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SUBMISSION ON “HELPING NATURE AND PEOPLE THRIVE: EXPLORING A BIODIVERSITY CREDIT SYSTEM FOR AOTEAROA NEW ZEALAND – DISCUSSION DOCUMENT”

on behalf of

THE ENVIRONMENTAL DEFENCE SOCIETY, PURE ADVANTAGE and WWF-NEW ZEALAND

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Introduction

1. This is a joint submission on behalf of the Environmental Defence Society (**EDS**), Pure Advantage and WWF-New Zealand (**WWF-NZ**) (together, ‘we’) on “*Helping nature and people thrive: exploring a biodiversity credit system for Aotearoa New Zealand – Discussion Document*” (**Discussion Document**), prepared by the Ministry for the Environment (**MfE**) and the Department of Conservation (**DOC**).
2. EDS is a non-for-profit, non-governmental national environmental organisation. It was established in 1971 with the objective of bringing together the disciplines of law, science, and planning to promote better environmental outcomes in resource management.

3. EDS has been significantly involved in advocating for good environmental outcomes for indigenous biodiversity in Aotearoa New Zealand. It has produced numerous publications on the subject, most notably “Vanishing Nature: facing New Zealand’s biodiversity crisis”;¹ “Pathways to Prosperity: Safeguarding biodiversity in development”;² “Banking on Biodiversity”;³ and “Reforming the Wildlife Act 1953: An Opportunity for Transformational Change of Aotearoa New Zealand’s Biodiversity Law”.⁴ Banking on Biodiversity is particularly relevant to this submission, as it explored how habitat banking could contribute to the management of New Zealand’s biodiversity and potentially play a useful role in formalising an offsetting regime.
4. EDS was also heavily involved in the development of national policy for indigenous biodiversity. Its representatives were on the Biodiversity Collaborative Group, which developed the draft version of the National Policy Statement for Indigenous Biodiversity 2023 (**NPS-IB**), and on the Stakeholder Reference Group for the New Zealand Biodiversity Strategy.
5. Pure Advantage is a registered charity led by business leaders and supported by a collective of researchers and writers who investigate, communicate and promote opportunities for Aotearoa New Zealand to fulfil its potential for green growth.
6. WWF-NZ is a not-for-profit, environmental non-government organisation, and part of the international environmental organisation WWF (World Wide Fund for Nature). Its mission is to stop the degradation of the planet’s natural environment and to build a future in which humans live in harmony with nature. WWF-NZ brings together individuals, communities, businesses, and government to develop and implement innovative, evidence-based solutions.
7. Globally, WWF has been a leading voice on the development of tools and approaches to support a nature-positive future, particularly through the negotiation of the Kunming-Montreal Global Biodiversity Framework, as a co-founder of the Taskforce on Nature-related Financial Disclosures, and as a member and convenor of the Nature Positive Initiative.⁵ In Aotearoa, WWF-NZ advocates for the establishment of the enabling conditions required to support our domestic transition to a nature-positive future, and supports the uptake of nature-positive practice by industry with tools like the WWF Biodiversity Risk Filter.⁶

Summary of submission

8. The Discussion Document explores a biodiversity credit system for Aotearoa New Zealand. The need for it is premised on two things: indigenous biodiversity in Aotearoa New Zealand is in a dire state, and current public and private investment is falling short of addressing the issue. The biodiversity credit system is proposed as a mechanism by which additional funds can be channelled into ‘nature-positive’ activities.
9. Establishing a system that facilitates the flow of economic resources to landowners undertaking conservation activities is well overdue.

¹ Brown, M et al (2015) *Vanishing Nature: facing New Zealand’s biodiversity crisis*, Environmental Defence Society, Auckland, available at https://eds.org.nz/wp-content/uploads/2023/02/EDS_Vanishing-Nature.pdf

² Brown, M (2016) *Pathways to Prosperity: Safeguarding biodiversity in development*, Environmental Defence Society, Auckland, available at https://eds.org.nz/wp-content/uploads/2023/02/EDS_Pathways-to-Prosperity.pdf

³ Brown, M (2017) *Banking on Biodiversity; the feasibility of biodiversity banking in New Zealand*, Environmental Defence Society, Auckland, available at https://eds.org.nz/wp-content/uploads/2022/01/Banking-on-Biodiversity_f.pdf

⁴ Koolen-Bourke, D, Peart R and Schlaepfer S, (2023) *Reform of the Wildlife Act 1953: An Opportunity for Transformational Change of Aotearoa New Zealand’s Biodiversity Law*, Environmental Defence Society, Auckland, available at https://eds.org.nz/wp-content/uploads/2023/07/Wildlife-Act-Report_FINAL.pdf

⁵ <https://www.naturepositive.org/news>

⁶ <https://riskfilter.org/biodiversity/home>

10. A mechanism that enables this financing at scale has enormous potential and could, if designed well, turn the tide on biodiversity loss.
11. A biodiversity credit system *may* have potential in this country. However, the mechanism is relatively new and evidence of its efficacy overseas is still emerging. More work is required before progressing it further.
12. In that regard, we consider that other options not explored in the Discussion Document may provide a better, or complementary, solution. A biodiversity *incentives* scheme has significant potential as a supplementary measure to support our efforts to address the twin crises of biodiversity loss and climate change.
13. The Discussion Document does not seem to allow for exploration of such options. It is narrowly crafted around the biodiversity credit system and carries risk in terms of the commodification of nature and compliance with te Tiriti o Waitangi. We consider there is merit in the government continuing its investigation of a biodiversity credit system, but also exploring a wider range of options to achieve the stated objectives.

