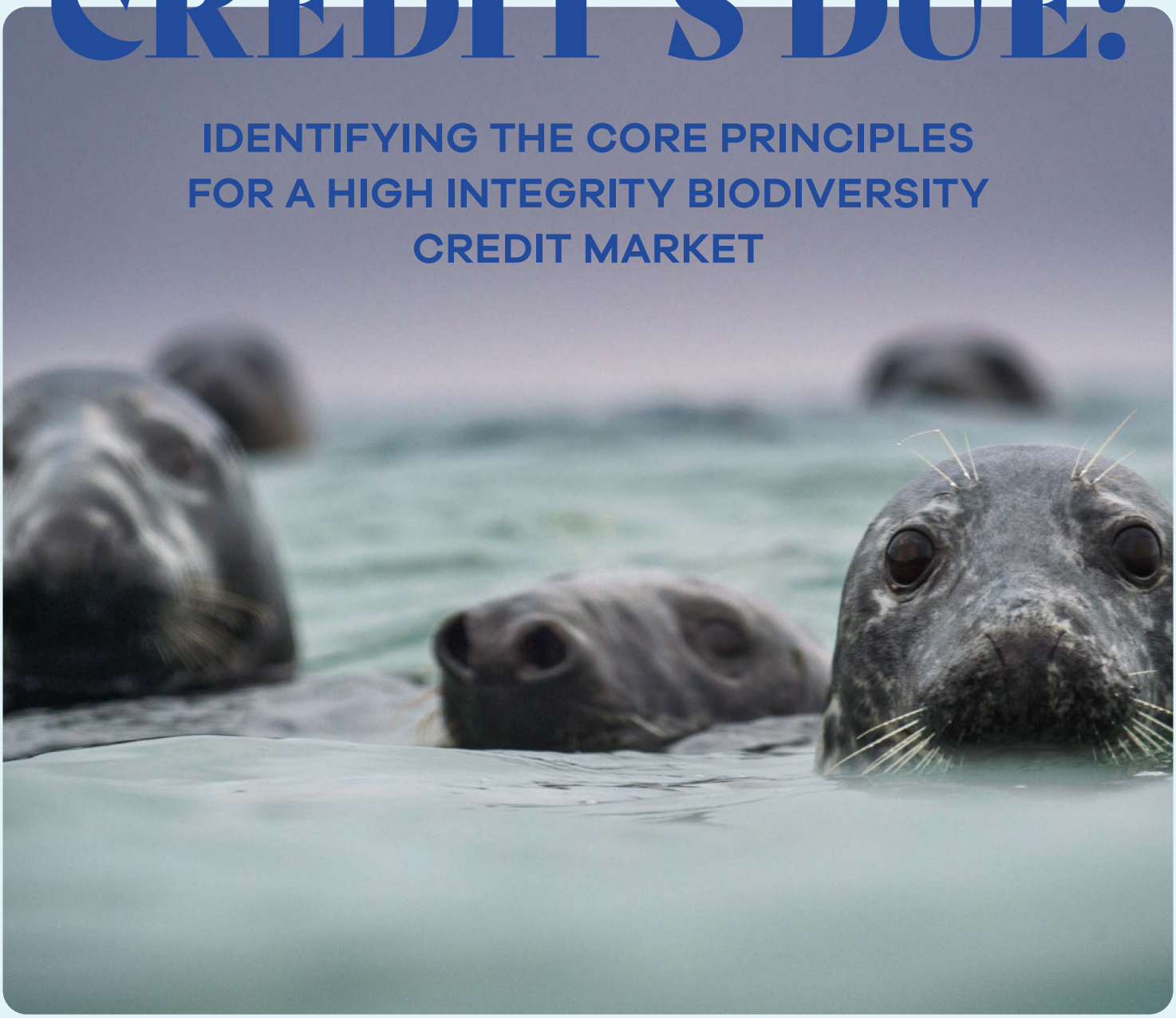
goodcarbon

BLUE MARINE FOUNDATION

PLAN VIVO
For nature, climate and communities

# CREDIT WHERE CREDIT'S DUE:

## IDENTIFYING THE CORE PRINCIPLES FOR A HIGH INTEGRITY BIODIVERSITY CREDIT MARKET



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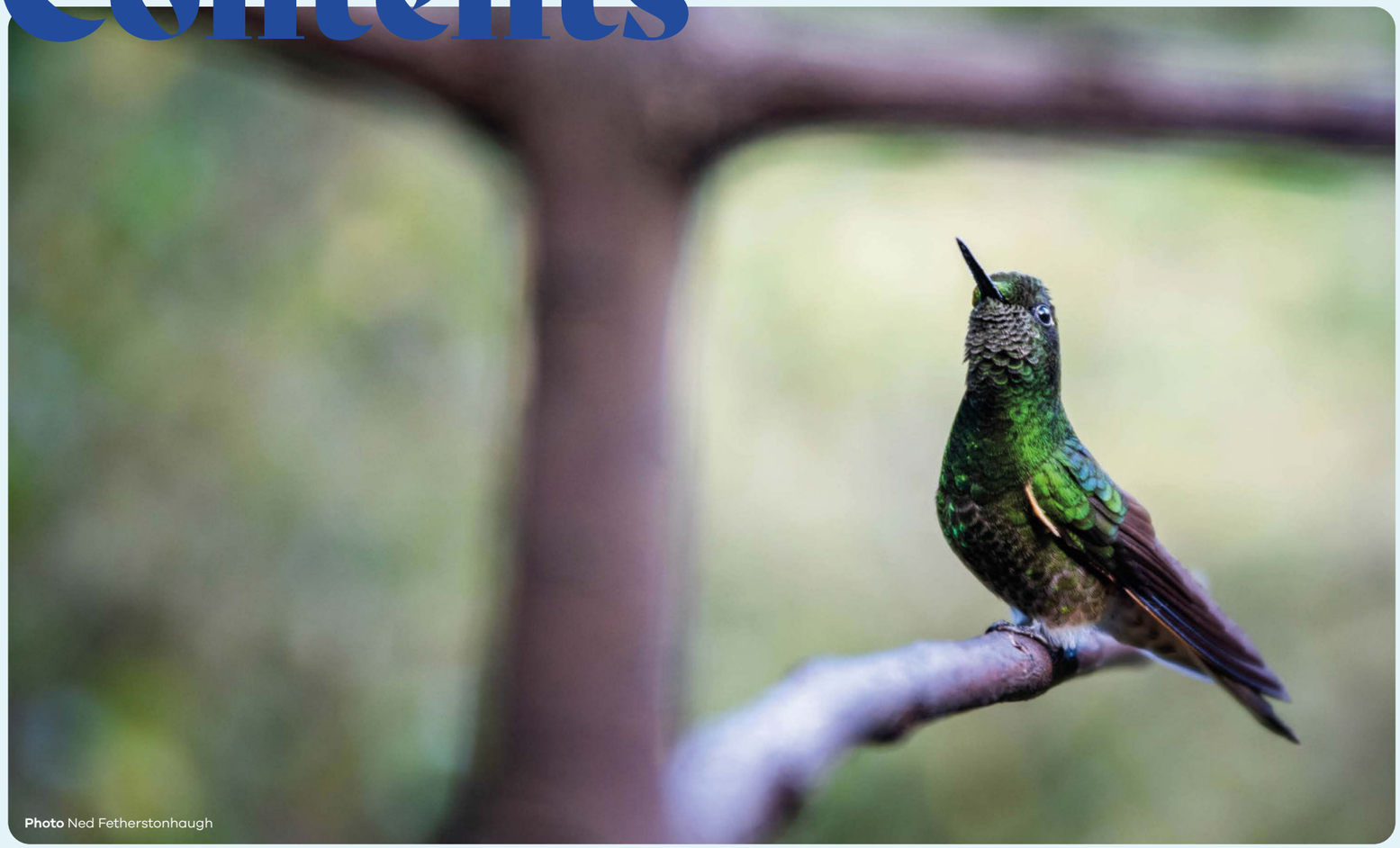

**Photo** Ned Fetherstonhaugh




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# Foreword

**Almost four years into the critical decade for achieving the global Nature-Positive goal and targets under the Kunming-Montreal Global Biodiversity framework, the potential for voluntary biodiversity credit markets to help close the global biodiversity financing gap continues to be an important theme for delivering on these aspirations. There has been a significant amount of work done on the development of standards, methodologies and projects, as well as guidance on high-integrity principles for these burgeoning markets since 2020.**

However, the current sources and scale of demand for voluntary biodiversity credits continue to be largely opaque.

