



Investigating the use of biodiversity markets to scale financing of nature-based solutions in Aotearoa New Zealand

Summary Report: Prepared by Pollination for the Aotearoa New Zealand Ministry for the Environment

Lead authors: Laura Waterford and Veda FitzSimons



# Contents

3	EXECUTIVE SUMMARY	<ul> <li>3 1.1 PURPOSE OF THIS SUMMARY REPORT</li> <li>4 1.2 THE OPPORTUNITY FOR NZ AND ITS BIODIVERSITY</li> <li>5 1.3 RECOMMENDATIONS TO THE NZ GOVERNMENT</li> </ul>
10	THE GLOBAL BIODIVERSITY FINANCE LANDSCAPE	10 2.1 THE GLOBAL BIODIVERSITY FINANCE GAP 11 2.2 ENVIRONMENTAL MARKETS FOR BIODIVERSITY FINANCE 15 2.3 ALTERNATIVES TO ENVIRONMENTAL MARKETS
16	ACCELERATING INVESTMENT IN BIODIVERSITY VIA A VOLUNTARY BIODIVERSITY CREDIT MARKET IN NZ	16 3.1 GLOBAL CONTEXT ON BIODIVERSITY CREDIT MARKETES 21 3.2 ESTABLISHING A VOLUNTARY BIODIVERSITY CREDIT MARKET IN NZ
31	ACCELERATING INVESTMENT IN BIODIVERSI	TY VIA CO-BENEFITS TO CARBON CREDITS IN NZ

# Executive Summary



#### 1.1 Purpose of this Summary Report

In late 2022 Pollination was asked by the Aotearoa New Zealand (NZ) Ministry for the Environment (MfE) to consider the opportunity to scale investment in nature based solutions (NBS) in NZ via environmental markets – namely carbon and biodiversity credit markets – to direct private and philanthropic capital into NBS activities that otherwise would not be financed.<sup>1</sup>

This Summary Report provides an overview of advice provided to MfE by Pollination in relation to the opportunity to accelerate investment in

biodiversity via a voluntary biodiversity credit market or via co-benefits to carbon credits in NZ.

This Summary Report was prepared in August 2023 however we note that this is a point-in-time document summarising advice provided to MfE as at December 2022 and factors relating to some aspects of our advice have progressed since it was prepared.

Please note there are broader definitions of NBS. For example, The International Union for Conservation of Nature (IUCN) defines NBS as "actions to protect, sustainably manage, and restore natural and modified ecosystems that address societal challenges effectively and adaptively, simultaneously benefiting people and nature.", available at: <a href="https://www.iucn.org/our-work/nature-based-solutions#:~:text=Nature%2Dbased%20Solutions%20are%20actions.simultaneously%20benefiting%20people%20and%20nature">https://www.iucn.org/our-work/nature-based-solutions#:~:text=Nature%2Dbased%20Solutions%20are%20actions.simultaneously%20benefiting%20people%20and%20nature</a>

#### 1.2 The Opportunity for NZ and its Biodiversity

#### 1.2.1 THE CONTEXT IN NZ

Given the prominence of agriculture and tourism to NZ's economy, and the importance of nature to Māori and local communities, NZ's future prosperity is intimately linked with the integrity of its natural environment and biodiversity.

However, as evidenced by the Environment Aotearoa 2022 report, the pressures of land use change and intensification, pollution, invasive species, and climate change are having detrimental impacts on NZ's environment.<sup>2</sup> NZ's rare ecosystems and indigenous species are under threat with 94 percent of reptiles threatened with extinction or at risk of becoming extinct, and nearly three-quarters of terrestrial birds threatened or at risk.<sup>3</sup>

For NZ to ensure a positive future for its biodiversity in a changing climate, and fulfil its pledge under the Leaders Pledge for Nature to help achieve the global vision of 'Living in Harmony with Nature by 2050', NZ – like all nations globally – will need to increase its efforts to protect, restore and steward its natural environment and biodiversity.

This undertaking will require the diversion of finance away from activities that diminish and degrade NZ's natural environment and biodiversity, towards activities aligned to their protection, restoration and stewardship.

#### 1.2.2 THE OPPORTUNITY IN NZ

Globally, voluntary carbon markets (VCMs) have proved a valuable mechanism for directing private capital into climate mitigation activities that otherwise would not have been financed. With the right settings in place to drive demand and a high-integrity approach to market design, voluntary biodiversity credit markets may represent a similarly important opportunity.

In NZ, a voluntary biodiversity market may present a valuable means to garner private and philanthropic sector support for the protection, restoration and stewardship of NZ's indigenous biodiversity. Given the vital importance of iwi to the health and resilience of NZ's nature and biodiversity and the strength of iwi governance, NZ has a unique opportunity to develop a voluntary biodiversity credit scheme, or schemes, which champion Māori as land stewards.

<sup>2</sup> New Zealand Ministry for the Environment, Environment Aotearoa 2022, 14 April 2022, available at: <a href="https://environment.govt.nz/assets/publications/environment-aotearoa-2022.pdf">https://environment.govt.nz/assets/publications/environment-aotearoa-2022.pdf</a>

<sup>3</sup> New Zealand Ministry for the Environment, Latest state of the environment report released, 14 April 2022, available at: <a href="https://environment.govt.nz/news/latest-state-of-the-environment-report-released/">https://environment.govt.nz/news/latest-state-of-the-environment-report-released/</a>

<sup>4</sup> Leaders Pledge for Nature. Endorsers. Available at <a href="https://www.leaderspledgefornature.org/endorsers/">https://www.leaderspledgefornature.org/endorsers/</a>

#### 1.3 Recommendations to the NZ Government

### RECOMMENDATION 1: FACILITATE THE DEVELOPMENT OF A VOLUNTARY BIODIVERSITY CREDIT MARKET IN NZ

#### 1.3.1 THRESHOLD ACTIONS

The approach taken by the NZ Government to support the establishment of a voluntary biodiversity credit market in NZ should be informed by all available information. At a threshold level, the following actions are recommended:



#### (a) Engage with iwi on market co-design

We recommend that NZ Government engages with iwi early on the potential for voluntary biodiversity credit schemes to be developed for NZ, including in relation to whether this policy mechanism is perceived by iwi as the optimal solution to increase private investment

in achieving positive nature and biodiversity outcomes in NZ. To ensure that any approach taken by Government receives broad-based support and is viewed to be of high integrity, it would be ideal to seek to pursue a partnership or co-design approach with iwi.



#### (b) Review NZ literature on biodiversity credit/offset schemes

Though elements of the biodiversity context in NZ were referred to in Pollination's advice, a detailed review of the existing NZ literature on biodiversity credit/offset schemes was not within scope. This could be completed as a next step to guide MfE's consideration of whether biodiversity credit markets are the most appropriate policy mechanism to increase private investment in achieving positive nature and biodiversity outcomes in NZ.



#### (c) Conduct market-sounding via public consultation

We recommend that NZ Government undertakes market sounding via a public consultation process to assess stakeholder sentiment in relation to establishing and scaling a biodiversity credit market (or markets) in NZ, including in relation to the potential role of Government in administering the market.

#### 1.3.2 POLICY DECISIONS



#### (a) Role of Government

If NZ Government determines to pursue a market-based approach to supporting biodiversity outcomes in NZ, a core policy consideration is the nature of the role NZ Government would play. Broadly speaking, the Government's role could fall into two key categories:

- Market administration establishing a Government-managed voluntary biodiversity scheme for NZ and playing an active role in market administration; or
- Market enablement establishing policy conditions to support the take up of voluntary biodiversity schemes in NZ and directing Government finance to support the market as it is established.

The two roles are not mutually exclusive and the Government could opt to take a hybrid approach, playing a market administration role for certain elements of market design and a market enablement role for others. The initiatives and solutions NZ Government pursues will be guided by this policy position on approach.

We recommend that Government consider its appetite to primarily play a market administration or a market enablement role based on considerations relating to the availability of Government funding and resources, likely market sentiment (e.g., the pros of having a Government-backed scheme for the purposes of providing investor certainty) and the pace of market development.



