As carbon-crediting programs update their rules in line with market best practices, these changes will help raise the collective ambition of standards in the market. Carbon-crediting programs must apply for assessment through the Integrity Council's Assessment Platform.

Assessment procedure

To become a carbon crediting program, the scheme should the procedure for carbon-crediting programs²¹ to be "*assessed as CCP-Eligible programs and for the assessment of Categories of carbon credits (Categories) as CCP-Approved so that CCP-Eligible programs are able to tag CCP-Approved carbon credits. It also identifies how CCP-Approved carbon credits may, where they meet the requirements in the CCP Attributes section of the Assessment Framework, be tagged in respect of such attributes*". Likewise, the Assessment Framework, builds heavily on the eligibility criteria for emission reduction units of CORSIA.

In that sense, if FSC though the ESP decides to become an offsetting or compensation scheme, it should adopt the CCPs and their requirements to deliver high-quality credits to the market, following the procedure that has 3 steps, that should be applied consecutively²²:

- a. **Assessment of carbon-crediting programs ("Program-level assessment"):** *The Integrity Council assesses whether applicant carbon-crediting programs satisfy the relevant CCPs using the Assessment Framework. Carbon credits will only be deemed CCP-Approved if they are issued by a carbon-crediting program that has been assessed to fulfil these principles and criteria and requirements.*

²⁰ Core Carbon Principles - January 2024, Version 2

²¹ Section 6: Assessment Procedure - Core Carbon Principles - January 2024, Version 2

²² Core Carbon Principles, Assessment Framework and Assessment Procedure. ICVCM. January 2024. Version 2

- b. **Assessment of Categories of carbon credits ("Category assessment"):** The Integrity Council assesses which Categories meet the relevant CCPs using the criteria and requirements applicable to Categories in the Assessment Framework. Carbon credits will only be deemed CCP-Approved if they belong to a Category that has been assessed under this Assessment Procedure to fulfil these principles and criteria and requirements.*
- c. **Identification of CCP-Approved carbon credits:** Following the completion of the previous two steps, CCP-Eligible programs will identify which carbon credits are CCP- Approved and tag them as such in its program registry together with any relevant CCP Attributes. The identification and tagging by carbon-crediting programs will be overseen by the Integrity Council.*

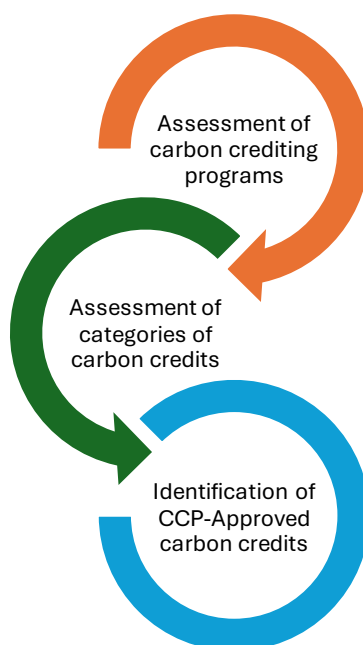


Figure 4. CCP assessment procedure

5.3. Claims Code of Practice of the Voluntary Carbon Markets Integrity Initiative (VCMI)

The primary purpose of the VCMI Claims Code is:

- *Provide clear requirements, recommendations, and supporting guidance to companies and other non-state actors on when they can credibly make voluntary use of carbon credits as part of their near-term emission reduction objectives and long-term net-zero commitments; and*
- *Provide guidance on how to describe the use of those credits.*

To make a credible and transparent claim, the VCMI outline 4 steps²³:

²³ Claims Code of Practice. Building Integrity in Voluntary Carbon Markets. November 2023. V2.

a. Comply with the foundational criteria:

- *Maintain and publicly disclose an annual greenhouse gas emissions inventory.*
- *Set and publicly disclose science-aligned near-term emission reduction targets and commit to reaching net-zero emissions no later than 2050.*
- *Demonstrate that the company is making progress on financial allocation, governance, and strategy towards meeting a near-term emission reduction target.*
- *Demonstrate that the company's public policy advocacy supports the goals of the Paris Agreement and does not represent a barrier to ambitious climate regulation.*

b. Select a VCM Claim to make and demonstrate progress towards meeting near-term emission reduction targets.

c. Meet the required carbon credit use and quality thresholds: Purchase and retire high-quality carbon credits following the ICVCM's Core Carbon Principles and transparently report relevant information pertaining to retired credits, including authorisation of credit by the host country.

d. Obtain third-party assurance following the VCM MRA framework.

VCMI is, in practice, the counterpart to the ICVCM on the demand side. The ICVCM's Core Carbon Principles (CCP) and the VCM Claims Code of Practice are global standards that create real, verifiable climate impacts in the voluntary carbon markets.

6. Analysis of the carbon market

In order to identify areas of improvement for the FSC ESP, a carbon credit scheme provider, it is necessary to compare key criteria and assess its gaps and compliances. The table below shows a qualitative score based on the procedure's accomplishment level, allowing a better understanding of the ESP's compliance regarding the key criteria.

Table 2. Assessment of the ESP against 13 carbon market criteria from CCP's and VCM Claim Code. ■ Criteria fulfilled even if it could be improved. ■ Medium improvement is necessary. ■ Important improvement necessary.

Carbon market criteria	Score	ESP improvements
Effective governance	■	Although it can be improved, the governance is in good condition. Based on transparent membership, the FSC system had an independent board that publishes annual financial reports. The FSC system had a robust, transparent, global consultation and grievance system. The improvements needed the FSC should:

		- Set procedures for registration and issuance. - Set a registry - Including procedures/methodologies to register and validate/verify mitigation activities, procedures for trading carbon credits. - Develop methodologies for the different mitigation activities. - Include experts in carbon markets in their Advisory Board. - Include procedures/mechanisms for continuous improvement in their quality management system
Tracking		The FSC system doesn't have an effective registry system to address the issuance and retirement of credits or procedures to address the erroneous issuance of offsets or the risk of reversal. The FSC should implement an effective registry system, which should also include provisions for compensating for any incorrect carbon offset claims.
Transparency		The FSC ESP should make all relevant documentation relating to the mitigation activity publicly available (subject to confidentiality and proprietary, privacy, and data protection restrictions) in the registry, including, but not limited to, project document description, monitoring report, GIS file of project area, validation and verification reports. Nevertheless, a wider understanding of the process and the accessibility to the information will be important. There are three levels of information publicly available: - Scheme level ad intra: organisation info, governance, policies, advisory committees. - Scheme level ad extra: standard, guidelines, procedures, methodologies, templates, forms, definitions, fees. - Project level: the information that should be publicly available on the registry: Key info (proponent, owner, estimated emissions reductions, project type, methodology, project area, location, project third party, dates), Project Description.