This report is timely because it provides valuable insights into the emerging demand landscape across a broad cross-section of close to 40 companies worldwide. In particular, the findings of this report emphasise the importance of prioritising participation by Indigenous Peoples and local communities in the development of voluntary biodiversity credit markets to meet buyer expectations, as well as shedding light on buyer motivations and potential approaches to pricing dynamics.

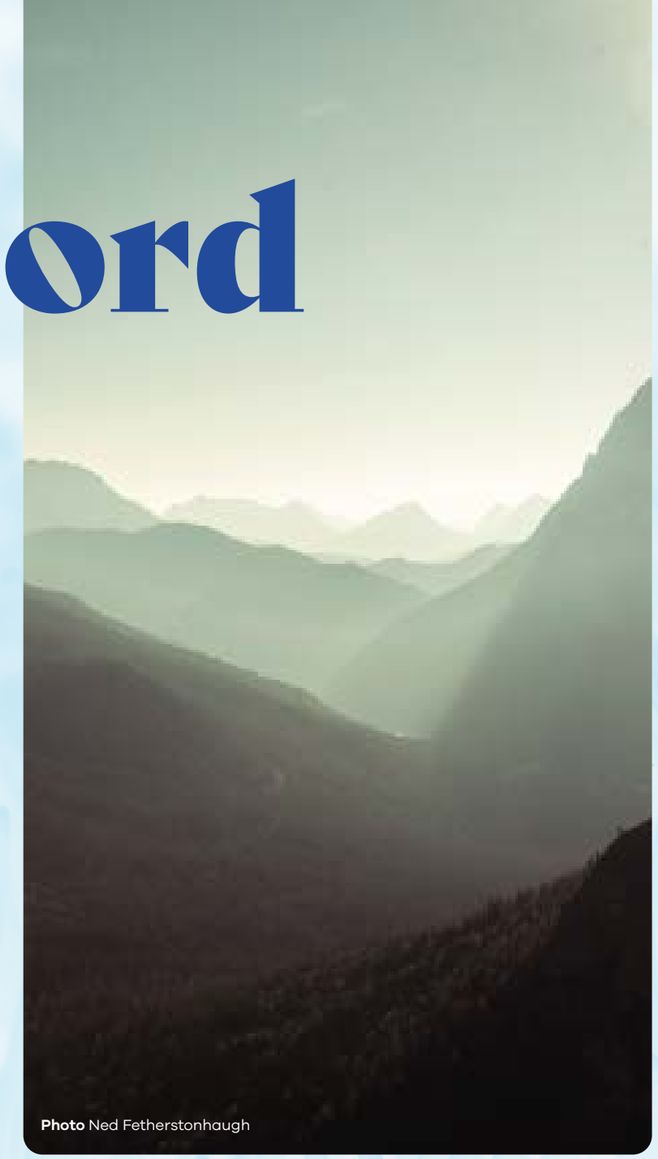


**Photo** Ned Fetherstonhaugh

Most importantly for those asking the question: "Can the voluntary biodiversity credit markets support investment in nature at scale?", this report helps to demonstrate that demand for voluntary biodiversity credits is building as potential buyers continue to educate themselves on the benefits of investing in voluntary biodiversity credits—from risk mitigation through to market differentiation. Making the business case for investing in voluntary biodiversity credits will continue to be crucial for ensuring these markets achieve their potential to deliver positive outcomes for people and nature at scale, and this report is a helpful resource for both supply and demand-side players currently grappling with this task.

***Laura Waterford, Director, Pollination***



# Executive Summary

We are facing unprecedented loss in biodiversity globally in large part due to the unsustainable use of our land and seas. With biodiversity being crucial for combating climate change, providing essential resources like food and water and supporting livelihoods, the cost of inaction is far greater than the cost of taking action for nature, climate, people and the global economy.

Estimates show that over half of the world's GDP depends on nature. To reverse nature loss by the global target of 2030, companies need to spend an estimated $600-800 billion, annually. One route to achieving this is through the development of high-integrity nature markets and innovative mechanisms such as voluntary biodiversity credits. The private sector has a key role to play in the development of this market. In December 2023, Blue Marine Foundation, Plan Vivo Foundation and goodcarbon led a market survey aimed at establishing the private sector's level of interest and understanding of the emerging biodiversity credit market. The survey revealed companies' motivations to purchase biodiversity credits, important attributes within a credit and drivers behind incentive to pay more for credits. Respondents indicated that credits that were evidence-based[1], delivered benefits to local communities and were third-party audited were most important. It also revealed that credits that supported indigenous peoples and local communities (IPLCs) and endangered habitats and species would be valued higher.

**Based on the results of the survey, we have identified three core principles for developing a high integrity biodiversity credit market:**

1. **Clear communication on the biodiversity assessment methodology and outcomes**

   Credits should be third-party validated and verified, and the impact on biodiversity and the associated benefits (climate, communities) must be communicated.

2. **Integrated community engagement and participation**

   Indigenous people and local communities in biodiversity credit projects should not only benefit financially from these projects, but be integrated in project design and delivery and where possible transpire into project ownership.

3. **Fair and equitable pricing**

   At the minimum, project operational costs should be covered, including recognition of the associated climate and community benefits and equitable benefit sharing, while taking into account the specific challenges with delivering projects in different ecosystems and geographies.

As we strive to meet global climate and nature commitments, we must continue to find innovative ways to channel crucial funding into protecting and restoring nature. The emerging biodiversity credit market offers us a way to achieve this, but it will require building a market based on trust, integrity and understanding from the buyers, including transparent, robust and equitable project structures.

1 Evidence-based refers to expertise based on Western scientific approaches and/or Indigenous knowledge.

# Introduction

## The Global Biodiversity Crisis

The last several decades have led to an alarming unprecedented loss in biodiversity due to how our economies and societies unsustainably use our land and seas. The Living Planet Report states an average of 60 per cent decline in wildlife population sizes since 1970[2]. More recently, it is estimated that on average about 25 per cent of plant and animal species are threatened with extinction indicating that at least one million species are already facing the threat of extinction[3]. The Convention on Biological Diversity (CBD) and the International Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) have appealed for the need for conservation and restoration of biodiversity. Coherent adaptation of social, ecological and economic systems, through approaches that "prioritise equity, social and climate justice, rights-based approaches, and inclusivity" are critical for limiting negative impacts of climate change, and delivering sustainable adaptation outcomes for people, livelihoods and ecosystems.

Biodiversity is fundamental to fighting the negative effects of climate change by stabilising our climate, filtering pollutants and providing food, drinking water and livelihoods to people around the world. For nature, climate, people and the global economy, the consequence of allowing business as usual to continue far outweighs the cost of taking action. Estimates indicate that over half of the world's GDP is moderately or highly dependent on nature[4], yet a recent study concluded that almost $7 trillion of public and private sector funding is currently directed toward activities that negatively impact nature, putting half of the global economy at risk with continued nature degradation[5]. The public and private sector need to be spending an additional $600-800 billion annually to try and turn the tables and reverse nature loss by 2030[6].

> **"We can close the nature funding gap for the cost of what the world spends on cigarettes or soft drinks". Deutz et al 2020[7]**

One of the ways to achieve this is through the development of high-integrity nature markets and innovative mechanisms such as voluntary biodiversity credits.

## WHAT DOES HIGH-INTEGRITY MEAN?[8, 9, 10]

High-integrity evidence-based benefits are delivered over time to nature and the people that depend on nature for their survival. High-integrity nature markets ensure the value generated by ecosystems is properly measured and understood, so that funding can flow towards their restoration and protection and benefit is delivered to local ecosystems and communities.

This improves buyer confidence that biodiversity credits are effectively aligned with restoration and conservation efforts and wider environmental and social commitments - thus ensuring that nature market participants are not exposed to reputational risks associated with issues such as greenwashing. To achieve high-integrity nature markets, robust methodologies are required alongside effective monitoring, reporting and verification of the outcomes achieved, so that transactions (such as the sale of credits) deliver clear additionality and permanent[11] environmental and social improvements. To ensure that local communities benefit, they must be involved in decision-making around the use of natural capital and the design of associated projects at a minimum. Transparent rights to resource use, progress towards equity ownership and equitable benefit sharing for IPLCs must also be in place.