#### (b) Determine the appropriate pace of market development

If NZ Government determines that it does wish to support a voluntary biodiversity credit market, another core consideration is the pace at which it pursues that goal.

NZ Government could determine that it is prudent to take a "watch and wait" position, tracking global and domestic developments and waiting for stronger market trends to emerge, or it could seek to establish itself as a global leader on biodiversity markets and establish NZ as a destination of choice for international capital seeking to support these markets.

This policy position will likely be determined, at least in part, by Government appetite for investment in this initiative in terms of both funds and resources.



#### (c) Determine the appropriate market design

Voluntary biodiversity credit schemes can take various forms and if NZ Government determines it wishes to support the development of a voluntary biodiversity credit market or markets for NZ some fundamental design decisions will need to be made. Policy positions on the approach taken to integrity considerations will be particularly important to ensure that any approach taken by NZ Government is, and is perceived to be, of high integrity.

#### 1.3.3 PRIORITY ACTIONS

If NZ Government determines it wishes to support the development of a voluntary biodiversity credit market in NZ, we recommend the following priority actions that would assist to build market foundations, irrespective of whether the NZ Government determines to play a market administration, market enabling or hybrid role.



#### (a) Release a public awareness campaign on the state and role of nature in the NZ economy

A core precursor to demand for voluntary biodiversity credits is strong public and corporate understanding of the:

- state and trends for nature and biodiversity in NZ;
- link between nature and NZ's economic prosperity, including businesses' dependency on nature; and
- impact of business activities in NZ on nature.

NZ Government can play a key role in commissioning research on these points and communication strategies targeted to the private sector to ensure they are well understood.



#### (b) Provide clear guidance on use case and voluntary corporate claims

The Government providing clarity on the appropriate use case for biodiversity credits and their role in contributing to 'nature-positive' goals would be valuable in establishing market confidence.

Further, the Government could release guidance on the appropriate and high-integrity claims corporates can make on the basis of purchasing and retiring biodiversity credits. This guidance would help to underpin corporate confidence and minimise buyer concerns regarding greenwashing allegations. Any claims guidance developed by Government should be aligned with the Commerce Commission and its efforts in relation to preventing greenwashing.



#### (c) Legislate to provide clarity on legal rights to biodiversity

For project proponents to have certainty in undertaking biodiversity credit-generating projects, the legal status of rights to make claims about biodiversity outcomes must be clear. Government can provide this clarity through relevant laws and regulations that address any existing gaps in legal frameworks. This legislative work could be undertaken on a standalone basis if NZ government chooses not to play a market administration role, or otherwise as part of that package of legislation introducing a Government-administered voluntary biodiversity scheme for NZ. Obviously, this process would need to be handled carefully to ensure all stakeholder interests are considered.



#### (d) Support the development of relevant data sets

The generation of biodiversity credits relies on high-quality, reliable data. NZ Government can play a valuable role in building out national data sets and making them available to project proponents to underpin biodiversity credit schemes.

### RECOMMENDATION 2: FACILITATE INVESTMENT IN BIODIVERSITY CO-BENEFITS WITHIN THE NZ CARBON MARKET

The NZ Government can play a valuable role in supporting investment in biodiversity co-benefits to NBS carbon credits. If NZ Government determines it wishes to support investment in biodiversity co-benefits to carbon credits in NZ, we recommend the following actions. <sup>5</sup>



#### (a) Promote public awareness through awareness campaigns

A precursor to demand for carbon credits with biodiversity co-benefits is public and corporate awareness of the role they can play in positively

contributing to restoring and conserving NZ's nature and biodiversity. The Government can play a role in building public awareness and a positive public narrative on the benefits of investing in carbon credits with biodiversity co-benefits (e.g., via an education campaign).



#### (b) Offer payment for co-benefits through the Carbon Neutral Government Programme

If the Government were to offer to pay a price premium for carbon credits with certified biodiversity co-benefits, it would help to establish market norms in relation to pricing and certification for this class of carbon credits, while establishing favourable demand signals for project proponents.

The Government could leverage the Carbon Neutral Government Programme (CNGP) CNGP for this purpose, offering offtake agreements with provision for a premium where project proponents meet certain requirements for biodiversity co-benefits. This is effectively the approach taken by the Queensland Government in Australia. The Queensland Government's Land Restoration Fund (LRF) supports land-sector carbon projects that deliver additional environmental, socio-economic and First Nations co-benefits. One of the activities of the Fund is to contract projects that deliver carbon credits with co-benefits through investment rounds.

A challenge for financing biodiversity outcomes in NZ through price premiums for biodiversity co-benefits is the availability of international carbon credits with certified co-benefits at relatively low cost. The Government establishing a positive narrative and market norm on the role of entities financing positive biodiversity outcomes in NZ through price premiums to carbon credits would assist to counter this (e.g., by publishing a guidance document).



#### (c) Develop methodologies for certifying co-benefits appropriate to NZ ecosystems

As noted above, the widespread implementation of NBS projects to generate carbon credits with certified biodiversity co-benefits will likely require biodiversity measurement, verification and certification methodologies applicable in the NZ context.

The Government could play a valuable role in supporting the development of biodiversity co-benefit methodologies specific to NZ's ecosystems. This would also allow the Government to prioritise methodologies that will foster project activities to support targeted species or ecosystems.

<sup>5</sup> The recommendations provided in this Summary Report pertain specifically to facilitating investment in carbon credits with biodiversity cobenefits. Note that Pollination's advice to MfE also identified a range of carbon market enablers and solutions to support the supply of, and demand for, NBS carbon credits in NZ generally. That advice has not been included in this Summary Report.

<sup>6</sup> Queensland Government, About the Land Restoration Fund, Overview, vision and objectives, 14 July 2022, available at: https://www.qld.gov.au/environment/climate/climate-change/land-restoration-fund/about/overview



#### (d) Build knowledge and capacity on NBS projects and biodiversity co-benefits

The implementation of NBS projects to generate carbon credits with certified biodiversity cobenefits will require project proponents to have, or have access to, specialised knowledge and capability. We consider it likely that the relevant biodiversity expertise exists in NZ, yet may not currently be directed towards NBS carbon credit generation.

Government could support the strengthening of this knowledge and capability by supporting training or making Government employees available to advise project proponents. With the right policy settings in place, we would expect that, in time, support from Government in this regard would no longer be required.

#### PRINCIPLES TO INFORM POLICY RECOMMENDATIONS

In taking forward our recommendations and proposed next steps, the NZ Government should be conscious of the following considerations for policy design.

#### CONSIDERATIONS FOR POLICY DESIGN

PRIVATE SECTOR INTERESTS	GOVERNMENT INTERESTS	OTHER POLICY CONSIDERATIONS
Receiving recognition and market competitiveness from voluntary action	Strong integrity, governance, accountability and transpaency arrangements	Policy is outcomes-focused, fit for purpose and practical for all users
Long term market certainty and a ready supply of NBS opportunities	Avoiding perverse outcomes (direct and indirect)	Able to demonstrate environmental outcomes (qualitatively and quantitively)
Social license opportunities	Creating enabling environments and minimising regulatory burden	Efficiency and elegance in policy design, but not to the detriment of integrity

# The global biodiversity finance landscape



#### 2.1 The Global Biodiversity Finance Landscape

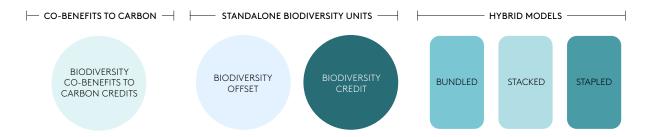
There is a growing appreciation of the role that nature, including biodiversity, plays in supporting the global economy, and the severity of the risks – both economic and social – if biodiversity loss is not rapidly curbed and reversed. <sup>7</sup> In 2020, a report commissioned by the Nature Conservancy, in partnership with the Paulson Institute and Cornell University's Atkinson Centre for Sustainability, Financing Nature: Closing the Global Biodiversity Financing Gap, aimed to quantify the global biodiversity finance gap. The research found an annual finance gap of between \$US598 billion - \$US 824 billion per annum to 2030.8

World Economic Forum, Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and Economy, January 2020, available at: <a href="https://www3.weforum.org/docs/WEF\_The\_Global\_Risks\_Report\_2022.pdf">https://www3.weforum.org/docs/WEF\_The\_Global\_Risks\_Report\_2022.pdf</a>; HM Treasury, Final Report of the Independent Review on the Economics of Biodiversity; the Dasgupta Review – Headline Messages, February 2021, available at: <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/957629/Dasgupta\_Review - Headline\_Messages.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/957629/Dasgupta\_Review - Headline\_Messages.pdf</a>.