Robust independent third-party validation and verification (V/V)		The FSC system has a strong and independent third-party certification assurance system. Although the certification and validation & verification (V/V) approaches are different, the majority of the FSC system's certification bodies (CBs) are also V/V bodies for other schemes. The FSC system will need to create an assurance program to handle the V/V approach aligned with the ISOs related to the Validation and Verification of environmental information: - ISO 17029 Conformity Assessment-General Principles and Requirements for Validation and Verification bodies (Environmental information) - ISO 14065 General principles and requirements for bodies validating and verifying environmental information. - ISO 14064-3 Specification with guidance for the verification and validation of greenhouse gas statements <i>FSC should develop a process for managing VVB performance, including a systematic review of validation and verification activities, reports, and remedial measures to address performance issues. This includes measures to ensure that poor VVB performance is reported to the relevant accreditation body and provisions to suspend or revoke a VVB's participation in the carbon-crediting program. This includes the development of procedures to be approved as VVB and a Validation & Verification manual or procedure, that should be publicly available.</i>
Additionality		The ESP provides an assessment of legal and financial additionality tests. Nevertheless, the ESP would need to ensure that the climate change mitigation activity would not have occurred in the absence of the incentive created by carbon credit revenues. For high-income countries, all legal requirements shall be deemed to be enforced. For countries other than high-income countries, legal requirements shall only be deemed to be unenforced based on authoritative and up-to-date information of

		non-enforcement that is relevant and applicable to the mitigation activity. Likewise, the ESP should ensure the consideration of carbon credits by demonstrating through evidence or an alternative approach based on the time limitation between the start date and validation/submission for registration. And ESP should require a demonstration of additionality through one or more of the following approaches²⁴: -Investment analysis optionally combined with a market penetration/common practice. -Barrier analysis combined with a market penetration/common practice. -Standardised approach (optionally combined with further approaches). - Regulatory surplus - Positive list These approaches should be developed for each project activity and could be recognised and adopted from among the existing ones.
Permanence		The FSC ESP doesn't address the permanence criteria. According to the CPP, forestry sequestration (improved forest management, afforestation/reforestation, agroforestry) projects require a risk of reversal assessment, as well as measures to address those risks and procedures to compensate for reversal (e.g. buffer pool). The ESP should require a monitoring and compensation period for mitigation activities of at least forty years from the start of the first crediting period or to the end of the crediting period, whichever is later. Likewise, the ESP should require the proponents to monitor and report any reversals for the full monitoring and compensation period and compensate for avoidable reversals. In addition, the ESP should:

²⁴ Core Carbon Principles – January 2024, Version 2. Section 4: Assessment Framework

		1) develop a methodology/tool/procedure to assess the potential risk of reversal for the mitigation activities 2) require estimation of the reversal risk using a clearly defined methodology that is made publicly available; 3) require or incentivise mitigation activity proponents to take measures to mitigate potential reversal risks; 4) define and apply clear criteria for determining whether a reversal is avoidable or unavoidable; 5) implement a pooled buffer reserve to compensate for reversals to which all relevant mitigation activities contribute, and from which reversals from any contributing mitigation activities may be compensated; 5) with respect to the pooled buffer reserve: i. <i>ensure that the proportion of carbon credits placed in the pooled buffer reserve are at least twenty percent of the total carbon credits issued to contributing mitigation activities; OR</i> ii. <i>ensure that the carbon credits placed in the pooled buffer reserve are proportional to the reversal risk of the mitigation activity over the full length of the monitoring and compensation period and account for the risk that the mitigation activity proponents do not compensate for avoidable reversals; AND</i> iii. <i>make publicly available information on the pooled buffer reserve contents, including origin of carbon credits (e.g., mitigation activity, activity type and vintage).</i>
Robust quantification of emissions reductions and removals		The FSC ESP stated that measuring the present value and baseline value of the selected outcome indicators is based on a recommended methodology and asked the organisations to provide documents indicating the project's boundaries. But, in addition to strength the criteria, the FSC ES should have a process for developing and adopting updates to existing quantification methodologies. Also, FSC ES should have approved methodologies and tools that address the following essential components: a) Applicability or eligibility criteria; b) Determination of the accounting boundary; c) Determination of additionality; d) Establishing the baseline scenario;

	e) Quantification of GHG emission reductions or removals; f) Monitoring practices. FSC ES also could recognise and adopt existing tools developed by other programs or schemes (e.g. VCS, Gold Standard, Plan Vivo and CDM). Likewise, FSC ESP should require that new methodologies and major revisions of existing methodologies undergo review by a group of independent experts and a public stakeholder consultation prior to approval; and should have procedures to review, suspend and/or withdraw the use of methodologies where the crediting program has determined, based on evidence, that GHG emission reductions or removals are being overestimated or that additionality might not be ensured. In addition, FSC ES should disclose the Global Warming Potential (GWP) values used to calculate the CO₂ equivalence. Likewise, FSC ES should define the length of crediting periods, including the total length of combined crediting periods and provide guidance on steps and requirements for renewal of the crediting periods and any renewal of the crediting period shall include a reassessment of the baseline scenario. Finally, FSC should ensure: A systematic approach to ensuring the conservativeness of quantification methodologies is approved for use, and accounting for uncertainties. That the methodology for the baseline scenario to be used is selected in a conservative manner. That the overall degree of conservativeness in the quantification of baseline emissions or removals is based on the level of the overall uncertainty, taking into account the choice of assumptions, models, parameters, data sources, measurements methods and other factors.
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		That any potential perverse incentives for the mitigation activity proponent to inflate quantified baseline emissions (or depress baseline removals) are taken into account in the methodology for the baseline scenario. That the baseline scenario and quantification of baseline emissions or removals are updated or reviewed at a frequency that appropriately reflects changing circumstances. These circumstances could include changes in government policies and legal requirements.
No double counting		The FSC ESP currently prevents the registration of any mitigation activity that has been registered under another carbon-crediting program and is still active under that program; The ESP stated that the organization shall declare whether it has a project in the same MU related to the ES impact to be verified that it is registered or seeking registration under an external framework or standard and that the organisation shall register the project registration number and details in the ESR. However, FSC ESP in the case of operationalising carbon offsets should ensure that it does not issue carbon credits for GHG emission reductions or removals where another program has issued credits to the same mitigation activity and/or for the same GHG emission reductions or removals and has not canceled those credits for the purpose of avoiding double issuance. In addition, FSC ESP should have registry provisions that prevent the further transfer, retirement or cancellation of a carbon credit once it has been cancelled or retired.
Double claiming/issuance		ESP should have provisions to identify potential overlaps between different mitigation activities and ensure that where there are overlapping GHG accounting boundaries between mitigation activities, it will only issue one carbon credit for the GHG emission reductions or removals that occur within the GHG accounting boundaries of more than one mitigation activity, including by: a) disallowing registration of any mitigation activity whose GHG accounting boundaries