**Photo** Ocean Image Bank, Cinzia Osele

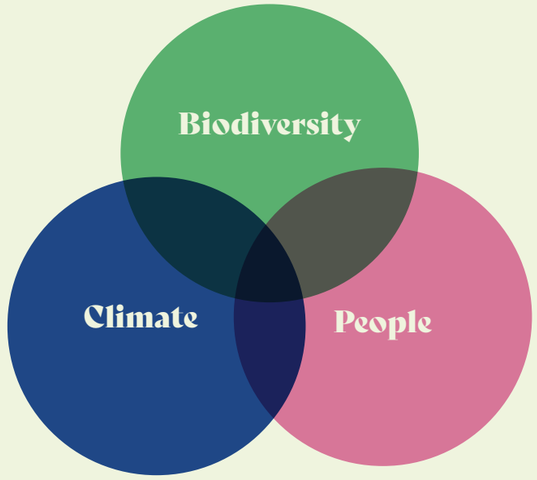
2 WWF (2022) Living Planet Report 2022 – Building a nature positive society. Almond, R.E.A., Grooten, M., Juffe Bignoli, D. & Petersen, T. (Eds). WWF, Gland, Switzerland.
3 IPBES (2019): Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. E. S. Brondizio, J. Settele, S. Díaz, and H. T. Ngo (editors). IPBES secretariat, Bonn, Germany. 1148 pages. https://doi.org/10.5281/zenodo.3831673
4 WEF, 2020. Nature risk rising: Why the crisis engulfing nature matters for business and the economy. Geneva, Switzerland: World Economic Forum.
5 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
6 Deutz, A., et al. 2020. Financing Nature: Closing the global biodiversity financing gap. The Paulson Institute, The Nature Conservancy, and the Cornell Atkinson Center for Sustainability.
7 ibid 2020.

8 High-Integrity Marine Natural Capital Markets: A Roadmap for Action (May 2024)
9 High-level integrity principles developed to steer emerging biodiversity credits market | Plan Vivo Foundation
10 The Core Carbon Principles | ICVCM
11 https://pollinationgroup.com/wp-content/uploads/2023/10/Global-Review-of-Biodiversity-Credit-Schemes-Pollination-October-2023.pdf

# Climate, Nature and People Nexus

Biodiversity, climate and people are all intrinsically linked. In order to achieve the goals of both the 2015 Paris Agreement, the international treaty on climate change aiming to keep warming below 1.5 degrees Celsius, and the 2022 Kunming-Montreal Global Biodiversity Framework (GBF), the international treaty that aims to halt and reverse biodiversity loss by 2030; these must be approached in an integrated and complementary way. Target Eight of the GBF explicitly acknowledges the impact of climate change on biodiversity and the need to build resilience, while the Global Stocktake (GST) recognises the role of "nature and ecosystems for effective and sustainable climate action"[12]. Neither will be achieved without the other and to strive to achieve them separately would be to ignore the fundamental connection between nature and climate. However, market structures have up until this point focused almost exclusively on the climate change mitigation aspects via regulated and voluntary carbon markets.

The voluntary carbon market (VCM) is one way to mobilise private sector finance through the sale of carbon credits. A carbon credit is a tradable unit representing one metric tonne of carbon dioxide or equivalent amount of another greenhouse gas[13]. The VCM allows companies, organisations and private individuals to account for, and where appropriate offset, their unavoidable emissions through the purchasing of carbon credits. These can be used in the form of offsetting their carbon footprint or beyond value chain mitigation (BVCM)[14].




The VCM has been growing at a fast pace in recent years with over 1,500 new projects registered across the five leading carbon registries between 2020-2023 alone, representing an increase of 160 percent in the rate of registration compared to the 2012-2020[15]. In 2022, approximately 253.8 million tonnes $CO_2e$ ($MtCO_2e$) were transacted[16]. Within the VCM, nature-based carbon projects are consistently in high demand and are dominated by Reducing Emissions from Deforestation and Forest Degradation (REDD+) projects. Nature-based solutions (NbS) projects fetch a higher market price with estimated price per carbon credit averaging around $11.21 in 2023 compared to $5.78 in 2021[17].

However, carbon offsetting, and the VCM more broadly, has received increased scrutiny amidst allegations of greenwashing from some large oil and gas companies, and the quality of some credits regarding additionality, permanence and over crediting. This has resulted in a contraction of the market.

Two bodies were launched in 2021 focused on building integrity within the VCM; the Voluntary Carbon Markets Integrity initiative (VCMI) (focusing on the demand side) and the Integrity Council for Voluntary Carbon Markets (ICVCM) (focusing on the supply side). The VCMI's purpose is to enable high-integrity markets that contribute to the goal of the Paris Agreement. They have since published the *Claims Code of Practice* that outlines the way companies should use voluntary credits as part of science-aligned net-zero decarbonisation pathways[18]. The ICVCM published the *Core Carbon Principles* to ensure integrity on the supply side, to ensure carbon credits represent real greenhouse gas emissions reductions and removals[19]. These bodies are continuing to develop and helping to refine and strengthen the quality and integrity of the market, and will likely contribute to the market rebounding[20]. Therefore, there is an argument that the VCM can continue to play a role in helping to meet climate targets of the private sector through the purchase of high-quality credits, with associated 'co-benefits' for people and nature.

As the biodiversity credit market develops, much can be drawn from the experience and development of the VCM; ensuring transparency and integrity is embedded into the generation of biodiversity credits from the beginning, including having robust certification and independent verification processes. The VCM can also work with the emerging biodiversity credit market in a complementary way, which when done well can incentivise organisations to increase their positive impact on both nature and climate.

**A CARBON CREDIT IS A TRADABLE UNIT REPRESENTING ONE METRIC TONNE OF CARBON DIOXIDE OR EQUIVALENT AMOUNT OF ANOTHER GREENHOUSE GAS[13].**

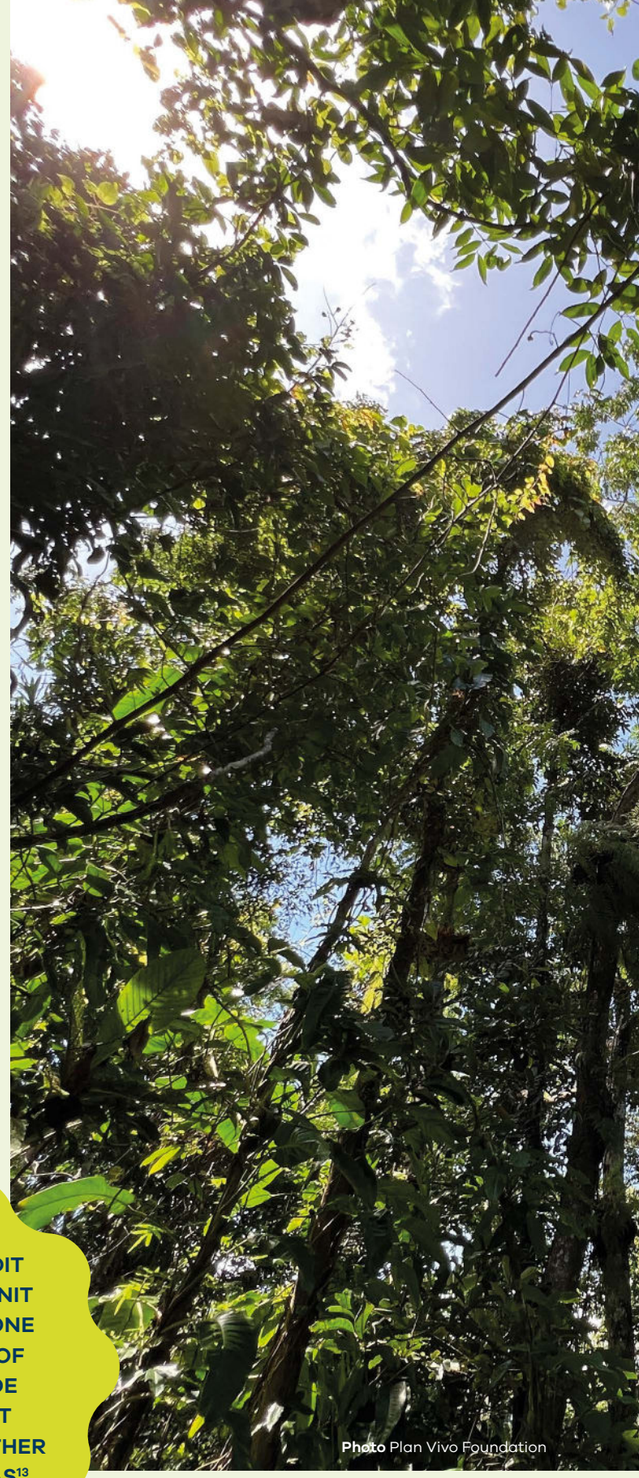


**Photo** Plan Vivo Foundation

12 Outcome of the first global stocktake. Draft decision -/CMA.5. Proposal by the President (unfccc.int)
13 https://www.sylvera.com/blog/what-is-a-carbon-credit
14 BVCM is a mechanism through which companies can accelerate the global net-zero transformation by going above and beyond their science based targets. BVCM is defined as "mitigation action or investments that fall outside a company's value chain, including activities that avoid or reduce GHG emissions, or remove and store GHGs from the atmosphere." Beyond Value Chain Mitigation - Science Based Targets Initiative (2024)
15 https://trove-research.com/report/global-carbon-credit-investment-report
16 State_of_the_Voluntary_Carbon_Markets_20240529 1.pdf (hubspotusercontent-na1.net)
17 Ecosystems Marketplace 2023. Paying for Quality