<sup>8</sup> Deutz, A. et al, Paulson Institute, Nature Conservancy and the Cornell Atkinson Centre for Sustainability, Financing Nature: Closing the Global Biodiversity Financing Gap, 2020, available at: FINANCING-NATURE\_Full-Report\_Final-with-endorsements\_101420.pdf (paulsoninstitute.org)

#### 2.2 Environmental Markets for Biodiversity Finance

Environmental regulation has typically been the primary approach used by governments to protect biodiversity. However, environmental markets are increasingly being leveraged to direct private capital into biodiversity restoration, protection and stewardship activities. Models for financing positive biodiversity outcomes through environmental markets include NBS carbon and biodiversity credit markets (as shown below).



Each of these models is explained in more detail below, with particular emphasis on investigating if and under what conditions private finance could best be leveraged to support biodiversity outcomes in NZ.

#### 2.2.1 BIODIVERSITY CO-BENEFITS TO **CARBON CREDITS**

Undertaking NBS activities for the purposes of generating carbon credits can deliver biodiversity 'co-benefits'. These carbon credits often yield a premium price. <sup>9</sup> Biodiversity co-benefits to carbon credits can be:

- **Unquantified** the biodiversity co-benefit is assumed by virtue of the nature of the NBS activity undertaken, for example, biodiverse indigenous planting projects; or
- Quantified/certified the biodiversity cobenefit is quantified and/or certified as an additional benefit to the carbon mitigation achieved through the project. An example of

this type of certification is the Climate, Community and Biodiversity Standards (CCB Standards) administered by Verra.<sup>10</sup> Plan Vivo is also developing the *Plan Vivo Biodiversity+* methodology as an option for carbon projects with enhanced biodiversity benefits.<sup>11</sup>

**CARBON CREDITS WITH BIODIVERSITY CO-BENEFITS** Quantified/ Unquantified certified biodiversity biodiversity co-benefit co-benefit NBS carbon NBS carbon credit credit Generated on same land Generated on same land

Generally standard carbon credits, carbon credits with unquantified biodiversity co-benefits, and carbon credits with certified biodiversity co-benefits are traded in the same VCM. This is, for example, the case in the Australian carbon market. Purchasers are increasingly demonstrating a willingness to pay a premium for carbon credits with:

- unquantified biodiversity co-benefits (compared to those without biodiversity co-benefits); and
- quantified/certified biodiversity co-benefits (compared to those with unquantified biodiversity cobenefits).

Purchasers' willingness to pay a premium price for carbon credits with co-benefits is due to the positive narrative that can be used in sustainability reporting and product offerings. Concerns relating to potential greenwashing scrutiny are driving buyer appetite for quantified/certified biodiversity cobenefits. Nevertheless, the core motivation for the purchaser remains tied to their carbon footprint (not necessarily their impacts and dependencies on nature).

<sup>9</sup> Note that New Zealand Emission Units (NZUs) with additional biodiversity co-benefits have historically garnered higher prices than carbononly NZUs, driven by buyers looking to purchase carbon credits with both carbon and biodiversity-related benefits. This differentiation in price does not exist now due to the high price from all NZUs within the ETS.

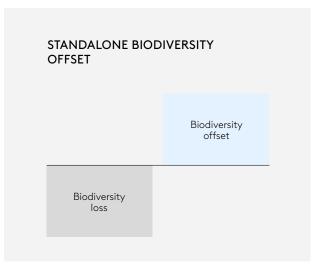
10 Verra, Climate Community and Biodiversity Standards, available at: https://verra.org/programs/ccbs/

<sup>11</sup> Plan Vivo, Our Statement on Biodiversity, 4 May 2022, available at: https://www.planvivo.org/news/plan-vivo-foundation-statement-onbiodiversity

#### 2.2.2 STANDALONE BIODIVERSITY OFFSETS

Biodiversity offsetting is used in several jurisdictions globally to compensate for the negative impacts of development on biodiversity with the objective of achieving either no net loss (NNL) or biodiversity net gain (BNG), either in compliance with regulation or on a voluntary basis. Biodiversity offsets can broadly be defined as "measurable conservation outcomes of actions designed to compensate for significant residual adverse biodiversity impacts arising from project development after appropriate prevention and mitigation measures have been taken".<sup>12</sup>

Typically, under government-regulated biodiversity offset schemes, project developers are required by government regulation to purchase biodiversity offsets to compensate for the direct impacts on



biodiversity resulting from the clearing of native vegetation. In the absence of government regulation, from the 2000s biodiversity offsetting has also increasingly been used by project developers on a bespoke, voluntary basis, often in accordance with guidance from the Business and Biodiversity Offsets Program (BBOP). Lender requirements, such as the International Finance Corporation performance standards, are important drivers of the voluntary-use biodiversity offsetting and NNL commitments.

At present, ~100 countries have either regulation or policy in place that either require biodiversity compensation or support voluntary compensation measures.<sup>13</sup> However, despite the prevalence of biodiversity compensation policy and biodiversity offsets globally, many biodiversity offset schemes have attracted strong criticism for failing to achieve their objective of NNL or BNG.<sup>14</sup> For this reason, strong regulation is required to prevent further biodiversity declines being facilitated by these schemes. This is relevant to the NZ Government noting that (according to guidance from the NZ Government), biodiversity offsetting is currently permitted under the Resource Management Act.<sup>15</sup>

We would not recommend that the NZ Government pursue the implementation of a biodiversity offset scheme as a primary market-based mechanism to channel private-sector investment into addressing biodiversity loss.

This is because the scope for these schemes to be aligned to nature-positive is generally limited in the following important respects:

- Inherent biodiversity loss: these schemes are designed primarily to facilitate development and therefore are inherently predicated on an accepted loss of biodiversity, provided that the projected loss is determined to be able to be 'offset' at a different location.
- Will not deliver nature-positive: the NNL or marginal BNG objectives relating to direct impacts on biodiversity under these schemes are insufficient to deliver the positive biodiversity outcomes required to achieve nature-positive by 2030.

<sup>12</sup> Forest Trends and Wildlife Conservation Society, Business and Biodiversity Offsets Programme (BBOP): Glossary, 2018, available at: <a href="https://www.forest-trends.org/wp-content/uploads/2018/11/BBOP\_Updated\_Glossary-01-11-18.pdf">https://www.forest-trends.org/wp-content/uploads/2018/11/BBOP\_Updated\_Glossary-01-11-18.pdf</a>

<sup>13</sup> IUCN, World View - A Snapshot of National Biodiversity Offset Policies, 5 September 2019, available at: <a href="https://portals.iucn.org/offsetpolicy/">https://portals.iucn.org/offsetpolicy/</a>; Sophus Olav Sven Emil zu Ermgassen et al, The Role of "No Net Loss" Policies in Conserving Biodiversity Threatened by the Global Infrastructure Boom, One Earth vol 1(3), 22 November 2019, pages 305-315, available at: <a href="https://www.sciencedirect.com/science/article/pii/">https://www.sciencedirect.com/science/article/pii/</a> S2590332219301332