		overlap with the GHG accounting boundaries for carbon-crediting of another mitigation activity; b) disallowing carbon credits for GHG emission reductions or removals that occur within the GHG accounting boundaries of another mitigation activity, under the same program. ESP should ensure that mitigation activities that a) generate GHG emission reductions or removals that overlap with mandatory domestic mitigation schemes (e.g., emissions trading systems or renewable energy quotas) are not registered and/or carbon credits are not issued; or b) when carbon credits are associated with GHG emission reductions or removals that are also covered by the mandatory domestic mitigation scheme, the mandatory domestic mitigation scheme has measures in place to ensure that any relevant impacts of the mitigation activity (e.g., the GHG emission reductions achieved) are not counted towards the achievement of targets or obligations under the mandatory domestic mitigation scheme (e.g., by cancelling allowances from the emissions trading system before issuing carbon credits).
Sustainable Development benefits and safeguards		The FSC system in the FM standard looks that organisations comply with national and local laws, objectives, programs and regulations and, where relevant, international conventions and agreements. Also, the FSC FM standard assesses associated risks of negative environmental and social impacts in the MU and includes measures, commensurate with the identified risks, to minimise and address such negative environmental and/or social impacts. Associated to this topic, the FSC Principles and Criteria (P&C) also assure that mitigation activity proponents ensure that the mitigation activity minimises air and water pollution. According to point 3.4, the FSC ESP ensures free, prior, and informed Consent (FPIC) processes for IPs and LCs. The FSC system assures human and labour rights and labour conditions, as well assess issues related to land acquisition and

		involuntary resettlement through the FSC P&C. In addition ensure that gender equality shall be addressed during the assessment. In the same way, FSC P&C assure that biodiversity conservation and sustainable management of living natural resources are considered. The FSC ESP have a Revenue Sharing Agreement – Section 11 appropriate to the context, that should be consistent with applicable national rules and regulations. However in case that the FSC ESP procedure was applied in a REDD+ project, was required that the mitigation activity is consistent with all relevant Cancun Safeguards as set out in paragraph 71 of decision 1/CP.16 of the United Nations Framework Convention on Climate Change. Likewise, the ESP should provide information on how the mitigation activity is consistent with the SDG objectives of the host country, where the SDG objectives are relevant and such is feasible; and demonstrate, if applicable, through qualitative assessment how the mitigation activity delivers positive SDG impacts for certain SDGs (excluding SDG 13), it is needed to provide information on any standardised tools and methods that were used to assess the SDG impacts. Furthermore, it includes the relevance of social justice for IPs and LCs, among other groups that suffer the most from the impacts of climate change.
Leakage		The ESP ES doesn't address the leakage concept. The ESP should ensure that all relevant potential sources of leakage associated with the type of mitigation activity are considered. The quantification methodology or related program documents include all material sources of leakage in the quantification of emission reductions or removals, except where the omission of leakage sources is conservative, and consider the following potential sources of leakage. The ESP should ensure the quantification methodology or related program documents:

		a) <i>Minimisation of any material sources of leakage emissions through requirements in the respective quantification methodologies (e.g., through requirements that avoid leakage).</i> b) <i>Estimation and deduction of any residual leakage emissions in the quantification of emission reductions or removals including through specific tools or standardized approaches.</i> c) <i>The estimation of leakage emissions is robust and conservative in the light of the uncertainties, taking into account the choice of assumptions, models, parameters, data sources, measurement methods and other factors</i>
Contribution to net zero transition		The ESP ES doesn't address this criteria. FSC ESP should state that carbon credits under the following categories are not eligible: a) Mitigation activities that directly lead to an increase in the extraction of fossil fuels (e.g., exploration and extraction of fossil fuels); b) Mitigation activities relating to coal-fired electricity generation; c) Mitigation activities that involve any other unabated fossil fuel-powered electricity generation, other than new gas-fired generation that is part of increased zero-emissions generation capacity in support of national low carbon energy transitions; d) Mitigation activities focused on road transport that rely on the continued use of solely fossil fueled powered engines. FSC ESP should ensure that new or revised methodologies require mitigation activity proponents to assess compatibility of the mitigation activity with transition to net zero by reference to the net zero objectives of the host country.
Claiming requirements		The ESP has clear requirements for the organisation and sponsor regarding: a) Period of the claim (not exceed 5 years). b) Elements included in the claim. c) Statement of the claim. d) Uses of the claim However, ESP should ensure that the claim's final user complies with the VCMI Claims Code of Practice, mentioned in 5.3 section.

		. ESP does not consider any type of trading/transferring of the potential mitigation outcomes (i.e. carbon credits).
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7. Biodiversity

7.1. Background

The current biodiversity credits market has originated from two decades of practice across a range of different approaches. One lesson learned from this experimentation is the essential need for clarity on the difference between biodiversity offsets and biodiversity credits:

- Biodiversity offsets are designed to compensate for significant residual adverse biodiversity impacts arising from project development after appropriate prevention and mitigation measures have been taken.
- Biodiversity credits are an economic instrument that can be used to finance actions that result in measurable positive outcomes for biodiversity (e.g. species, ecosystems, natural habitats) through the creation and sale of biodiversity units.

While biodiversity offsets and credits may look similar in design, what distinguishes them from each other is the intention of the purchase and the claims that are made around that purchase.²⁵

Since offsets require “like-for-like” and biodiversity is not fungible at the global scale (the need for equivalent ecosystems helps explain why biodiversity offsetting schemes are almost entirely local), organisations like the World Economic Forum (WEF) suggest that biodiversity credits serve as an additional or parallel step in the mitigation hierarchy, articulated by the Science Based Targets Network (SBTN) as “Avoid, Reduce, Restore & Regenerate, Transform”.

The concept of biodiversity credits has thus gained traction in recent years as a way to address the increasing need for solutions to biodiversity loss and financial resources.