18 https://vcmintegrity.org/
19 https://icvcm.org/core-carbon-principles/
20 State_of_the_Voluntary_Carbon_Markets_20240529 1.pdf (hubspotusercontent-na1.net)

# Biodiversity Credits

**There is an estimated annual $700 bn funding gap to reach global nature goals by 2030.** Though the majority must be filled through public finance, the private sector has an opportunity to support this target by channelling additional finance into the protection and restoration of nature. The emerging biodiversity credit market offers the private sector the possibility to contribute above and beyond existing commitments and allows companies to acknowledge and act upon the financial risk posed by nature loss. However, it is crucial that biodiversity credits should not be seen as an alternative to reducing negative impact on nature degradation.

Biodiversity credits (also referred to as certificates) are a new instrument aimed at channelling capital into the hands of local conservation practitioners and communities, to mobilise resources and incentivise restoration and conservation of biodiversity. **These credits are not offsets, but instead facilitate payments to support projects that protect, restore or positively manage biodiversity ("biodiversity outcomes"). High-integrity biodiversity credits offer a measurable, traceable and tradeable unit of biodiversity impact that provide a funding solution to biodiversity loss. The Kunming-Montreal GBF has identified biodiversity credits as a potential instrument to help deliver positive biodiversity outcomes[21].**

Biodiversity is complex, multi-faceted and encompasses diversity of species, ecosystems and ecosystem services. Though there is yet no formally defined definition, the Biodiversity Credit Alliance defines them as credits that broadly represent evidence-based outcomes for biodiversity that is additional to what would otherwise occur[22]. While there is no single approach for measuring biodiversity, ensuring biodiversity credits are generated through credible mechanisms with robust methodologies and rigorous safeguards is vital for establishing a high-integrity biodiversity credit market. Further, ensuring the involvement of Indigenous Peoples and Local Communities (IPLCs)[23] in the ownership, design and generation of (and benefit sharing from) biodiversity credit projects, plays a critical role in ensuring long-term impact for both global biodiversity and the people that immediately depend on it.

**$700 BILLION**

**THE ESTIMATED FUNDING GAP TO FILL TO REACH OUR GLOBAL NATURE GOALS**

# Nature-Positive[24]

There is an emerging Nature-Positive movement, recognising that we must go beyond halting biodiversity loss and instead contribute to its recovery. This movement goes beyond the traditional regulatory markets that require companies to offset their negative biodiversity impact. **Importantly, at this stage of the voluntary biodiversity credits market, these credits are not to be used for offsetting purposes but rather to contribute towards Nature-Positive action - making an evidence-based contribution to halting and reversing biodiversity loss.** The emerging voluntary market for biodiversity credits, with a Nature-Positive approach, represents a significant opportunity to increase much-needed finance for biodiversity restoration and conservation. The World Economic Forum recently reported that the biodiversity credit market has the potential to reach $2 billion by 2030 and upwards of $69 billion by 2050[25].

As companies navigate through the journey of sustainability transition and strive to generate a positive impact on nature, investing in biodiversity credits is becoming an increasingly attractive strategy. These credits could significantly aid companies in advancing their sustainability journey, fulfilling emerging disclosure requirements, mitigating nature-related financial risks, and enhancing corporate image and stakeholder trust.

**The biodiversity credit market has the potential to reach $2 billion by 2030 and upwards of $69 billion by 2050[25]**

Photo Theo Vickers

21 https://www.cbd.int/doc/c/e761/abc8/a3a6b3d8c118f389ac6b8d8c/sbi-04-inf-10-en.pdf
22 https://www.biodiversitycreditalliance.org/wp-content/uploads/2024/05/Definition-of-a-Biodiversity-Credit-Rev-220524.pdf
23 Individuals and communities who are, on the one hand, self-identified as indigenous and, on the other hand, are members of local communities that maintain intergenerational connection to place and nature through livelihood, cultural identity and world-views, institutions and ecological knowledge (IPBES 2024).
24 Nature-Positive is defined as: A movement aimed at making a positive (and evidence-based) contribution to reversing biodiversity loss and increasing the resilience of our planet and communities, by positively incentivising people (in particular IPLCs) to conserve and restore important and threatened species and ecosystems.
25 Biodiversity Credits: Demand Analysis and Market Outlook (December, 2023, WEF)

## Drivers of Demand for the Private Sector

There are a variety of emerging regulating and reporting standards that will allow companies to incorporate and demonstrate their commitments to the Nature-Positive movement. These standards serve as incentives and drivers behind this nascent biodiversity credit market.

Regulatory requirements, such as the Corporate Sustainability Reporting Directive (CSRD) mandate the disclosure of information on environmental and social impacts, pushing firms to demonstrate concrete actions towards sustainability. Particularly, the European Sustainability Reporting Standard (ESRS) 4 Biodiversity is well-suited for reporting on investments in biodiversity credits, as it includes the subcategory 'Biodiversity Credits', where companies can explicitly report on purchased credits.

Additionally, the Taskforce on Nature-related Financial Disclosures (TNFD) provides a framework for assessing and reporting on the companies' dependencies and impacts on nature. It is an integrated roadmap that is designed to make biodiversity concerns an integral part of corporate decision-making. With this, businesses can chart their course towards reducing their impact on nature, minimising risks of biodiversity loss and including biodiversity in their financial strategies.

By purchasing biodiversity credits, companies can not only meet the emerging disclosure frameworks but also proactively address and mitigate nature-related financial risks. Investments in the voluntary biodiversity market which finance Nature-Positive gain, allow them to reduce their dependence on nature and de-risk their own value chains.

Furthermore, investing in biodiversity credits could enable companies to gain a competitive edge by driving sustainability innovation within their industry and showcasing their commitment to preserving ecosystems. Companies that quickly engage in the biodiversity credit market will have a first-mover advantage, enhancing their corporate image and stakeholder trust, which in turn fosters long-term business resilience and market competitiveness.

However, the biodiversity credit market is still at its infancy. Due to their complexity, there is a need to appropriately educate companies about biodiversity credits and the respective ways to measure them. The survey and its outcomes described in the following chapters will contribute to increasing awareness and understanding of nature markets.

**Photo** Local women hand gathering shellfish, Mario Guilamba



# About the Survey

**Photo** Alex Tattersall

In December 2023 Blue Marine Foundation, Plan Vivo Foundation (PVF) and goodcarbon led a market survey aimed at establishing the private sector's level of interest and understanding of the emerging biodiversity credit market. The survey will inform future decision making around marketing and engagement of corporate actors with biodiversity credits. It aimed to understand the current integration of climate and biodiversity investment within company strategies as well as the potential demand for private sector involvement in the emerging biodiversity credit market.

The survey underwent review from academic, financial and NGO experts to remove any bias within the questions, and to ensure a range of themes were covered. It was then distributed amongst Blue Marine, PVF and goodcarbon corporate and private sector networks for responses, and covered questions across five different sections:

1. Background of operations
2. Understanding of Biodiversity credits: General
3. Understanding of Biodiversity credits: Pricing
4. Sustainability strategy
5. Company Background Information

## Response Analysis

The survey received 39 responses from companies interested in purchasing biodiversity credits.