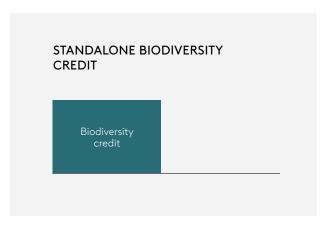
<sup>14</sup> Sophus Olav Sven Emil zu Ermgassen et al, The ecological outcomes of biodiversity offsets under "no net loss" policies: A global review, Conservation Letters, 17 July 2019, available at: <a href="https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/conl.12664">https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/conl.12664</a>; Martine Maron et al, Faustian bargains? Restoration realities in the context of biodiversity offset policies, Biological Conservation vol 155, October 2012, pages 141-148, available at: <a href="https://www.sciencedirect.com/science/article/abs/pii/S0006320712002716">https://www.sciencedirect.com/science/article/abs/pii/S0006320712002716</a>; Ina Porras and Paul Steele, Making the market work for nature: How biocredits can protect biodiversity and reduce poverty, March 2020, available at: <a href="https://www.iied.org/sites/default/files/pdfs/migrate/16664|IED.pdf">https://www.iied.org/sites/default/files/pdfs/migrate/16664|IED.pdf</a>; Katie Devenish et al, On track to achieve no net loss of forest at Madagascar's biggest mine, Nature Sustainability vol 5, 3 March 2022, pages 498-508, page 498, available at: <a href="https://www.nature.com/articles/s41893-022-00850-7">https://www.nature.com/articles/s41893-022-00850-7</a>

<sup>15</sup> New Zealand Ministry for the Environment, Guidance on Good Practice Biodiversity Offsetting in New Zealand, August 2014, available at: <a href="https://www.doc.govt.nz/globalassets/documents/our-work/biodiversity-offsets/the-guidance.pdf">https://www.doc.govt.nz/globalassets/documents/our-work/biodiversity-offsets/the-guidance.pdf</a>

#### 2.2.3 STANDALONE BIODIVERSITY CREDITS

Biodiversity offsets and credits may be similar in design. However, what distinguishes the two types of biodiversity units is the intention of the purchaser and the claims they can make.

In contrast to biodiversity offsets, biodiversity credits are not intended to facilitate the 'offsetting' of a negative impact on biodiversity. Rather, biodiversity credit schemes are intended to facilitate private-sector investment in the protection and regeneration of nature only.



According to a recent publication by the World Economic Forum (which Pollination was the lead author on), there are two reasons companies might choose to make this kind of investment:16

- Contribution to systems change: to fulfil a voluntary corporate commitment to contribute to a nature-positive future<sup>17</sup> by helping to finance the systemic change required to address biodiversity loss and thereby realise that goal; and
- Mitigation of systemic risk: to demonstrate positive action towards the mitigation of systemic nature-related risks associated with biodiversity loss to which the company is exposed and will increasingly be expected to disclose on under the Taskforce on Nature-related Financial Disclosures framework from 2023.

As biodiversity is an inherently localised asset and not currently fungible at the global scale, investing in biodiversity credits can help voluntary purchasers to demonstrate their progress against the 'Restore & Regenerate' and 'Transform' elements of the mitigation hierarchy articulated by the Science Based Targets Network (SBTN) as 'Avoid, Reduce, Restore & Regenerate, Transform' (emphasis added).<sup>18</sup> Applying the SBTN mitigation hierarchy requires:19

- **Avoiding** and **reducing** the pressures on nature loss (which would otherwise continue to grow)
- Restoring and regenerating nature so that the extent and integrity of nature can recover; and
- Transforming underlying systems, at multiple levels, to address the drivers of nature loss.

<sup>16</sup> World Economic Forum, Biodiversity Credits: Unlocking Financial Markets for Nature-Positive Outcomes, September 2022, available at: https://www3.weforum.org/docs/WEF\_Biodiversity\_Credit\_Market\_2022.pdf

17 Note that this societal-level goal is emerging as the 'north star' for voluntary corporate commitments on nature.

18 Science Based Targets Network, Science-Based Targets for Nature: Initial Guidance for Business, available at: https://

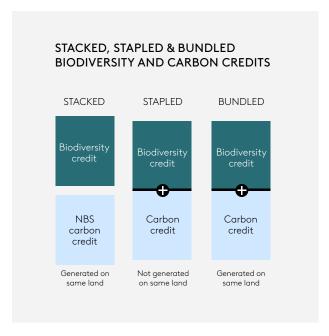
 $<sup>\</sup>underline{science based targets network.org/wp-content/uploads/2020/09/SBTN-initial-\underline{guidance-for-business.pdf}}$ 

#### 2.2.4 HYBRID PRODUCTS

There are examples of standalone carbon and biodiversity credits being generated on the same land or carbon and biodiversity credits from separate projects being incorporated into hybrid units, including the 'stacked', 'stapled' and 'bundled' biodiversity and carbon-credit approaches depicted below.

Stacked products are generated on the same land, with activities carried out on the land generating both a certified carbon credit and a certified biodiversity credit.

The permissibility of the generation of two independently-fungible units is dependent upon the regulatory requirements of the units' schemes and additionality must be carefully managed. Where the two units are purchased by different purchasers the claims permitted to be made by each purchaser are nuanced



and somewhat restricted. The purchaser of the NBS carbon credit in this scenario would not be entitled to make claims about the biodiversity benefits derived from the activities carried out on the land, and likewise, the biodiversity credit purchaser would not be entitled to claim any of the carbon benefits from the activities carried out on the land.

- Stapled products comprise separate carbon and biodiversity credits from separate projects that can be sold together to a single purchaser. The carbon credit component could be an NBS carbon credit or a non-NBS carbon credit. The purchaser of a stapled unit is entitled to make claims about both the carbon and biodiversity benefits associated with the carbon and biodiversity credits respectively.
- Bundled products involve multiple benefits produced by nature-based projects within a project area being sold as a single product to a single buyer.<sup>20</sup>

#### 2.3 Alternatives to Environmental Markets

It should be noted that environmental markets are not the only, nor necessarily the most effective, policy mechanism to achieve positive nature and biodiversity outcomes in NZ. Alternatives to environmental markets include the following:

- tighter environmental regulation to closely regulate the key drivers of nature and biodiversity loss in NZ;
- a tourism levy applicable to all foreign tourists entering NZ with the proceeds of the levy reinvested by Government into on-ground NBS activities;
- a tax on the key drivers of negative nature outcomes such as fertiliser, with the proceeds of
  the tax invested by Government into on-ground NBS activities; and a nature/biodiversity
  tax commensurate with corporate profit or contribution to negative impacts on nature and
  biodiversity in NZ, with the proceeds of the tax invested by Government into on-ground NBS
  activities.

<sup>20</sup> Global Environment Facility, Innovative Finance for Nature and People: Opportunities and Challenges for Biodiversity-Positive Carbon Credits and Nature Certificates, 27 February 2023, page 3, available at: https://www.thegef.org/newsroom/publications/innovative-finance-nature-and-people

# Accelerating investment in biodiversity via a voluntary biodiversity credit market in NZ



#### 3.1 Global Context on Biodiversity Credit Markets

#### 3.1.1 THE STATE OF BIODIVERSITY CREDIT MARKETS GLOBALLY

Though biodiversity credit markets are nascent, there has been a rapid increase globally in initiatives focused on creating, supporting and regulating these markets over the past 12 months. Initiatives across the biodiversity credit market space can be categorised into four key areas.<sup>21</sup>

<sup>21</sup> Given the nascency of voluntary biodiversity credit markets globally, there is limited literature available to inform our analysis. The below insights are derived from stakeholder engagement conducted with a number of relevant entities in the NZ market, research into existing schemes, guidance and thought leadership on best practice approaches, and the Pollination team's extensive engagement globally on these topics.

#### (a) Private sector-led programs

There are a range of private-sector programs globally developing biodiversity credit schemes. Initiatives in this space have rapidly increased over the past 6-12 months. Most programs are at the piloting stage.

#### (b) Government-led programs

Though a large number of jurisdictions have biodiversity offsetting schemes in place, schemes to support voluntary biodiversity credit markets have not yet been widely pursued by national or subnational governments.