Biodiversity credits provide a potential mechanism to finance conservation, restoration and interventions addressing drivers of biodiversity loss, such as habitat degradation and destruction, overexploitation, and pollution. Biodiversity credits represent an opportunity to access new sources of finance to conserve the life-supporting value nature provides through a wide range of ecosystem services, including carbon sequestration. While nature has

²⁵ Biodiversity Credits: Unlocking Financial Markets for Nature-Positive Outcomes. WEF 2022.

intrinsic value, the ability to financially value nature is part of the necessary vision for addressing the nature crisis. Biodiversity credits can provide a simplified, accessible, and easily transacted mechanism for businesses and other actors to contribute to nature and internalize costs to nature, as part of corporate nature positive strategies and targets, and as part of the mitigation hierarchy. Biodiversity credits also have the potential to secure a long-term investment to finance conservation effectively; depending on the structure of a specific biodiversity credit unit, it can ensure the maintenance of conservation, and the ability to generate ecological processes that can affect biodiversity, climate, and other ecosystem services in the medium and long term.²⁶ Market observers note that complementary to e.g. a voluntary carbon market, a well-designed biodiversity credit scheme could potentially unlock significant private financing in conservation investments²⁷. The recent UNEP report on the State of Finance for Nature²⁸ assessed that private financial flows to Nature-based Solutions of US\$ 26 billion annually constitute 17 per cent of total NbS finance. Sustainable supply chain investments are the largest private finance component, channelling about US\$ 8 billion per year (5 per cent of total NbS flows) followed by biodiversity offsets at US\$ 6 billion per year and private payments for ecosystem services and impact investments, each contributing US\$ 3 billion per year.²⁹

The Global Biodiversity Framework (GBF) provides a strong justification for closing this gap. Target 19c of the GBF specifically relates to increased private sector finance to support biodiversity, and target 19d specifically calls out biodiversity credits, stating that finance should be mobilized by, “Stimulating innovative schemes such as payment for ecosystem services, green bonds, biodiversity offsets and credits, and benefit-sharing mechanisms, with environmental and social safeguards.” The Biodiversity Credits Alliance (BCA) aims to help meet this challenge by supporting increases in private finance for biodiversity. Biodiversity credits could also support multiple nature-related objectives, providing the means to cost-effectively help reach climate net zero targets, Land Degradation Neutrality (LDN) targets, and Global Biodiversity Framework targets. Biodiversity credits could simultaneously contribute to the implementation and achievement of biodiversity National Biodiversity Strategies and Action Plans (NBSAPs), climate Nationally Determined Contributions (NDCs), and land restoration Land Degradation Neutrality targets. Biodiversity credit projects could be structured to address priorities and targets identified in these national-level strategies, which are structured to reflect global targets (based on a country’s particular context).³⁰

²⁶ Demand-side Sources and Motivation for Biodiversity Credits. Biodiversity Credit Alliance. Dec 23.

²⁷ Glover, P., et al (2022) Biodiversity: Concepts, themes and challenges. Credit Suisse Research Institute Center for Sustainability.

²⁸ United Nations Environment Programme (2023). State of Finance for Nature: The Big Nature Turnaround – Repurposing \$7 trillion to combat nature loss. Nairobi. <https://doi.org/10.59117/20.500.11822/44278>

²⁹ UNEP (2022). State of Finance for Nature in the G20. Nairobi.

³⁰ Demand-side Sources and Motivation for Biodiversity Credits. Biodiversity Credit Alliance. Dec 23.

7.2. A biodiversity credits taxonomy

According to the World Economic Forum³¹ (2022), unlike carbon or biodiversity offsets, which are payments made by a business to compensate for their damaging impacts on location-specific ecosystems, biodiversity credits allow companies to support nature-positive action. This funding contributes to nature's long-term conservation and restoration, offering a higher-order contribution than simply offsetting negative impacts. However, there are challenges related to this practice, such as establishing an effective monitoring, reporting, and verification (MRV) system, ensuring credibility, avoiding double counting and leakage, ensuring permanence, and safeguarding the rights and livelihoods of local communities.

But the taxonomy goes beyond these two options. The Summit for a New Global Financing Pact³² held in Paris in June 2023 outlined the following broad categories of biodiversity credits and market approaches:

- Philanthropic claims/certificate markets: the simplest version of a biodiversity credit is the name given to a certificate/claim indicating that an entity has done something, generally involving a financial contribution/investment, to protect or regenerate a defined biodiversity landscape (including ocean). Here, the credit provides the 'right to brag' but not to attribute the credit with a tradable financial value or to assert its value as part of legal compliance requirements.
- Regulatory (mandated) offset markets: increasing numbers of countries have legislation requiring companies to compensate for any not-avoided land- or seascape damage associated with their operations. Biodiversity offsets are then certified proof that the business has complied with its regulatory requirements, effectively offsetting an associated legal and so also a financial liability but not providing a credit that can be monetised through trade. What could develop is the potential, like in the carbon space, for auctions to emerge – thus entering a more competitive market space.
- Biodiversity-linked carbon offset markets: Biodiversity linked carbon credits are closely tied to the voluntary carbon market, also bought by some for offsetting purposes. Carbon is the underlying market currency, with biodiversity (and other social components) serving as additional core benefits, often achieving a price premium (for example, linked to the Climate, Community and Biodiversity Standards (CCB Standards). They are sold over the counter under primary markets and traded among investors on the secondary market, eventually to be retired and claimed against a corporation's emission reduction targets and, more frequently, as additional, beyond value chain actions.

³¹ Biodiversity Credits: Unlocking Financial Markets for Nature-Positive Outcomes. World Economic Forum, 2022.

³² "Harnessing Biodiversity Credits for People and Planet" and "The Future of Biodiversity Credit Markets" developed by Nature Finance and Carbone4 outline the taxonomy

- Beyond value chain biodiversity credits (certificates or claims): Such biodiversity credits go beyond a company's value chain and corporate targets, and are currently evolving in the voluntary market space. These credits are at present receiving the majority of market actors' attention, primarily from project developers and standard setters. Similar to the net zero climate movement, there are corporates (and investors) willing to go beyond biodiversity offsetting or value chain investments and to contribute to positive biodiversity gains (or uplifts) to achieve global biodiversity (and climate) goals. Several countries (see use cases below) have or are in the process of setting up voluntary market frameworks or conditions, including Australia, UK, and New Zealand.
- Biodiversity offset markets: the most difficult and so contentious are full-blown biodiversity offset markets, which may be voluntary or regulated. This approach would allow businesses to offset the damage done to biodiversity, in some cases only after having applied the mitigation hierarchy, through their operations by buying and being able to trade credits related to improvements being made to comparable biodiversity landscapes elsewhere. Terrasos, a Colombian-based platform, is expanding its work around mandatory offsets into the voluntary space.
- Biodiversity financial assets: there is a growing demand by the global asset management sector for financial assets that can adequately value nature within portfolios and help diversify and mitigate climate and nature risks as portfolio management tools. This is as part of their efforts to try and meet ESG and impact investment criteria. Biodiversity credits, if properly designed, issued, valued, and traded (i.e. "securitised") could answer some of the needs of these fast-growing asset management trends, and therefore become a new, significant financial asset class.