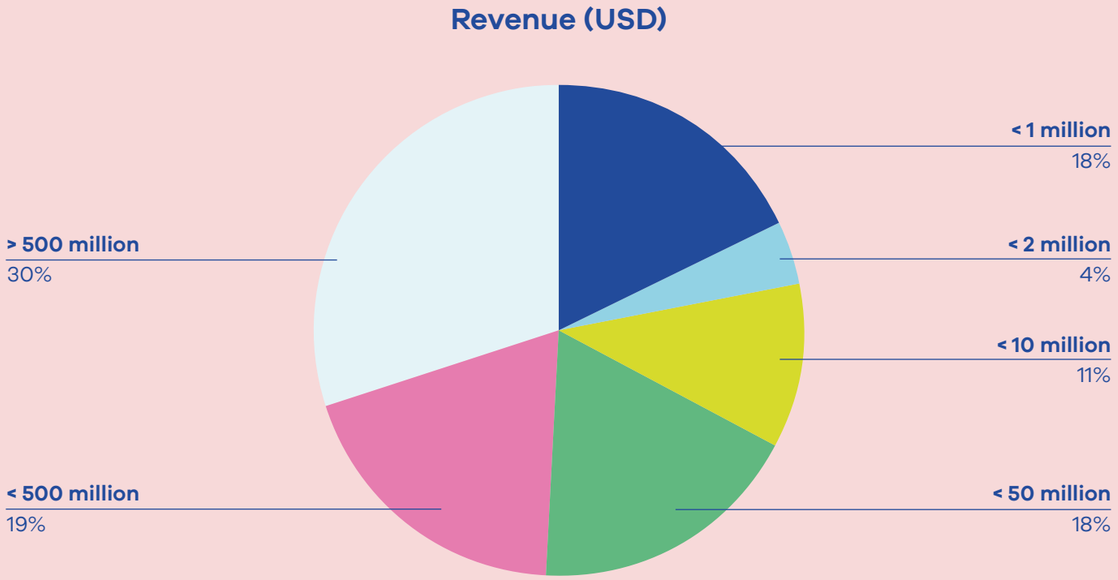
Responses to each question were summarised and analysed individually and collated to understand the key trends. These provided insights into important factors influencing buyers' demand for biodiversity credits, including the buyers motivation to purchase credits, the attributes in a credit they consider important and how they think credits should be priced. Respondents were also asked about their willingness to invest in early-stage projects, the type of projects they might be interested in investing in, and how soon after investment they expect biodiversity credits to be issued. The sample was further disaggregated based on each company's sector of operation and their engagement with carbon credits.

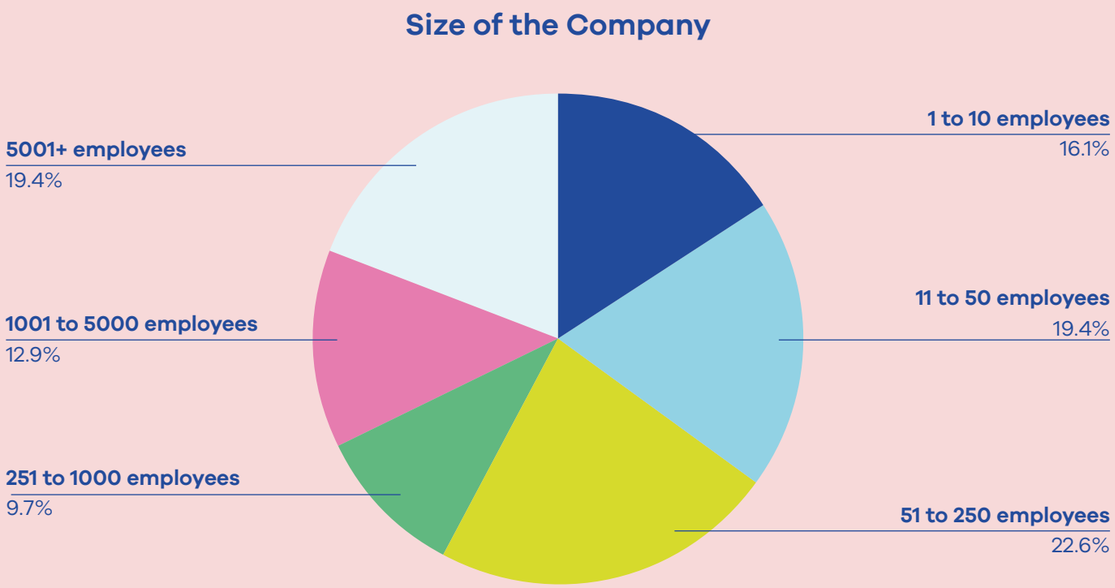
# Results

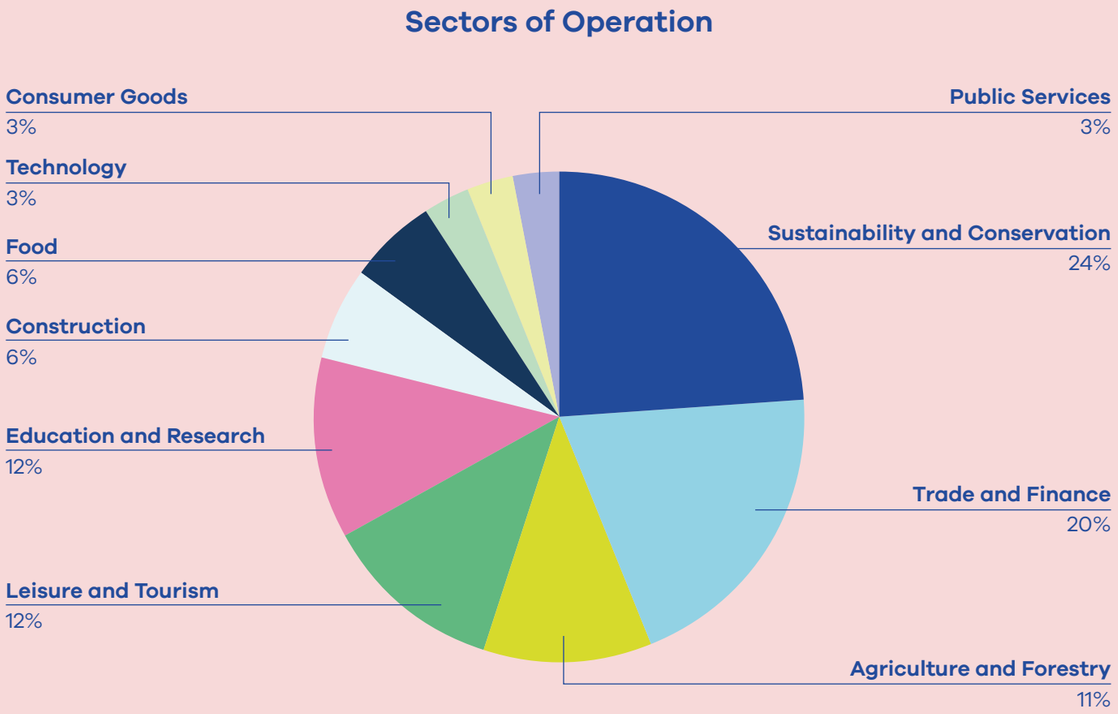
## Demographics

Survey respondents ranged from small companies with under 50 employees and revenues under $1 million to large companies that employed over 5000 people and earned revenues over $500 million. By revenue, 23 percent of the companies had  revenues under $10 million. A quarter of the companies were mid-sized, with revenues between $10-500 million. A fifth of the companies had revenues over $500 million. Over half of the respondents had under 250 employees, and about a fifth employed over 5000 people.  Most companies operated in the sustainability and conservation sector consisting of 33 percent of respondents, then trade and finance at 17.5 percent, agriculture and forestry, leisure and tourism and education and research at 10 percent each, construction and food at 5 percent each, and finally technology, consumer goods and public services at 2.5 percent each. The graphs below illustrate the characteristics of the survey respondents.

Respondents reported headquarters in the UK, Ireland, Europe, USA, India, New Zealand, Canada and the UAE with operations spread globally, with Northern and Western Europe, North America and Central and South Asia being the most common regions of operation.