- Currently, the only government to take substantive steps to establish a national voluntary biodiversity credit market that Pollination is aware of is the Australian Government.<sup>22</sup>
- The Government of Gabon has also announced its intention to begin "working on a biodiversity credit system like carbon credits", but no further details on the scheme have been publicly released.<sup>23</sup>

#### (c) Independent standards bodies

A range of bodies are developing frameworks to account for and verify biodiversity outcomes. These include, for example:

 Accounting for Nature – an Australian notfor-profit that administers an environmental accounting framework, including certification of environmental accounts prepared in compliance with its methodologies that can be used to underpin biodiversity credit schemes.<sup>24</sup>

- Verra, SD VISta- Verra has recently announced that it is developing a biodiversity methodology under its Sustainable Development Verified Impact Standard Program (SD VISta). The methodology will be designed to enable project developers to use the methodology to quantify the biodiversity benefits of their conservation and restoration activities.<sup>25</sup>
- Plan Vivo Plan Vivo is developing a standalone biodiversity standard (PV Nature) designed to facilitate the crediting of biodiversity conservation.<sup>26</sup> Plan Vivo is playing a role as an independent third-party certification body and issuer for the Wallacea Trust biodiversity credit program.

#### (d) Governance/integrity initiatives

A number of entities are seeking to provide guidance to the market on the appropriate use case and integrity characteristics of voluntary biodiversity credits. These initiatives include: The World Economic Forum;<sup>27</sup> Nature Finance;<sup>28</sup> Verra who, with a consortium of advisors, is developing a whitepaper on biodiversity credits;<sup>29</sup> and IUCN's Global Standard for NBS.<sup>30</sup>

<sup>22</sup> Australian Government, Department of Agriculture, Fisheries and Forestry, A National Biodiversity Market, September 2022, available at: <a href="https://haveyoursay.agriculture.gov.au/national-biodiversity-market">https://haveyoursay.agriculture.gov.au/national-biodiversity-market</a>

<sup>23</sup> Afrik21, GABON: The government wants to collect "biodiversity credits", June 1 2022, available at: <a href="https://www.afrik21.africa/en/gabon-the-government-wants-to-collect-biodiversity-credits/">https://www.afrik21.africa/en/gabon-the-government-wants-to-collect-biodiversity-credits/</a>

<sup>24</sup> Åfrik 21, Gabon: The government wants to collect "biodiversity credits", 1 June 2022, available at: https://www.accountingfornature.org/

<sup>25</sup> Verra, New Biodiversity Methodology, 3 November 2022, available at: https://verra.org/new-biodiversity-methodology/

<sup>26</sup> Plan Vivo, Our Statement on Biodiversity, 4 May 2022, available at: <a href="https://www.planvivo.org/news/plan-vivo-foundation-statement-on-biodiversity">https://www.planvivo.org/news/plan-vivo-foundation-statement-on-biodiversity</a>

<sup>27</sup> World Economic Forum, Biodiversity Credits: Unlocking Financial Markets for Nature-Positive Outcomes, September 2022, available at: <a href="https://www3.weforum.org/docs/WEF\_Biodiversity\_Credit\_Market\_2022.pdf">https://www3.weforum.org/docs/WEF\_Biodiversity\_Credit\_Market\_2022.pdf</a>

<sup>28</sup> Taskforce on Nature Markets, available at: <a href="https://www.naturemarkets.net/">https://www.naturemarkets.net/</a>

<sup>29</sup> Coalition for Private Investment in Conservation, Blog Part 2, Biodiversity credits: a turning point for nature, 14 July 2022, available at: <a href="http://cpicfinance.com/blog-part-2-biodiversity-credits-a-turning-point-for-nature/">http://cpicfinance.com/blog-part-2-biodiversity-credits-a-turning-point-for-nature/</a>
30 International Union for the Conservation of Nature, IUCN Global Standard for Nature-based Solutions, 24 July 2020, available at: <a href="https://cpicfinance.com/blog-part-2-biodiversity-credits-a-turning-point-for-nature/">https://cpicfinance.com/blog-part-2-biodiversity-credits-a-turning-point-for-nature/</a>

<sup>30</sup> International Union for the Conservation of Nature, IUCN Global Standard for Nature-based Solutions, 24 July 2020, available at: <a href="https://portals.iucn.org/library/sites/library/files/documents/2020-020-En.pdf">https://www.iucn.org/news/europe/202007/iucn-global-standard-nbs</a>

#### 3.1.2 MARKET MECHANICS AND INFRASTRUCTURE

The following infrastructure and processes will be required to establish a well-functioning, high-integrity voluntary biodiversity credit scheme:

REGISTRATION	Projects are registered under a publicly available standard and methodology, administered by an independent standards body (Scheme Administrator) (e.g., a government body or NGO).	
IMPLEMENTATION	Project proponents carry out activities to protect, regenerate and/or steward nature and biodiversity in accordance with the requirements of the applicable standard and methodology.	
VERIFICATION	At periodic intervals, project proponents measure and report biodiversity outcomes, which are verified by the Scheme Administrator in accordance with the requirements of the applicable standard and methodology.	
ISSUANCE	The Scheme Administrator issues biodiversity credits for the verified biodiversity outcomes achieved by the project during each reporting period, ideally on a register with a tracking identifier.	
TRANSACTION	Project proponents sell biodiversity credits to corporations and other entities seeking to contribute to systems change to support nature and reduce exposure to system nature risks. Ideally, this transaction will be tracked in a register.	
RETIREMENT	Purchasers of biodiversity credits that make public claims about their contribution to the biodiversity outcomes they represent cancel the credits in a register to avoid double-counting/claiming of outcomes.	

#### 3.1.3 INTEGRITY CONSIDERATIONS AND APPROACHES

Building upon lessons learned through the evolution of VCMs, numerous integrity principles are highly likely to be relevant to biodiversity-credit markets to ensure that they are effective in achieving positive outcomes for nature and biodiversity and that purchaser claims have high integrity. The proper application of integrity principles to biodiversity-credit markets has not yet been established, however, Pollination is currently working with the World Economic Forum and Nature Finance on developing initial guidance for the market on governance and integrity issues.<sup>31</sup>

INTEGRITY CONSIDERATION	QUESTIONS TO BE ADDRESSED DURING DESIGN PHASE	
ELIGIBLE ACTIVITIES	What should a voluntary biodiversity-credit scheme be designed to achieve (i.e., what activity types should be incentivised)?	
QUANTIFICATION AND METRICS	<ul> <li>What requirements relating to the quantification of positive biodiversity outcomes resulting from activities carried out under schemes are acceptable for verification or certification?</li> </ul>	
JUST TRANSITION CONSIDERATIONS (INCLUDING FREE, PRIOR AND INFORMED CONSENT) AND BENEFIT SHARING	<ul> <li>How should voluntary biodiversity-credit markets be designed to ensure just and inclusive outcomes for First Nations people and local communities?</li> </ul>	
PROJECT PROPONENT REQUIREMENTS	<ul> <li>What requirements should be in place with respect to the credentials and financial capacity of project proponents?</li> </ul>	
LEGAL RIGHTS AND INTEREST HOLDERS	What legal rights or consents must be held by a project proponent to conduct a project?	
ADDITIONALITY	<ul> <li>What principles of additionality should apply to ensure that investment in voluntary biodiversity credit schemes achieves positive outcomes that would not have occurred but for that investment?</li> <li>Is it acceptable to adopt additionality requirements that are different to those under voluntary carbon market schemes?</li> </ul>	

<sup>31</sup> Note, a draft version of these principles were released for consultation in December 2022, subsequent to delivery of this advice. World Economic Forum, High-level Governance and Integrity Principles for Emerging Voluntary Biodiversity Credit Markets, December 2022, available at: <a href="https://www3.weforum.org/docs/WEF\_Biodiversity\_Credits\_Markets\_Integrity\_and\_Governance\_Principles\_Consultation.pdf">https://www3.weforum.org/docs/WEF\_Biodiversity\_Credits\_Markets\_Integrity\_and\_Governance\_Principles\_Consultation.pdf</a>