These categories are not exhaustive. They are likely to evolve over time, and to reflect what is already out there in nascent, or in some cases in quite mature, forms. Moreover, the categories are not exclusive, and may overlap. Philanthropic credits, for example, could in principle be tradeable offsets if a market could be found for them, just as regulatory offsets might evolve into being traded on secondary markets, potentially as third-party offsets. It is important to keep a clear, conceptual distinction between the two main features of biodiversity credits, namely on one hand offsets and no offsets and, on the other hand, secondary trading versus no secondary trading.

7.3. Caveats

Market-based solutions are increasingly featured in policy-based developments for nature conservation. Previous international efforts dedicated to biodiversity conservation have relied predominantly on policy action and public financing. Whilst well intended, none have successfully mobilised the required funding. Moreover, none have been effective in shifting economic incentives to reverse biodiversity loss or enhancing efforts to

address and halt climate challenges^{33,34,35}. Such shortfalls have led to a generation of public interest, market-based solutions. Results to date have not been encouraging. The performance of most existing nature credit markets, notably voluntary carbon markets, have not lived up to intended ideals³⁶. There is growing evidence of these markets being riddled by regional price disparities and “greenwashing”. Moreover, despite some investment growth into the supply of future nature-based carbon offset projects, the expected finance volumes through nature credit markets have not been mobilised³⁷.

Voluntary biodiversity credits are most likely to deliver verifiable positive biodiversity outcomes if they are not used as biodiversity offsets³⁸: biodiversity offsets are designed to compensate for residual negative biodiversity impacts as a last resort in a mitigation hierarchy of actions to address known site-based impacts, which should first prioritise prevention. Offsets typically need to generate equivalent biodiversity values to those that are lost. Since biodiversity is place-specific and not fungible at the global scale, offsetting schemes are almost always local. In contrast, biodiversity credits are best understood as an economic instrument for financing positive biodiversity outcomes. They are generated independently and often spatially or temporally distant from the negative impacts of companies’ value chains (beyond value chain mitigation). As such, biodiversity credits will not usually be appropriate to offset contemporary, attributable negative business impacts on biodiversity because they are unlikely to generate values that are ecologically equivalent to those damaged by business activity. Rather, biodiversity credits could be used for positive contributions to nature, for example going beyond the mitigation hierarchy to make a proportional contribution towards addressing historical impacts on biodiversity. Addressing companies’ contemporary negative impacts separately (e.g. using the mitigation hierarchy in a science-based target framework) serves to guard against credits providing a ‘licence to trash’. Excluding the use of credits for offsetting also avoids the many thorny technical and practical challenges with

³³ Deutz, A., Heal, G. M., Niu, R., Swanson, E., Townshend, T., Zhu, L., Delmar, A., Meghji, A., Sethi, S. A., and Tobinde la Puente, J. (2020). Financing Nature: Closing the global biodiversity financing gap.

³⁴ OECD (2020). A Comprehensive Overview of Global Biodiversity Finance.

³⁵ UNEP (2022). State of Finance for Nature in the G20. Nairobi.

³⁶ <https://www.theguardian.com/environment/2022/aug/30/utterly-damning-review-finds-offsets-scheme-failsto-protect-nsw-environment>;

<https://www.abc.net.au/news/rural/2022-09-01/nsw-biodiversity-offset-schemescriticised-by-auditor-general/101391042> 10

<https://www.mckinsey.com/capabilities/sustainability/our-insights/a-blueprint-for-scaling-voluntary-carbonmarkets-to-meet-the-climate-challenge>

³⁷ <https://www.bain.com/insights/voluntary-carbon-markets-in-2023-a-bumpy-road-behind-crossroads-ahead/>

³⁸ Exploring design principles for high integrity and scalable voluntary biodiversity credits. The biodiversity consultancy, Dec 22.

ensuring offsets are used appropriately³⁹. This distinction between biodiversity credits and biodiversity offsets is aligned with emerging good practice for carbon credits, which are best used to counterbalance remaining unabated emissions after engaging absolute emissions reductions on a science-based pathway and not instead of absolute emissions reductions⁴⁰.

7.4. Existing schemes

A number of organisations and schemes are set to deliver specific outcomes internationally, covering the biodiversity credits taxonomy outlined above.

This list does not include only standards, nor organizations delivering credits, nor organizations delivering non-carbon related biodiversity claims. The landscape for biodiversity finance is not as evolved as the carbon one yet, it's under construction. Below are some of the main international initiatives that are work in progress to fit the biodiversity financing requirements as in of the Kunming-Montreal Global Biodiversity Framework⁴¹, namely Target 19, which is one of the most relevant as set to identify financial resources.

The non-exhaustive list includes:

- Architecture for REDD+ Transactions (ART) – The REDD+ Environmental Excellence Standard (TREES)
- BioCarbon Standard
- Botanic Gardens Conservation International (BGCI) Global Biodiversity
- Climate Community and Biodiversity (CCB) Standards Sustainable Development Verified Impact Standard (SD VISTa)
- COICA's Tropical Forest Credit Integrity Guide (TFCI)
- Gold Standard
- International Union for Conservation of Nature (IUCN) Global Standard for NbS
- LandScale
- Organization for Biodiversity Certificates
- Plan Vivo, PV Nature
- Preferred by Nature Ecosystem Restoration Standard (including Biodiversity Module in progress)
- Science Based Targets Network – Global Commons Alliance (SBTN)

³⁹ Applying good practice principles (e.g., BBOP, 2012; Pilgrim & Ekstrom, 2014) can help to improve the outcomes of biodiversity offsets. However, offsets remain challenging to implement both in theory and in practice (e.g., Maron et al., 2015; S. zu Ermgassen et al., 2019). Offsets may not equivalently compensate for impacts (S. zu Ermgassen et al., 2020) and there are high risks that predicted gains are not in fact delivered, through implementation failure and/or poor design (Maseyk et al., 2020). To be effective, offsets thus require a robust and locally-based framework of rules and well-resourced monitoring and due diligence, and issues can arise even if those conditions are met (e.g., S. O. S. E. zu Ermgassen et al., 2021). A global credit scheme is unlikely to have the legitimacy or capacity to be an arbiter of trades between losses and gains in diverse local contexts.