# General Trends

**Below is a snapshot of trends of responses from each section:**

- Most respondents currently mitigate their biodiversity impact by carrying out restoration or conservation activities (61.5%), reduce their environmental impacts through supply chain management (32.5%), provide philanthropic contributions to support biodiversity conservation or restoration (22.5%) or through the purchase of carbon credits (20%).
- Half of all participants are closely following biodiversity market developments as biodiversity credits are an option for them in the future, whilst a fifth of respondents are still trying to understand the role of biodiversity credits for their own company.
- Respondents considered it important for credits to be evidence-based, third-party audited and verified and for projects to deliver benefits to IPLCs in addition to benefiting biodiversity.
- Respondents were primarily driven to purchase biodiversity credits by their ESG and Nature-Positive Movement commitments and their compliance with Biodiversity Net Gain (BNG)[26] and TNFD.

**ALL PARTICIPANTS WERE INTERESTED IN KNOWING THE TECHNICAL METHODOLOGY USED TO CALCULATE AND QUANTIFY A UNIT OF BIODIVERSITY CHANGE.**

**Photo** Wild is Life, Donal Boyd

- Most companies (75%) were interested in purchasing biodiversity credits from both restoration and conservation projects.
- **All participants were interested in knowing the technical methodology used to calculate and quantify a unit of biodiversity change.**
- Credits supporting IPLCs, threatened habitats and threatened species incentivised companies to pay more for a biodiversity credit.
- Around 44% of participants thought credits must have a minimum price, 38% disagreed, and 17% were unsure and thought a credit would have to be more clearly defined.
- Two thirds of respondents were willing to invest in early-stage projects that will generate credits in the future. However, 28% expected credits to be issued within a year of investment, 18% were willing to wait two years, 26% were willing to wait up to three years and 18% willing to wait up to five.

26 Biodiversity net gain (BNG) is a way of creating and improving natural habitats. BNG makes sure development has a measurably positive impact ('net gain') on biodiversity, compared to what was there before development In England, BNG was made mandatory from February 2024.



# Analysis

Two comparisons were made; comparison one examined the difference between respondents who had previously purchased carbon credits compared to respondents who had not. Comparison two compared respondents within the sustainability sector and those operating in other sectors. The answers with the highest percentage of responses are demonstrated in the tables below. Tables 1 - 4 present a summary of the results and how they differed between the two comparisons.

Further details of these groupings can be found in Annex 1.

| Criteria | Comparison 1 | | Comparison 2 | |
|---|---|---|---|---|
| ***Motivation to purchase biodiversity credits*** | *Has purchased carbon credits* | *Has not purchased carbon credits* | *Sustainability Sector* | *Non-sustainability Sector* |
| ESG Commitments | X | X | X | X |
| Regulatory Requirements | | X | X | |
| Consumer Pressure and Marketing Purposes | | | | X |
| TNFD/ SBTN/ SBTi | | X | | |
| Climate Impacts | X | | | |

*Table 1: Summary of the analysis results of comparison 1 and comparison 2 relating to the motivations for purchasing*

| Criteria | Comparison 1 | | Comparison 2 | |
|---|---|---|---|---|
| ***Important attributes in a credit*** | *Has purchased carbon credits* | *Has not purchased carbon credits* | *Sustainability Sector* | *Non-sustainability Sector* |
| Evidence-based | X | X | X | X |
| Third-party verified and audited | X | X | X | X |
| Deliver benefits to local communities | X | X | X | X |
| Simplicity of under-standing | | X | X | X |
| Respect rights of IPLCs | | | X | X |
| Contribute to additional climate impact | X | | | |

*Table 2: Summary of the analysis results of comparison 1 and comparison 2 relating to the perceived important attributes of a*

| Criteria | Comparison 1 | | Comparison 2 | |
|---|---|---|---|---|
| ***Incentive to pay more for credit*** | *Has purchased carbon credits* | *Has not purchased carbon credits* | *Sustainability Sector* | *Non-sustainability Sector* |
| Credits that support protection of threatened habitats and species | X | X | X | X |
| Support IPLCs | X | X | X | X |
| Habitat Type from which credits were generated | | X | X | X |
| Geography from which credits were generated | X | | X | |
| Covers the minimum cost of the project plus added impact | X | | | |
| Values behind the credit | | | | X |

*Table 3: Summary of the analysis results of comparison 1 and comparison 2 relating to incentives for buyers to pay more for a*

| Criteria | Comparison 1 | | Comparison 2 | |
|---|---|---|---|---|
| ***Time after investing companies expect credits to be issued*** | *Has purchased carbon credits* | *Has not purchased carbon credits* | *Sustainability Sector* | *Non-sustainability Sector* |
| 0 to 1 year | | X | | X |
| 1 to 2 years | | | | |
| 2 to 3 years | X | | X | |
| 3 to 5 years | | | | |

*Table 4: Summary of each group's most commonly chosen answer describing the time after investment that each group would wish to have credits issued.*

# Carbon credit Buyers vs. Non-buyers

ESG commitments were listed as a major factor influencing the choice to purchase biodiversity credits for both groups. However, concern about climate change and its impacts were more significant motivating factors for carbon credit buyers than biodiversity-related factors. On the other hand, non-buyers of carbon credits were motivated by biodiversity-related factors such as their commitment to the Nature-Positive Movement, disclosure frameworks such as SBTN and TNFD, and regulatory requirements like BNG and CSRD.

Carbon credit buyers indicated they would be willing to pay more for credits that are third-party verified and audited, but participants who had not bought carbon credits previously expressed interest in knowing whether projects delivered benefits to IPLCs. Another difference between the two groups was that carbon credit buyers, and potential investors into biodiversity credit projects, were willing to wait up to three years for credits to be issued after investing in a project, as opposed to non-buyers, where the majority were willing to wait for only up to one year (see Table 4).



# Sustainability Sector vs Non-sustainability Sector Companies

Factors driving the purchase of biodiversity credits varied between the two groups. Companies in the sustainability sector intended to purchase biodiversity credits to achieve their environmental commitments or to meet regulatory requirements, companies operating in non-sustainability sectors were driven to purchase biodiversity credits to meet their ESG commitments and due to stakeholder or consumer pressure.

Potential investors into biodiversity credit projects in non-sustainability sectors expected biodiversity credits to be issued within a year of investing in a project, while most companies operating in the sustainability sector were more willing to invest in early-stage projects and wait up to three years after investing, for credits to be issued (see Table 4).

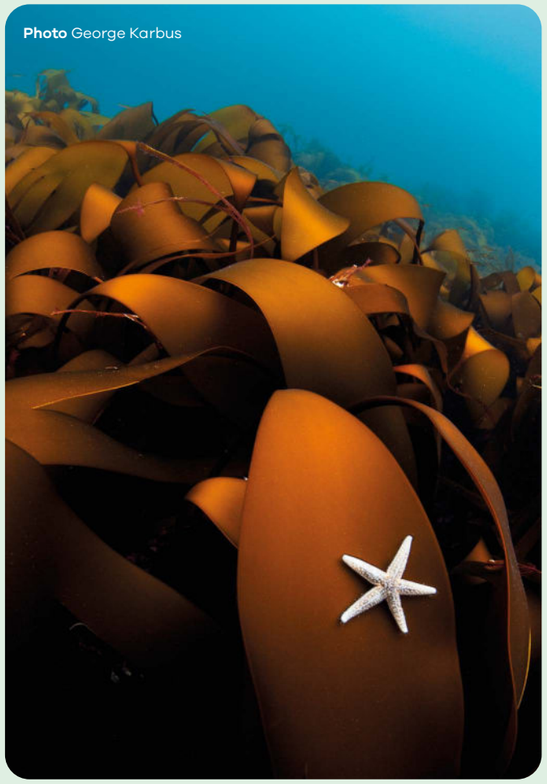


**Photo** George Karbus

**Photo** Yaeda-Eyasi Landscape Project, Carbon Tanzania

# Minimum Price

Pricing remains an element of the market that has yet to be defined due to uncertainties relating to the cost of producing credits, and the exact definition or quantification of the impact of biodiversity credits.

Reasons listed for companies believing credits should have a minimum price included agreement that a price should be set to cover the costs of implementing the project and producing the biodiversity credits. This could help maintain an industry standard and allow for the market demand to drive up prices through marketplace dynamics. Respondents disagreeing with the need for a minimum price indicated that they believed that the market must decide the price of a credit. Furthermore, respondents identified that differences in geography and local economy should have an effect on the price, as financial equity has not been reached worldwide and costs will vary across ecosystems and countries.

Respondents that indicated that they were unsure if a minimum price should be set, listed reasons around the complexity and abstract nature of identifying a singular 'unit' of biodiversity which could vary depending on the project, making a minimum price impossible to set. Units can be represented in different forms using area, species, or habitat indicators allowing a standard unit to exist in different forms complicating the implementation of any minimum price structure.