INTEGRITY CONSIDERATION	QUESTIONS TO BE ADDRESSED DURING DESIGN PHASE	
LEAKAGE	What principles relating to preventing 'leakage' of activities that are harmful to biodiversity should be addressed in voluntary biodiversity credit schemes?	
PERMANENCE	What principles relating to ensuring the permanence of positive biodiversity outcomes resulting from voluntary biodiversity credit schemes are appropriate?	
MONITORING, REPORTING AND VERIFICATION	<ul> <li>What monitoring, reporting and verification requirements should apply?</li> <li>Should schemes be administered by third parties independent to project developers?</li> </ul>	
TRANSPARENCY AND GOVERNANCE	What transparency and governance requirements should apply to schemes and transactions?	
NATURE OF CLAIMS	<ul> <li>What claims will buyers be able to make?</li> <li>What, if any, integrity principles should apply in relation to proximity and equivalence between a corporate's negative impacts on nature across its value chain, and positive impacts funded by a corporate through the purchase of voluntary biodiversity credits?</li> </ul>	
DOUBLE-COUNTING	<ul> <li>What double-counting principles should apply?</li> <li>What are the implications for corporates purchasing voluntary biodiversity credits in the context of country-level ambitions to set targets that are aligned to the global '30x30' or 'nature-positive' goals?</li> </ul>	

# 3.2 Establishing a Voluntary Biodiversity Credit Market in NZ

# 3.2.1 DETERMINING THE ROLE OF GOVERNMENT - MARKET ADMINISTRATION VS. MARKET ENABLEMENT

To bring about a well-functioning, high-integrity voluntary biodiversity credit market in NZ, the Government could play two broad roles:

- 1. Market administration establishing a government-managed voluntary biodiversity scheme for NZ and playing an active role in market administration; or
- 2. Market enablement establishing policy conditions to support the take up of voluntary biodiversity schemes in NZ and directing government finance to support the market as it is established.

The two roles are not mutually exclusive and the Government could opt to take a hybrid approach, playing a market administration role for certain elements of market design and a market enablement role for others. For example, the Government could primarily play a market administration role, but seek private-sector input in relation to the R&D required for new methodologies approved under the standard maintained by the Government. However, at first instance, it is helpful for the Government to consider its appetite to primarily play a market administration or a market enablement role. We recommend the Government considers these policy questions to inform the development of a voluntary biodiversity market in NZ.

Given the nascency of voluntary biodiversity credit schemes globally there are not a significant number of examples from other jurisdictions to draw from. However, both the Australian and Gabonese Governments have signalled an intention to play a market administration role in the development of biodiversity-credit markets in their jurisdictions.<sup>32</sup>

As noted above, a well-functioning, high-integrity voluntary biodiversity market requires appropriate market infrastructure and administration. There are several options for Government to help facilitate this outcome, depending on whether it seeks to primarily play a market administration or market enablement role.



<sup>32</sup> Australian Government, Department of Agriculture, Fisheries and Forestry, A National Biodiversity Market, September 2022, available at: https://haveyoursay.agriculture.gov.au/national-biodiversity-market; Afrik21, GABON: The government wants to collect "biodiversity credits", June 2022, available at: https://www.afrik21.africa/en/gabon-the-government-wants-to-collect-biodiversity-credits/

ELEMENT	MARKET ADMINISTRATION	MARKET ENABLEMENT			
MARKET INFRASTRUC	MARKET INFRASTRUCTURE				
METHODOLOGIES/ STANDARD	Government develops, or funds the development of, a publicly-available standard and methodologies appropriate to the NZ context.	Government provides funding to support the development of standards/methodologies by private actors.  Existing market players such as Ekos could be supported in this.			
REGISTRY	Government establishes a registry for project registration, credit issuance, tracking and retirement.  Government acts as the scheme administrator.	Government provides funding to support the development of a registry or registries for voluntary biodiversity credits.  Existing market players such as Toha could be supported to develop and maintain this market infrastructure.			
MARKET ADMINISTRA	TION				
IMPLEMENTATION	Government provides capacity-building training for project developers/landholders.  Government provides some upfront financing for project implementation, including potentially leveraging the Jobs for Nature initiative.	N/A			
VERIFICATION	Government performs the verification function in relation to outcomes delivered by projects based on monitoring and reporting undertaken by project proponents at periodic intervals.  This could include accrediting independent third-party auditors to undertake this work.	N/A			
ISSUANCE	Government issues biodiversity credits into the registry accounts held by project proponents for the verified biodiversity outcomes achieved by the projects during each reporting period.  Biodiversity credits are issued with a unique identifier for tracking purposes.	N/A			

ELEMENT	MARKET ADMINISTRATION	MARKET ENABLEMENT
TRANSACTION	Government registry infrastructure is designed to enable the transfer of biodiversity credits to be recorded in the registry.  Government would need to determine when designing the scheme whether a secondary market for biodiversity credits will be allowed. Doing so provides for more liquidity in the market, but increases market complexity.  Government may act as a buyer or offer a floor price for biodiversity credits to support the market in its initial stages.	Government may act as a buyer or offer a floor price for biodiversity credits to support the market in its initial stages.
RETIREMENT	Government registry infrastructure is designed to enable credits to be retired when entities make a claim about the benefit to nature and biodiversity that underpins the biodiversity credit.  Government releases guidance to the NZ market on the appropriate claims to be made by purchasers of biodiversity credits generated under the scheme.  Government may wish to create a public tracker to transparently demonstrate how entities' contributions through biodiversity credits are contributing to national nature and biodiversity-related goals.	Government releases guidance to the NZ market on the appropriate claims to be made by purchasers of biodiversity credits.

#### 3.2.2 KEY BARRIERS TO A VOLUNTARY BIODIVERSITY CREDIT MARKET IN NZ

Given the nascency of voluntary biodiversity credit markets globally, our analysis of the key barriers to scaling voluntary biodiversity credit schemes in NZ is derived from stakeholder engagement conducted with a number of relevant entities in the NZ market, research into existing schemes, guidance and thought leadership on best practice approaches, and the Pollination team's extensive engagement globally on these topics.

The core barriers, from both a demand and supply perspective, reflect the nascency of the market.

#### (a) Demand barriers

PUBLIC AWARENESS	A core barrier to demand for biodiversity credits is the current lack of public, corporate, and investor awareness of mechanisms available.	
BUSINESS CASE FOR PURCHASE AT SCALE	While entities face increasing pressure to disclose their impacts and dependencies on nature, and to manage and mitigate associated nature risks, that pressure is yet to translate into a clear business case for investment in voluntary biodiversity credits.	
CASE AND CLAIMS  There is not yet clarity in relation to the use case and claims associated with the purchase of voluntary biodiversity credits.		
CLARITY ON METRICS	Clarity in the metrics that underpin biodiversity credits, and alignment of those metrics with business priorities, will be required for large-scale demand.	
SUPPLY	Given the nascency of voluntary biodiversity credit markets, supply of credits is limited. This is a barrier to widespread demand because it contributes to a lack of public awareness (see above).	

#### (b) Supply barriers

LACK OF STRONG DEMAND SIGNALS	As noted above, there are not yet strong demand signals for voluntary biodiversity credits. This is a fundamental barrier to the supply of biodiversity credits at scale in NZ (and globally).	
CONTERVAILING LAND USE CONSIDERATIONS	Supply of biodiversity credits will be constrained by landholder willingness to prioritise biodiversity projects instead of other land uses, including exotic forestry and agriculture.	
PUBLIC PERCEPTION AND STAKEHOLDER BUY-IN	By virtue of the nascency of voluntary biodiversity-credit markets, there is not currently widespread positive public sentiment or stakeholder buy-in.	
RESTRICTED METHODOLOGY OPTIONS	By virtue of the nascency of voluntary biodiversity-credit markets, options for methodologies to certify activities to generate biodiversity credits are limited and not well understood.	
ACCESS TO FINANCE	By virtue of the nascency of voluntary biodiversity-credit markets, they are not well understood by investors and financiers, restricting access to finance.	
ACCESS TO DATA	Voluntary biodiversity credits must be underpinned by high-integrity, scientifically-appropriate data sources. Methods to collect and collate this data with sufficient comparability for unitisation, and in a cost-effective manner, are not widely understood or adopted.	
KNOWLEDGE AND TECHNICAL CAPABILITY	Capacity building will be required to ensure the knowledge and technical capability to undertake projects to generate biodiversity credits is available. Tough this technical capability is likely to exist in NZ, it may not have been applied to biodiversity credit generation previously.	
LACK OF ACCOUNTING AND REGISTRY INFRASTRUCTURE	Clear, transparent, and straightforward accounting and registry infrastructure will be required.	
LACK OF CLARITY IN LEGAL RIGHTS TO BIODIVERSITY	Clarity in legal rights to biodiversity (and any other elements of nature unitised through credits) will be required to support uptake of projects generating biodiversity credits.	