⁴⁰ <https://www.wri.org/technical-perspectives/guidance-voluntary-use-nature-based-solution-carbon-credits-through-2040>

⁴¹ <https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-04-en.pdf>

- Verra, Nature Framework

7.5. Criteria

Building on the Global Environment Facility/ International Institute for Environment and Development (GEF/IIED) considerations⁴², there are three fundamental criteria which credible, high-integrity biodiversity credit markets need to meet:

- Timely Scale: provide for the rapid scale-up of the volume and value of transactions, allowing for integrated finance and planning solutions to be developed.
- Equitable Outcomes: provide for fair price and equitable distribution of rewards, notably for project developers, sovereigns, and Indigenous Peoples and local communities.
- Credible Impact: provide for measurable positive change on the ground, for nature and people.

In considering the myriad of current practices and debate, five critical design challenges need to be addressed in meeting the core design specification as discussed in the One Forest Summit in Gabon⁴³ :

- Providing credible, timely, and affordable measurement and monitoring of the state, improvement and/or maintenance of biodiversity.
- Scaling sustained and high-integrity demand for credits and associated financing.
- Ensuring a sufficient, high-integrity supply of credits offering nature positive outcomes.
- Securing adequate price and equitable distribution of rewards to project developers, sovereigns, and Indigenous Peoples and local communities.
- Establishing robust governance and broader, transparent institutional arrangements.

Terrasos, a Colombian company specialized in the structuring and operation of environmental investments goes deeper to detail⁴⁴ that for a biodiversity conservation project to be able to issue Voluntary Biodiversity Credits, it must ensure that in its structuring and operation, as well as in the issuance, marketing and monitoring of credits, it operates under the following principles:

- *Traceability: Ensured access to information related to:*

⁴² Innovative Finance for Nature and People: Opportunities and Challenges for Biodiversity-Positive Carbon Credits and Nature Certificates

⁴³ Harnessing Biodiversity Credits for People and Planet, Nature Finance and Carbone4, 2023

⁴⁴ Protocol for issuing voluntary biodiversity credits, Terrasos 2022

- *The value chain: mechanisms must be generated to track and communicate how a Voluntary Biodiversity Credit is created, how it is marketed and how it is withdrawn from the market when all biodiversity conservation goals are reached.*
- *Biodiversity information: monitor and publish data related to biodiversity monitoring, restoration and conservation actions that are carried out.*
- *Permanence: The conservation project must have the technical, administrative, financial and legal conditions to ensure the permanence of the activities of preservation and restoration of ecosystems and their biodiversity. The projects that wish to be included in this Protocol must guarantee the continuity of the actions for a period of at least 20 to 30 years. The duration of the action and what is included in the cost of the Credit must be consistent with the time required to achieve the defined objectives.*
- *Rigor: Biodiversity conservation projects that wish to issue Voluntary Biodiversity Credits must ensure analytical and scientific rigour in the development of their activities. They must be supported by an establishment and monitoring plan where the objectives to be achieved and the indicators with which their compliance will be measured are specified very clearly. On the other hand, the design of the conservation project must ensure an ongoing evaluation where the results are contrasted with the goals and objectives, ensuring an adaptive management where corrective changes are made if necessary and/or the implementation of actions that were not initially considered.*
- *Transparency: All stakeholders must guarantee that the procedures are public and open to consultation (information related to the Loan registration, the preservation and restoration project, the participants and their roles in the Loan transaction, the actions to be carried out, dates, impact, goals and documents), as well as the information related to who the buyer is, and the prices must be public.*
- *Complementarity: The actions proposed in the structuring of the projects must be complementary and in accordance with the environmental planning and management instruments of the region and with the national or regional conservation priorities. Similarly, the monitoring and follow-up of the Credits must be complementary to the requirements and trends of the business sustainability reports and indices.*
- *Applicability: The Protocol will be designed in such a way that, while complying with technical rigor to generate benefits for biodiversity, it is practical and applicable enough to ensure its implementation in a variety of environmental, social, and economic contexts.*
- *Additionality: Every project that issues Voluntary Biodiversity Credits must generate additional outcomes (demonstrable gains) in terms of biodiversity conservation, which would not have occurred without the implementation of the project. Additionality must also ensure that negative impacts on biodiversity are not transferred to other areas. To ensure that the gains in biodiversity generated by the project are new,*

it is necessary to clearly establish which barriers to conservation exist and how they will be overcome thanks to the preservation and restoration actions of each project. These barriers should not only be restricted to the environmental nature, but the analysis should also include social, economic, and legal barriers.

The emerging biodiversity credits market must thus incorporate lessons from the experience of the carbon market, or it will risk having low integrity and low-quality credits, weak demand, poor supply, slow uptake, high costs, lack of outcomes, and potentially market failure. At the same time, biodiversity and greenhouse gas emissions are fundamentally different, and a biodiversity or nature credits market will require novel approaches. The inclusion of inputs from IPs and LCs may be one of the critical factors to be considered. It is also especially important to have a benchmark standard that defines the integrity of biodiversity credit projects and associated outcomes, as well as systems that enable purchasers to make credible claims.⁴⁵

Likewise, Biodiversity Credit Alliance (BCA)⁴⁶, mentions that although the biodiversity credit methodologies *"must be evidence-based. It is recognised that some level of uncertainty is likely to remain an inherent factor, and "evidence-based" doesn't necessarily mean demonstrated in the absolute ... credit methodologies should go through broad consultation with interested parties and a public review process, and projects should go through a validation and verification process conducted by independent third parties"*.

⁴⁵ Demand-side Sources and Motivation for Biodiversity Credits. Biodiversity Credit Alliance. Dec 23.

⁴⁶ Biodiversity Credit Alliance (2024). Definition of a Biodiversity Credit. Issue paper.

8. Water, Soil, Recreation services and Cultural Values

It is evident that carbon and biodiversity are currently the most advanced ecosystem services in terms of creating frameworks, programs or standards as market mechanisms. These mechanisms serve as tools to incorporate the mitigation hierarchy and compensate or offset the impacts caused by human activities. However, it's important to clarify that it is not the only ecosystem service that has developed a market strategy to trade economic retribution for a positive impact on the ecosystem. The PES system has been in the market for several decades as an effective way to trade positive impacts, particularly the water PES, which is one of the most successful schemes, with several cases around the globe, such as the Costa Rica payment for environmental services, where the government pays an amount of money for hydrological protection or the Conversion of Cropland to Forest Program in China developed in 1999, among others. However, **none of these programs and projects rely on verification or certification standards to verify the successful and continued protection/provision of ecosystem services.** Nevertheless, it is important to mention that in the FSC system, already exists a couple of projects have already verified against the ESP as Ejido Topia in México.

It is also common to observe mentions of the soil associated with these water projects, particularly those related to erosion control and improving or enhancing soil quality. Still, these are secondary outputs or impacts in the PES framework.