# Discussion:

## Building the Principles of a High-Integrity Voluntary Biodiversity Market

### Importance of Third-party Verified Evidence Based Credits

The top two elements of biodiversity credits that respondents found the most important were evidence-based credits (87 percent of respondents) that can demonstrate impact, and that are third-party audited (68 percent of respondents). This is likely due to translating integrity principles of the VCM into these new emerging biodiversity markets. Biodiversity credits that have undergone third-party validation and verification help to ensure credibility; projects are also more likely to be prompted to adhere to common integrity principles.

The biodiversity market could draw on lessons learnt from the VCM to ensure the developmer of high-integrity biodiversity credits. For example, the ICVCM is an independent governance body established to maintain high standards for the global voluntary carbon market. They published the Core Carbon Principles in 2023, a set of ten science-based principles for identifying high-quality projects and ensuring real-world climate impact. One o these principles is 'Robust independent third-party validation and verification'[27].

**It will be vital that biodiversity credits are evidence-based and undergo third-party validation and verification in order to:**

- Build credibility and trust, allowing all stakeholders (buyers, investors) to trust what the biodiversity credits represent.
- Effectively communicate and verify the biodiversity outcomes, ensuring validity of the credits and ensuring avoidance of any double counting.
- Assess the permanence of the project, evaluate any potential leakage risks and ensure that the project accounts for this through appropriate mechanisms.
- Ensure proper engagement of IPLCs through Free Prior and Informed Consent (FPIC) and that environmental and social safeguards are met throughout the project lifetime.
- Promote equity ownership of IPLCs.
- Ensure that the project has aligned to the relevant Standard body.

Principles such as these should be used to enhance fledging nature markets, building in high-integrity through key mechanisms from the outset.

27 The Core Carbon Principles | ICVCM

### Importance of Including Indigenous Peoples and Local Communities

The adoption of the Kunming-Montreal GBF in 2022, outlines global goals that aim to help halt and reverse nature loss. Recognized in the agreement and across conservation communities was the importance of the fair and equitable representation of IPLCs in the global goals around nature going forward. IPLCs are stewards of over 80 percent of biodiversity though they represent less than 5 percent of the global population highlighting their importance in the fight against nature loss[28].

Local communities' knowledge and expertise is crucial for implementing successful long-term nature-based projects. However, it is essential that project developers and policymakers take the necessary steps to safeguard IPLCs against any potentially negative consequences. This includes: carefully followed FPIC procedures[29], project design and co-development including safeguard information systems or other such mechanisms, appropriate legal support and clear pathways to securing land-tenure, management rights or equity ownership, and transparent benefit-sharing mechanisms developed through inclusive participation and help to build capacity. Inclusion of IPLCs within decision making processes should also consider any existing protection measures implemented by communities prior to the development of the project[30]. Project developers need to follow these steps to ensure that instances of "land grabbing" or "ocean grabbing" are avoided.

> Local communities' knowledge and expertise is crucial for implementing successful long-term nature-based projects.

Participatory approaches and benefit-sharing must also be an integral part of the emerging biodiversity credit market going forward. This is recognised within the survey, which found that three-quarters of respondents across sectors would pay more for credits that support IPLCs.

This critical sentiment is echoed by project developers, Standard Setters and auditing bodies. For example, the Plan Vivo Biodiversity Standard (PV Nature) requires at least 60 percent of income generated by credits to go back to the community and requires projects to have rigorous stakeholder engagement throughout the project planning and implementation process. This type of mechanism is also an important contributor to the sustainability and permanence of biodiversity conservation efforts and reduces risk for investors. It not only incentivises local communities to become stewards of their local biodiversity, but also allows projects to draw on the extensive knowledge of the people living in the area.

**Photo** Yaeda-Eyasi, Yaeda Chini Village

28 https://www.nationalgeographic.com/environment/article/can-indigenous-land-stewardship-protect-biodiversity-?rnd=1716483080696&loggedin=true
29 Barletti, J.P.S., A.M. Larson, K. Lofts, and A. Frechette. 2021. Safeguards at a Glance: Supporting the Rights of Indigenous Peoples and Local Communities in REDD+ and Other Forest-Based Initiatives. Center for International Forestry Research.
30 Blue Carbon Handbook - Ocean Panel

# Defining a Minimum Price

The survey showed that there is not yet consensus amongst the respondents on the need for a minimum price for biodiversity credits. In order to satisfy the project's needs and the buyer's demands, the pricing of biodiversity credits could be a market price that is subject to a strict minimum that, at the very least, covers the costs of the project.

Pricing of biodiversity credits will likely depend on the location, ecosystem, project type and scale of the project. A minimum price should reflect the minimum cost it takes to do the work on the ground including project implementation and operation, monitoring, evaluation and reporting, and finally appropriate rewarding of and support for IPLCs for biodiversity stewardship. Such an approach will hopefully also ensure that financial flows will be directed where loss of biodiversity and climate change impacts will hit the hardest, addressing concerns relating to the disproportionate spread of existing conservation finance.

> **Pricing of biodiversity credits will likely depend on the location, ecosystem, project type and scale of the project.**

In the established VCM, it has been shown that high-quality and holistic carbon credits, those that provide benefits to climate, communities and biodiversity fetch a higher price. Already, credits that certified additional robust environmental and social co-benefits "beyond carbon" have a significant price premium. Carbon Credits from projects with at least one co-benefit certification had a 78 percent price premium in 2022, compared to projects without any co-benefit certification.[31] Examples for these premium-priced credits are those certified by the standard body Verra that also carry the Climate, Community and Biodiversity (CCB) label and credits certified by the standard body Plan Vivo that is known for its strong focus on community benefits.

The higher prices being fetched by carbon credits acknowledging co-benefits[32] should be an indication of the value that ecosystem services can possess. It also reflects the value that buyers (and their shareholders and/or customers) place on these types of approaches. As the biodiversity credit market emerges, we have the opportunity to set a fair price for these credits right from the beginning. This allows us to get closer to the true value of maintaining or improving biodiversity and all of the co-benefits this provides, while ensuring that IPLC's are appropriately benefiting therefore avoiding previous pitfalls of the VCM.

# Project Development Education and Learnings from the VCM

The survey findings indicate there is still limited understanding of the overlap between the climate and nature crisis. The development of the emerging biodiversity market aims to address nature loss and the additional climate benefits that comes with its restoration and protection. The survey revealed that companies that currently purchase carbon credits are looking at biodiversity credits as an additional element to their overall environmental strategy rather than focusing on their nature impact as a separate strategy. These companies may be more interested in purchasing a biodiversity credit if it is stacked or bundled with a carbon credit. The case is well established for purchasing voluntary carbon credits to offset a company's emissions. The business case for this emerging biodiversity market is not yet proven, suggesting the possibility that corporate buyers haven't clearly identified the link between nature conservation and climate risk mitigation.

Some of the knowledge gaps were centred around timelines of credit issuance and project development. Respondents that had previously purchased carbon credits were more aware of potential long timelines for projects to be able to issue credits. Contrastingly, respondents previously unaware of biodiversity credits expected them to be delivered within one year of the project starting. This result may be attributed to a lack of understanding of the complexity, funding and administration needs required to meet high-integrity standards of becoming a certified biodiversity crediting project.

The development of core principles for the voluntary biodiversity market, following the example of the ICVCM and VCMI, will be important to ensure both the supply and demand side have similar expectations and understanding of biodiversity credits. Integrity and standardisation across the market will help to build confidence and stimulate the private sector to build nature recovery into companies business models. The understanding of the unit itself will be important for buyers to have trust in the impact of the project they have invested in.

**THE SURVEY FINDINGS INDICATE THERE IS STILL SOME DISCONNECT BETWEEN UNDERSTANDING THE OVERLAPS BETWEEN THE CLIMATE AND NATURE CRISIS.**

**Photo** Martin Stevens

31 https://3298623.fs1.hubspotusercontent-na1.net/hubfs/3298623/SOVCM%202023/2023-EcoMarketplace_SOVCM-Nov28_FINALrev-Mar2024.pdf
32 Co-benefits (ecosystem services) are a service that is provided by an ecosystem as an intrinsic property of its functionality (e.g. pollination, nutrient cycling, nitrogen fixation, fruit and seed dispersal). The benefits (and occasionally disbenefits) that people obtain from ecosystems.