#### 3.2.3 ADDRESSING BARRIERS TO ENTRY AND PARTICIPATION

We have identified a range of potential Government initiatives that will address the core demand and supply barriers to a well-functioning, high-integrity voluntary biodiversity credit market in NZ.

#### SUMMARY OF SOLUTIONS

SOLUTION	BARRIERS ADDRESSED	TIME AND EFFORT	IMPACT/ IMPORTANCE
SUPPLY			
Ensure any scheme is co-designed with iwi and informed by strong community stakeholder consultation)	<ul> <li>Public perception and stakeholder buy-in</li> <li>Countervailing land-use considerations</li> </ul>	High	High
Government demand for biodiversity credits and provision of a floor price for biodiversity credits	<ul> <li>Countervailing land-use considerations</li> <li>Lack of strong demand signals</li> <li>Access to finance</li> </ul>	High	High
Support development of relevant data sets	<ul><li>Access to data</li><li>Public perception and stakeholder buy-in</li></ul>	High	High
Government provision/ funding of registry infrastructure	<ul> <li>Public perception and stakeholder buy-in</li> <li>Lack of accounting and registry infrastructure</li> </ul>	High	High
Legislate to provide clarity on legal rights to biodiversity	Lack of clarity on legal rights to biodiversity	Medium	High
Fund/develop methodologies appropriate to NZ ecosystems	Restricted methodology options	Medium	Medium
Leverage existing initiatives and partnerships: Jobs for Nature, Biodiversity Incentives program, He Waka Eke Noa, Aotearoa Circle and Sustainable Business Network	<ul> <li>Public perception and stakeholder buy-in</li> <li>Countervailing land-use considerations</li> <li>Knowledge and technical capability</li> </ul>	Medium	Medium

SOLUTION	BARRIERS ADDRESSED	TIME AND EFFORT	IMPACT/ IMPORTANCE
DEMAND			
Mandatory natural capital accounting	<ul><li>Public awareness</li><li>Business case for purchase at scale</li></ul>	High	High
Ensure any scheme design is informed by consultation with NZ business	<ul> <li>Business case for purchase at scale</li> <li>Clarity in use case and claims</li> <li>Clarity on metrics</li> </ul>	Medium	High
Mandatory nature risk disclosure	<ul><li>Public awareness</li><li>Business case for purchase at scale</li></ul>	Medium	High
Public awareness campaign on state and role of nature	<ul><li>Public awareness</li><li>Business case for purchase at scale</li></ul>	Low	Medium
Provide clear guidance on use case and voluntary corporate claims	<ul><li>Business case for purchase at scale</li><li>Clarity in use case and claims</li></ul>	Low	Medium

#### **DETAIL ON SUPPLY SOLUTIONS**

## (a) Ensure any scheme is co-designed with iwi and informed by strong stakeholder consultation

Generating a strong pipeline of supply of voluntary biodiversity credits will require widespread adoption of project activities by landholders and iwi. While potentially an effective mechanism to recruit additional finance to support positive nature outcomes, the unitisation and pricing of nature are sensitive. Some have a philosophical opposition to 'putting a price' on nature.

If NZ Government decides to play a market administration role, to ensure that any voluntary biodiversity credit scheme for NZ does not face a negative public response it will be important to ensure that:

 iwi are intimately involved in the design of the scheme to ensure that it is well aligned with iwi values, beliefs and knowledge systems regarding nature;

- local communities and landholders are actively consulted in designing the scheme to ensure it is practical and effective at an onground level; and
- public messaging is clear and direct in positioning voluntary credit markets as one of a range of options to support positive nature and biodiversity outcomes for NZ.

# (b) Government demand for biodiversity credits and provision of a floor price for biodiversity credits

Strong demand signals will be required to support supply of voluntary biodiversity credits at scale. The NZ Government establishing itself as a source of demand would be valuable in the early stages of the market. This could be done in two key ways:

 Government provides a floor price for biodiversity credits: this would help to provide the market and project proponents with price certainty as the market develops. As a policy measure, it would be designed to become redundant as voluntary demand from entities develops to surpass the floor price. This has been a successful strategy in the Australian VCM, with the Government entering into option contracts for the purchase of ACCUs to provide price certainty to project developers, who are then free to seek a higher price from private buyers.

 Government establishes itself as a source of demand: Government could seek to purchase biodiversity credits directly as a means to incentivise activities on private landholdings. The biodiversity incentives program announced alongside the exposure draft of the National Policy Statement for Indigenous Biodiversity could potentially be leveraged for this purpose.

Revenue to finance the Government's purchase of biodiversity credits could be gained through, for instance, a nature/biodiversity tax on entities relative to their contributions to the key drivers of negative nature outcomes, or a tourism levy payable by foreign tourists.

#### (c) Support development of relevant data sets

The generation of biodiversity credits relies on high-quality, reliable data. Government can play a role in building out national data sets and making them available to project proponents to underpin the issuance of biodiversity credits.

#### (d) Government provision/funding of registry infrastructure

A well-functioning biodiversity-credit market in NZ will require registry infrastructure. As noted in section 3.2.1, Government could either establish or help to fund the establishment of registry infrastructure for a voluntary biodiversity-credit scheme or schemes. This infrastructure will help to provide confidence to scheme participants and lighten the administrative burden for project proponents.

#### (e) Legislate to provide clarity on legal rights to biodiversity

For project proponents to have certainty in undertaking biodiversity credit-generating projects, the legal status of rights to make claims about biodiversity (and the definition of biodiversity in that context) must be clear. Government can provide this clarity through relevant laws and regulation. Obviously, this process would need to be handled carefully to

ensure all stakeholder interests are considered.

#### (f) Fund or develop methodologies appropriate to NZ ecosystems

The generation of biodiversity credit supply will be contingent on the set of methodologies available to market actors and their appropriateness to the NZ context. As noted in section 3.2.1, the government could develop or fund the development of methodologies applicable to the generation of biodiversity credits.

There is a significant amount of activity to support indigenous biodiversity already occurring on privately owned land in NZ. The development of methodologies for voluntary biodiversity crediting should be informed by an audit of existing activities to ensure there is strong alignment.

#### (g) Leverage existing initiatives and partnerships

There are a number of existing Government initiatives that could be leveraged to help establish a biodiversity-credit market in NZ.

#### (i) Jobs for Nature

The Jobs for Nature initiative is well aligned with the activities and capabilities required to underpin biodiversity-credit supply. Building on the success of the program, the settings of that funding package could be designed to align with a biodiversity-credit scheme.

(ii) Biodiversity-incentives program under the National Policy Statement for Indigenous Biodiversity

A set of pilot biodiversity incentives have been announced to support the forthcoming National Policy Statement for Indigenous Biodiversity. This program could be leveraged to support the generation of biodiversity credits.

#### (iii) He Waka Eke Noa (HWEN)

Pollination understands that there is appetite to expand the HWEN to address outcomes beyond carbon sequestration. This program would be well-positioned to support biodiversity credit generation for on-farm improvements to biodiversity outcomes.

There are also a number of existing partnerships that could be built upon to support the development of a voluntary biodiversity credit market in NZ.

#### (iv) Aotearoa Circle

NZ Government has a partnership with the Aotearoa Circle and is involved with its work on Taskforce for Nature-related Financial Disclosures (TNFD) preparedness. This forum may be valuable to leverage when consulting on corporate interest in a voluntary biodiversity credit market.

#### (v) Sustainable Business Network

NZ Government has a partnership with the Sustainable Business Network and is supporting its Nature Regeneration program. Again, this existing partnership could be helpfully leveraged to inform and/or support the development of a voluntary biodiversity credit market in NZ.

#### **DETAIL ON DEMAND SOLUTIONS**

#### (h) Mandatory natural capital accounting

Requiring corporations to monitor and report on the state of nature within their sphere of control through the preparation of natural capital accounts would increase awareness of adverse impacts on nature caused by a business' direct operations (if there is a negative trend over time), and also increase stakeholder scrutiny if that information is made publicly available.