A similar situation could be identified for Recreational Services; in this case, the market transaction is made based on an economic analysis using different ecosystem services technical valuation tools, such as Cost-Benefits analysis or Hedonic prices.

However, in the case of Cultural Values, the valuation and exchange in the ecosystem services markets could be difficult to perform. The current ecosystem services markets are predominantly led by market-based instrumental values of nature that do not address the intrinsic value of the cultural practices. Ignoring, excluding or marginalising the cultural values could lead to socio-environmental conflicts linked to value clashes, especially in the context of power asymmetries.

9. Within value chain abatement, inset credits and scope 3 interventions

Plan Vivo and PUR Project first introduced the concept of carbon inseting. The International Platform for Insetting (IPI) defines inseting as "*the implementation of nature-based solutions such as reforestation, agroforestry,*

renewable energy and regenerative agriculture. Some insetting activities also improve the livelihoods of indigenous communities as a result.”⁴⁷

As the Science-Based Targets initiative (SBTi) reported, “*There is no international standard or consistent definition to describe insetting projects nor an agreed methodology to account for their GHG emission reductions. Further work needs to be done to standardize the definition of insetting projects and to develop a clear accounting methodology*”. IPI as mentioned above permits insetting from within and around the value chain and recommends, but does not require, certification.

Based on IPI requirements, insetting could have two forms. Either scope 3 interventions, where the reductions and removals are directly linked with the product sourced and accounted in the scope 3 of the organizations downstream. Under this approach, inventory accounting is used and therefore allowing simplified accounting methodology. Or as inset credits, where the reductions and removals are reported separately and the credits could be traded within the value chain. Inset credits might need to follow the intervention (project) accounting which is more demanding and basically follow the same requirements as offset credits.

As for the Carbon Removals and Land Sector Initiative from WRI under the Greenhouse Gas Protocol⁴⁸, the guidance which is being developed now, with the goal of publishing it in 2024. The guidance does refer to inset credits within the value chain which will require certification similar to the requirements for the carbon offsets in the voluntary carbon market. This also implies that in the future if the organizations would opt for insetting using inset credits for their GHG targets, they would need to comply with similar requirements for carbon offsets. Currently, FSC ESP provides functional solution for scope 3 intervention. As for the inset credits, the decision would need to be taken if FSC would like to move towards crediting pathway and align the system with GHG protocol guidance which shall be published later this year.

10. Assurance

As mentioned in the carbon market analysis, the FSC system currently has a strong and independent third-party certification assurance system, and the carbon (and ecosystem services markets) are based on a verification/validation assurance system.

There are significant differences between the two models, the most important of which is the object of evaluation. In certification, the conformity of 'products, services, processes and management systems' is assessed, while

⁴⁷ Brandt, S., Tilmann S. (2022, March). *A Practical Guide to Insetting*. International Platform for Insetting. <https://www.insettingplatform.com/wp-content/uploads/2022/03/IPI-Insetting-Guide.pdf>

⁴⁸ Greenhouse Gas Protocol. (2024). *Land Sector and Removals Guidance*. Greenhouse Gas Protocol. <https://ghgprotocol.org/land-sector-and-removals-guidance>

in validation/verification, a claim is confirmed through the provision of objective evidence that the requirements for a specific intended future use or application have been fulfilled (Validation) or that specified requirements have been fulfilled (Verification).

Another difference is that the validation/verification result reflects only the situation when it is issued as a validation/verification statement, unlike the certification, in which the certificate is valid for a period of time and monitored through monitoring or surveillance audits. In the case of the V/V model, the program or scheme establishes the periodicity in which these verifications are carried out.

Each assurance system has a different conformity assessment tool, and the case of the V/V was ruled by ISO 17029⁴⁹ (Conformity assessment. General principles and requirements for validation and verification bodies). Furthermore, in the case of the certification system, the conformity assessment is lined by:

- ISO/IEC 17021 Conformity assessment — Requirements for bodies providing audit and certification of management systems; and
- ISO/IEC 17065 Conformity assessment — Requirements for bodies certifying products, processes and services.

The FSC system is built for the certification assurance system, where the certification bodies are accredited for Assurance Services International (ASI) against these conformity assessments. In the case of FSC changing or adding the V/V assurance system, ASI will need to develop a system to comply with the accreditation requirements of the system, or FSC should need to develop an internal system to fulfil the requirements. In both cases, the system also needs to comply with the CCP principles to deliver high-quality carbon credits.

The certification bodies will also need to comply with the assurance system. Although the majority of the CBs are also VVBs, they will need to reorganise their systems to fulfil the requirements.

11. Registry

As mentioned in the revision of the carbon and biodiversity crediting approach, transparency and credibility are among the main focus of the offsetting standards. Many carbon schemes have developed Registry Systems to list the information of validated and verified projects and the information related to the issuance, transfer, retirement or cancellation of units from market transactions.

A registry system should be credible and have a robust traceability system. It should register all the information and documentation of the validated/verified project activity and make the publicly available information

⁴⁹ Linked to ISO 14065 General principles and requirements for bodies validating and verifying environmental information and ISO 14064-3 Specification with guidance for the verification and validation of greenhouse gas statements.

accessible to the different stakeholders. If FSC moves to an offsetting program, it should be responsible for reviewing the documentation and overseeing the VVB to ensure the integrity of the projects and the units to be traded.

The registry system should be based on the best technology available to ensure data safety and prevent cyber fraud. This system needs to be built to allow the following steps in the registration process:

- Before listing the project, it is necessary to submit the Draft Project Plan, which shall include a minimum of sections completed:
 - o Sectorial Scope
 - o Project Type
 - o Project Eligibility
 - o Project Design
 - o Project Proponent
 - o Ownership
 - o Project Start Date and Crediting Period
 - o Estimated GHG ER
 - o Project Activity
 - o Conditions Prior to Project initiation
 - o Compliance with Laws
 - o Double Counting and Claiming
 - o Participation under other GHG Programs
 - o Title and Reference of Methodology
 - o Applicability of Methodology.
- Project listing, for which it is necessary to submit a completed Project Plan and proof of contracting an accredited VVB, and a document with the project proponent information
- Project registration (after Validation)
- Issuance of registry instrument⁵⁰ (after Verification)
- Transfer instrument recording
- Cancellation of instruments

Each step will require the register/upload of mandatory project documents/information (e.g. project boundary and project design document for listing).

The process needs to be built in a strong legal framework. The FSC should clarify the legal status of the instrument and clearly separate the ownership of the title from other controversial issues related to the instrument and the organisations involved in the transactions. An important issue to be addressed from the legal perspective is the assumption of responsibility by the registry system user in terms of the outcomes of the registry system use.

A registry system is being developed for FSC, and its usage will require payment from users. Therefore, FSC needs to ensure that the accounting system will be fully operational within the platform.