## CASE STUDY:

# The Solent Seascape Project

**The Solent Seascape Project (SSP)[33] is a multi-million-pound, collaborative initiative to restore multiple habitats across the Solent strait - a diverse estuarine system between the Isle of Wight and mainland England. The project covers over 522km² of coastal and marine habitats in one of the most heavily used waterways in Europe. In a partnership of ten organisations, the SSP is actively restoring critical habitats and working with local communities to co-develop an ambitious recovery plan for the Solent, to create a thriving seascape for all.**

**To achieve its goals, the project is:**

1. Collaborating with local stakeholders and communities to develop and co-create a long-term seascape recovery plan, that supports better management of existing Solent marine and coastal habitats.
2. Actively restoring 8ha of saltmarsh, 7ha of seagrass, 4ha of oysters, and 10 breeding seabird nesting sites to increase habitat extent and catalyse recovery across the wider seascape, improving ecological connectivity.
3. Assessing ecosystem service benefits (such as carbon, biodiversity, and nitrate remediation) to create an evidence base of the wider benefits of seascape restoration.
4. Developing key interventions and financial mechanisms to upscale the potential for seascape restoration in the longer term by working with government and regulators.
5. Empowering local communities and building capacity to ignite and improve understanding of seascape processes, catalyse behavioural change, and increase involvement in seascape recovery.

The Solent Seascape Project was selected as one of Plan Vivo's pilot projects in September 2022 to be a pilot project for the new Plan Vivo Biodiversity Standard (PV Nature). It is the first project in the UK and the first Global North marine project to develop biodiversity certificates (credits) under the PV Nature Methodology. Plan Vivo is an internationally recognised certification body enabling communities and smallholders on the forefront of the climate and nature crisis to access nature markets, and generate credits through scientifically robust approaches and a rigorous certification process.

The project will be generating credits across two harbours where active restoration is occurring. The harbour systems that both active and passive restoration activities are taking place within reach a total area of nearly 6,000ha. The project team will be monitoring habitat health and extent of saltmarsh, oyster reef, seagrass and seabird habitat while also monitoring fish, invertebrates and seabird diversity and abundance. Monitoring methods will include sonar, acoustics, baited remote underwater videos and environmental DNA. Income from the sale of biodiversity credits will be vital for the long term sustainability of the project and allow the activities around community engagement and the protection and restoration of coastal habitats around the Solent to continue far into the future. Without the income generated from these credits, projects like these often have to rely on philanthropic funding, which is often limited, not always guaranteed and unsustainable for creating long-term impact.

**Photo** Saltmarsh habitat, Paul Adams

33 https://solentseascape.com

# Conclusion and Recommendations

Biodiversity credits present an opportunity for the private sector to step up and begin contributing to the critical movement to protect and restore nature. The market is designed to go above and beyond the traditional mitigation hierarchy and allow companies to take the additional steps needed to help mitigate against the future risks posed by biodiversity loss.

However, these markets should not replace concrete action on net-zero and biodiversity commitments made by governments and the private sector. These encompass decarbonisation plans, absolute emissions reductions and the protection of 30 percent of land and ocean by 2030 among othersThe nature financing gap currently stands at $700 billion, and public finance is responsible for filling the largest proportion of the gap. The group Campaign for Nature outlines six vital action points for governments to meet their existing commitments[34] which include:

1. Developed countries providing $20 billion in international finance to developing nations by 2025, and $30 billion by 2030;
2. Increasing the level of financial resources from all sources by 2030, mobilising at least $200 billion per year;
3. Identifying by 2025 and eliminating, phasing out, or reforming subsidies harmful to nature by $500 billion per year by 2030;
4. Mainstreaming biodiversity across sectors and aligning financial flows with the Kunming-Montreal Global Biodiversity Framework and the 2050 Vision for Biodiversity;
5. Enhancing the role of collective actions by Indigenous Peoples and local communities;
6. And supporting the establishment and allocation of funds towards the Global Biodiversity Framework Fund.

**Photo** Wild is Life, Donal Boyd

34 Why $20 Billion? — Campaign For Nature

**Photo** Solent – Needles Chalk Reef, Theo Vickers

**Biodiversity credits can act as a tool to leverage private sector funding for nature positive action that support existing targets and commitments. Using evidence provided from this survey we were able to identify three key priority areas that will support the private sector in accessing biodiversity credits that have the highest impact for nature, climate and people.**

1. **Clear communication on the biodiversity assessment methodology and impact is crucial**

   Clear and transparent measurement reporting and verification (MRV) processes are crucial. To maintain and uphold a high-integrity market, credits should be third-party validated and verified and the impact on biodiversity and the associated benefits (carbon, communities) has to be communicated.

2. **There must be integrated community engagement and participation**

   IPLC's in biodiversity credit projects should not only benefit financially from these projects, but be integrated in project development and delivery. There should also be strong efforts made towards building equity ownership of IPLCs in biodiversity credit projects. This will create a cohesive approach and help ensure ongoing support and stewardship of the project while recognising the knowledge and rights of IPLCs.

3. **Pricing should be fair and equitable**

   At minimum project costs should be covered, but should include elements that recognise the co-benefits and ensure equitable benefit sharing. Pricing should also take into account the specific challenges with delivering projects in different ecosystems and geographies ensuring appropriate compensation for the work being delivered. It is also important that pricing is set with increased transparency and links to direct outcomes.

   Biodiversity credits can achieve impact at every level - aligning with global goals as well as corporate and national regulations. They can help support the creation and maintenance of protected areas aligning with the Kunming-Montreal GBF global commitment to protect 30 percent of the planet by 2030. They can also help the private sector reduce nature-related financial risk and meet environmental targets through the TNFD and ESG requirements.

# Looking Forward

At COP16, governments will be tasked with reviewing the state of implementation of the Kunming-Montreal GBF. Parties to the Convention are expected to show the alignment of their National Biodiversity Strategies and Action Plans (NBSAPs) with the Framework. COP16 will further develop the monitoring framework and advance resource mobilisation for the GBF. Discussions on how countries aim to finance this and how the private sector can support these initiatives will be central to the event, with biodiversity credits as a tool being an important part of the conversation.

COP29 will take place in Baku, Azerbaijan, where many parties will be submitting their third iterations of their Nationally Determined Contributions (NDCs) due in early 2025. The UNFCCC secretariat has called on nations to bend the curve, bringing NDCs 3.0 from vision to reality. This next round of commitments will likely determine whether we are able to stay on the global emissions trajectory to limit global warming below 1.5 degrees. Simon Stiell the UN Climate Change Executive Secretary said 'your NDCs 3.0 will be the most important climate documents produced so far this century'[35]. This will be the first round of NDCs to be submitted since the Kunming-Montreal GBF. Nature must be embedded within this next round to reflect the ambition of the GST.

**It is vital that we see cross-sector and institutional collaboration so that the next round of NBSAPs and NDCs are aligned, complimenting the respective targets of the other. This is critical to achieving climate and biodiversity goals as we approach 2030.**

**Photo** Jenny Stock

35 UNITED NATIONS (unfccc.int)

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## Annex

### Carbon Credit Buyers vs Non Carbon Credit Buyers

Companies were split between two major groups; those who had previously purchased carbon credits either from the voluntary or compliance market, and those that have not purchased carbon credits.

The majority of respondents from both groups were aware of biodiversity credits and closely following market developments, although companies that were currently engaged with carbon credits formed a greater share of these respondents. Both sets of respondents stated that they would be willing to pay more for a biodiversity credit if the credits supported IPLCs and the protection of threatened habitats and species. Regardless of their engagement with carbon credits, almost half of the total respondents believed that biodiversity credits must have a minimum price. Both groups also noted that they would be willing to pay more for evidenced-based biodiversity credits.

### Working in the Sustainability Sector vs Non-Sustainability Sectors

Companies were divided into sustainability and "non-sustainability" based on their sector of operation. Companies grouped under the sustainability sector undertake environmental management or conservation as core business activities. Companies that operate in any other sector have been included in the "non-sustainability" group. "Non-sustainability" sector companies included those in trade and finance, leisure and tourism, education and research, technology, consumer goods and the public sector.

All sectors expressed the desire for the credits to be evidence-based, third-party audited and verified and stated that they would be incentivised to pay more for a biodiversity credit if the credits supported IPLCs as well as the protection of threatened habitats and species.

PLAN VIVO
For nature, climate and communities

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**Photo above** : Alex Tattersall
**Cover Photo** George Karbus