This would indirectly increase pressure on corporates to demonstrate they are also contributing to positive outcomes for nature, which could be done via the purchase of biodiversity credits (as described above).

#### (i) Ensure any scheme design is informed by consultation with NZ business

Biodiversity is complex and there are a broad set of metrics that could be measured and verified to underpin biodiversity credits.

If NZ Government decides to play a market administration role, it will be important to ensure that the factors accounted for in the creation of biodiversity credits are aligned with business priorities and disclosures.

This could include ensuring there is alignment with the TNFD and guidance from the SBTN.

#### (j) Mandatory nature risk disclosures

Requiring corporations to make mandatory TNFD disclosures would increase internal awareness of adverse impacts on nature caused by a business' activities across both its direct operations and supply chains, and also increase stakeholder scrutiny of that information as the information would be publicly available.

This would indirectly increase pressure on corporates to demonstrate they are investing in positive outcomes for nature to mitigate their exposure to systemic nature-related risks, which could be done via the purchase of biodiversity credits (as described above).

#### (k) Public awareness campaign on state and role of nature in NZ's economy

A core precursor to demand for voluntary biodiversity credits is strong public and corporate understanding of the:

- state and trends for nature and biodiversity in NZ;
- link between nature and NZ's economic prosperity, including businesses' dependency on nature; and
- impact of business activities in NZ on nature.

NZ Government can play a key role in commissioning research on these points and communication strategies targeted to the private sector to ensure they are well understood.

The Australian Conservation Foundation recently released a piece of analysis examining the dependency of the Australian economy on nature, which could be valuable to replicate for NZ.<sup>33</sup> The report, The nature-based economy: How Australia's prosperity depends on nature, found that approximately 49% of Australia's GDP has a moderate to very high direct dependence on nature.<sup>34</sup>

<sup>33</sup> Australian Conservation Foundation, Pollination, Australian Ethical, The nature-based economy: How Australia's prosperity depends on nature, 6 September 2022, available at: <a href="https://assets.nationbuilder.com/auscon/pages/20826/attachments/original/1665019942/2208\_Nature\_NatureDependencyReport\_FINAL-2.pdf?1665019942">https://assets.nationbuilder.com/auscon/pages/20826/attachments/original/1665019942/2208\_Nature\_NatureDependencyReport\_FINAL-2.pdf?1665019942</a>

Relatedly, NZ Government can play a role in positioning voluntary biodiversity credit markets as an important tool for private sector, philanthropic and government entities to demonstrate their contribution to protecting, restoring and better managing NZ's nature and biodiversity, and therefore supporting the resilience of NZ's economic prosperity.

#### (I) Provide clear guidance on use case and voluntary corporate claims

Corporates are generally wary of making sustainability claims that could expose them to allegations of greenwashing. Given the nascency of voluntary biodiversity-credit markets globally, and the lack of established market norms, corporates will be particularly sensitive to this.

The Government providing clarity on the appropriate use case for biodiversity credits and their role in contributing to 'nature-positive' goals would be valuable in establishing market confidence.

Further, the Government could release guidance on the appropriate and high-integrity claims corporates can make on the basis of purchasing and retiring biodiversity credits. Again, this would help to underpin corporate confidence and minimise concerns regarding greenwashing allegations.

Any claims guidance developed by Government should be aligned with the Commerce Commission and its efforts in relation to preventing greenwashing.



# Accelerating investment in biodiversity via co-benefits to carbon credits in NZ



# 4.1.1 ADDRESSING KEY BARRIERS TO INVESTMENT IN BIODIVERSITY CO-BENEFITS TO CARBON CREDITS IN NZ<sup>35</sup>

New Zealand Emission Units (NZUs) with biodiversity co-benefits have historically garnered higher prices than carbon-only NZUs, driven by buyers looking to purchase carbon credits with both carbon and biodiversity-related benefits. This differentiation in price does not exist now due to the high price from all NZUs within the ETS.

However, certifying co-benefits of certain carbon-sequestration methods and pricing these carbon credits accordingly could further incentivise action by landowners to enter the carbon market, and produce carbon credits by protecting, regenerating or differently managing parts of their land. This may require further methodologies to be certified and verified, and funding models to be developed.

<sup>35</sup> The barriers provided in this Summary Report pertain specifically to investment in carbon credits with biodiversity co-benefits. Note that Pollination's advice to MfE also identified a range of barriers relevant to NBS carbon credits in NZ generally. That advice has not been included in this Summary Report.

#### (A) DEMAND BARRIERS FOR BIODIVERSITY CO-BENEFITS TO CARBON CREDITS

#### LACK OF AWARENESS AND SUPPLY

We understand that NBS projects beyond plantation (and especially indigenous) forestry have been limited in NZ. As a result, there has not been an extensive supply of carbon credits with biodiversity co-benefits, resulting in poor market awareness (and limited demand).

#### LOWER INTERNATIONAL PRICES

VCM participants can purchase carbon credits on the international market at a significant discount to NZUs. It is possible to source carbon credits with certified biodiversity co-benefits internationally. These price discounts reduce demand for NZ carbon credits with biodiversity co-benefits.

#### (B) SUPPLY BARRIERS FOR BIODIVERSITY CO-BENEFITS TO CARBON CREDITS

CO-BENEFIT CERTIFICATION METHODOLOGIES Although there are some international schemes available to certify biodiversity co-benefits, there may be a need for measurement, verification and certification methodologies that are specifically applicable in the NZ context.

KNOWLEDGE, CAPABILITY, AND PERCEPTION Given the focus on permanent forestry projects in NZ to date, there has been limited supply-side experience with other forms of NBS carbon projects. This, in turn, has limited supply of carbon credits with biodiversity co-benefits.

# 4.1.2 ROLE OF NZ GOVERNMENT IN SUPPORTING INVESTMENT IN BIODIVERSITY CO-BENEFITS

NZ Government can play a valuable role in overcoming these barriers and supporting investment in biodiversity co-benefits to NBS carbon credits. Pollination's advice identified a range of carbon market enablers and solutions to support the supply of, and demand for, NBS carbon credits in NZ generally that are not contained in this Summary Report. Our recommendations with respect to facilitating investment in biodiversity co-benefits within the NZ carbon market are provided at Section 1.3 above.



#### For further information please visit pollinationgroup.com

#### DISCLAIMER

Pollination acknowledges the Traditional Owners of the land on which we work and live, and recognises their continuing connection to land, water and culture. We pay respect to Elders past and present.

This material has been prepared by Pollination Global Holdings Limited (UK) ('Pollination Group', or 'we') and is for general information purposes only and is not an offer, inducement, solicitation or invitation of any kind for the purchase or sale of any financial product or service and under no circumstances is it to be construed as a prospectus or an advertisement. The material has been prepared for wholesale, institutional and professional clients and is not intended to provide you with financial, legal or tax advice and does not take into account your objectives, financial situation or needs. Although we believe that the material is correct, no warranty of accuracy, reliability or completeness is given, except for liability under statute which cannot be excluded and no reliance may, nor should, be placed upon the contents of this material by any person for any purposes whatsoever. Please note that past performance is not indicative of future performance and that no guarantee of performance, the return of capital or a particular rate of return, is given. Pollination Group may hold positions in investments described in this material. This material is proprietary to Pollination Group. The recipient of this material agrees not to reproduce or distribute this material in whole or in part and not to disclose any of its contents to any other person.

If you are subject to Australian law, this material is issued by Pollination Capital Partners Pty Limited (ACN 631 476 956) (CAR No. 1282843) ('Pollination Australia') as a corporate authorised representative of Lanterne Fund Services Pty Ltd (AFSL 238198) and TEM Financial Services Pty Ltd (AFSL 430036). Pollination Australia is authorised to provide financial services to wholesale clients (within the meaning of the Corporations Act 2001). Pollination Australia is part of the Pollination Group.

This material is not intended for use by any U.S. Person (as defined under the U.S. Securities Act 1933) and is not for distribution and does not constitute an offer to or solicitation to buy any securities in the USA.

Please consider the environment before printing this material.

© 2022 Pollination Group