⁵⁰ Instrument or title in this framework refers to an ecosystem service credit (e.g. carbon credit)

Finally, confidentiality and use of intellectual property need to be clearly identified and addressed in the registry system, following the example of other schemes (e.g. Verra⁵¹); the user hereby grants to the scheme owner and the Registry Software Provider, a perpetual, royalty-free license to:

- Use, reproduce, distribute, display and prepare derivative works from data provided by the User (User Data) and Confidential Information provided by the User; and
- Grant sublicenses to such User Data and Confidential Information to subcontractors and other third parties.

It is important to mention that the FSC must increase its capacity to build a strong team and properly lead the registry system.

Conclusions and recommendations

1. ESP addresses the mitigation hierarchy's avoidance, minimisation, and rehabilitation/restoration stages by demonstrating progress toward net-zero, net-positive, science-based, or sustainability targets representing within value chain abatement by verifying positive impacts.
2. The ESP needs to define the concept of compensation as BBOP's define and incorporate it in the Terms and Definitions section of the procedure.
3. The current market tools developed for offsetting and compensation primarily serve climate change mitigation or carbon markets. To incorporate these concepts into the ESP, the FSC needs to adjust to meet the carbon market criteria (see Table 3). However, engaging with the carbon markets carries such reputational risks, including criticism related to the lack of transparency, insufficient safeguards, and concerns about "greenwashing".
4. To become a source of offsets, based on the analysis of the carbon markets, the ESP should perform the following changes:
 - a. Improve the transparency process by making all relevant documentation relating to the mitigation activity publicly available (subject to confidentiality and proprietary, privacy, and data protection restrictions) in the registry, including, but not limited to, the project document description, monitoring report, GIS file of the project area, and validation and verification reports.
 - b. Create an assurance program to handle the V/V approach that complies with the accreditation process of a recognised international accreditation standard. Likewise, develop a process

⁵¹ <https://verra.org/wp-content/uploads/2024/04/Verra-Registry-TOU-April-2024-TRACK-CHANGES.pdf>

for managing VVB performance to ensure good quality of the evaluations.

- c. FSC ESP needs to perform important improvements in the procedure following the recommendations made in Table 3 of this report regarding additionality, permanence, quantification of emission reductions and removals, double counting, leakage and contribution to net zero transition. For all these topics, it is recommended to include already existing tools or analyze whether it will be possible to do so, instead of creating new ones. It is recommended that all the future methodologies, tools etc., should be aligned with the IPCC guidelines, UNFCCC requirements and those developed by the international standards especially those that comply with the Core Carbon Principles of The Integrity Council for the Voluntary Carbon Market (ICVCM).
- d. Even though the FSC, through the FSC P&C, has a good level of social and environmental safeguards, the FSC should improve the provision of Sustainable Development benefits and safeguards in the ESP, including a social justice approach, as was mentioned in Table 3 of this report. Nevertheless, the FSC can use existing SDG tools to demonstrate the provision of benefits and safeguards.
- e. ESP should ensure that the claim's final user complies with the VCM Claims Code of Practice:
 - i. Comply with the Foundational Criteria:
 1. Maintain and publicly disclose an annual greenhouse gas emissions inventory.
 2. Set and publicly disclose science-aligned near-term emission reduction targets, and publicly commit to reaching net-zero emissions no later than 2050.
 3. Demonstrate that the company is making progress on financial allocation, governance and strategy towards meeting a near-term emission reduction target.
 4. Demonstrate that the company's public policy advocacy supports the goals of the Paris Agreement and does not represent a barrier to ambitious climate regulation.
 - ii. Select a VCM Claim to make and demonstrate progress towards meeting near-term emission reduction targets.
 - iii. Meet the required carbon credit use and quality thresholds.
 - iv. Obtain third-party assurance following the VCM MRA Framework
- f. Define compensation claims.

- g. FSC's currently does not involve transferring rights over credits. The verified impacts remain with the certificate holder, and FSC operates at a sponsorship level. In the VCM, the owner of the credit (impact) can do the trade. This could be particularly difficult due to the involvement of indigenous people and local communities, where such a transfer of rights may not be feasible.
5. Based on recent experiences and caveats to be considered around biodiversity market tools, FSC could move towards a system based on biodiversity credits rather than biodiversity offsets, which aligns with some voices from FSC's membership in the past.
6. Biodiversity credits could be used to make a proportional contribution claims to addressing historical impacts on biodiversity. Nevertheless, in the case of ESP, it will be necessary to adapt the procedure to improve the tool in the following aspects:
 - a. Traceability, creating a system to address the issuance and retirement of credits.
 - b. Additionality, as a mandatory requirement for the credit sale.
 - c. Double counting and claiming, in light of the increasing global concern about this issue, while acknowledging that much of this discussion remains unclear.
 - d. Leakage in a similar way to double counting and claiming.
 - e. Transparency, ensuring that sections relating to biodiversity credits are incorporated into public audit reports.
 - f. Credit methodologies must include multiple metrics of different aspects of biodiversity that describe a habitat's condition, consisting of elements of structure, function, and composition (e.g., different, distinct dimensions of diversity in taxonomic groups, or habitat quality and structure).
7. In the case of water, soil, recreational services and cultural values, there is no schemes that address the use of these ecosystem services as part of the offsetting. Nevertheless, excluding or marginalising cultural values could lead to socio-environmental conflicts and create a credibility problem to the FSC system.
8. In relation to BVCM, the ESP may serve as a source of funding contributions claims, or compensation claims, but in this case, it must meet VCMI quality criteria and adjust the procedure to meet the CCP requirements.
9. If the FSC transitions to an offsetting scheme, it should establish a robust assurance system based on the V/V approach. ASI will be required to create a system that meets the scheme's accreditation requirements. Alternatively, the FSC may choose to develop an internal system to meet the requirements. In either case, the system must

comply with the CCP Core Carbon Principles principles to ensure the production of high-quality carbon credits.

10. In a similar way, FSC should develop a strong and credible registry system where all the information and documentation related to the validated/verified project activity, with publicly available and accessible information to the different stakeholders. This process will need the creation of new capacities and additional technological resources to handle the registry platform.
11. Although the biodiversity (and other ecosystem services) crediting system is not yet as developed as the carbon market, it needs to build on the lessons learned from stakeholders such as the Biodiversity Credit Alliance (BCA). However, a system to generate contribution claims for other ecosystem services based on the principles of VCMi will be necessary.
12. Aligning inseting i.e., inset credits, with the Greenhouse Gas Protocol⁴⁸ to explore the opportunity of utilizing the inset credits option within the value chain.

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