Nature loss and why it matters

14. As a result of human activity, species are now going extinct at 1,000 to 10,000 times the natural rate.⁷ Globally, around 1 million species are already threatened with extinction, many within decades.⁸ Aotearoa New Zealand is no exception to this global picture. It has the highest proportion of threatened species in the world, with around 4,000 species considered threatened with extinction or at risk of becoming threatened.⁹
15. This species profile is due to our country's unique biogeographical conditions and high rate of endemism. Since human arrival, 59 species of bird have gone extinct, more than in any other country in the last 1,000 years.¹⁰
16. Habitat loss is an equally troubling story. More than 90% of our wetlands have been lost since human arrival. Indigenous forests, which once covered 80% of our landmass, now cover little over a quarter.¹¹ Since human settlement, the condition of marine habitats has significantly declined.¹²
17. The main drivers for biodiversity losses are decline and fragmentation of natural habitats due to land use change and intensification through urbanisation or agricultural development and impact of introduced species. Climate change effects are driving further losses, with localised extinctions already being seen.¹³
18. Protecting and maintaining indigenous biodiversity is essential for its intrinsic value, but also for the benefits it provides to humans. The services provided by indigenous biodiversity and

⁷ Joy M and Mclean S (2019), Biodiversity crisis in Aotearoa New Zealand', New Zealand Sustainable Development Goals, 15 April 2019, <https://www.sdg.org.nz/2019/04/15/biodiversity-crisis-in-aotearoa-new-zealand/>

⁸ Díaz et al, (2019) Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, IPBES, Germany

⁹ Te mana o te taiao: Aotearoa New Zealand biodiversity strategy 2020, Department of Conservation Wellington; Joy M and Mclean S, 2019

¹⁰ Ibid, at 17

¹¹ Ministry for the Environment and Stats NZ (2019), *New Zealand's Environmental Reporting Series: Environment Aotearoa 2019*, at 21

¹² Ministry for the Environment and Stats NZ (2022), *New Zealand's Environmental Reporting Series: Our marine environmental 2022*, at 10

¹³ Ministry for the Environment and Stats NZ (2023), *New Zealand's Environmental Reporting Series: Our atmosphere and climate 2023*, at 6

ecosystems go to the very heart of continued human existence. We rely on nature for water and air filtration, pollination, carbon sequestration, temperature regulation and much more. As the Discussion Document rightly states “[w]hen nature is in trouble, so are we.”¹⁴

19. Further, indigenous biodiverse ecosystems have the potential to shield us from the worst consequences of climate change as they absorb some greenhouse gases and act as a buffer against extreme weather events and other climate impacts.¹⁵ The continuing loss of biodiversity and degradation of ecosystems will weaken their ability to provide these benefits. *We are approaching environmental tipping points in many areas, beyond which large and often irreversible changes will be unavoidable.*¹⁶
20. Biodiversity is also central for ensuring social, economic and cultural well-being, as well as its contribution to preserving tikanga, mātauranga and te ao Māori.

Biodiversity funding deficit

21. Internationally, there is a significant gap between the amount of money spent on biodiversity conservation and what is actually required.¹⁷ Some estimates put the global biodiversity funding gap at USD \$598-824 billion per year by 2030. The UN Environment Programme “State of Finance for Nature” report predicts a USD \$4.1 trillion financing gap in nature by 2050.¹⁸ Only fundamental system shifts in financial flows to biodiversity conservation will avoid catastrophic tipping points of biodiversity loss that will have devastating impacts on the global economy.
22. The situation is no different domestically. Current public and private investment is not keeping up with the task at hand, as reflected in the abysmal state of our indigenous biodiversity. Financial constraints are clearly hindering efforts to turn things around. We cannot just continue to rely on government funding and the goodwill of landowners to solve the biodiversity crisis.¹⁹ Something more is required if this country is to adequately protect, maintain and restore biodiversity on both public and private land.
23. There is growing recognition in the private sector that biodiversity loss is a business risk. USD \$44 trillion of value generation, representing more than 50% of global GDP, is moderately or highly dependent on nature, biodiversity and the services it supports. With this recognition comes an *opportunity for the private sector to play a role in ensuring its own resilience, by contributing to the conservation and restoration of biodiversity*. A biodiversity credit system is one potential mechanism for this, but it is not the only one.

Narrow focus on the potential of a biodiversity credit system

24. The Discussion Document focuses primarily on a biodiversity credit system as the solution to bridging the funding gap and achieving nature-positive outcomes. Although Ministry officials advised during stakeholder engagement that ‘everything is still on the table’, the Discussion Document does not actively prompt feedback on other potential approaches. All of the consultation questions relate to a biodiversity credit system, and the Discussion Document goes

¹⁴ Discussion Document, at 21

¹⁵ Ministry for the Environment and Stats NZ, 2023, *New Zealand’s Environmental Reporting Series: Our atmosphere and climate 2023*, at 7

¹⁶ Ministry for the Environment and Stats NZ, 2023, *New Zealand’s Environmental Reporting Series: Our atmosphere and climate 2023*, at 7

¹⁷ For example, as of 2019, current spending on biodiversity conservation was between US\$124 and \$143 billion per year, against an approximated annual need of US\$722 - \$967 billion per year to stop decline in global biodiversity between now and 2030, 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, at 12

¹⁸ <https://www.unep.org/news-and-stories/speech/time-unlock-financing-biodiversity-protection-now>

¹⁹ Discussion Document, summary

quite a way in terms of the development of such a system, seeking feedback on the principles which should underpin it, its necessary components, how it might be structured and its alignment with other systems.

25. Biodiversity credit systems have gained traction internationally as economic instruments that can be used to finance actions that result in measurable positive outcomes for biodiversity (species, ecosystems, genes). Momentum on biodiversity credits has increased significantly in recent months, with their inclusion in Target 19 of the Kunming-Montreal Global Biodiversity Framework, and a growing number of biodiversity credit initiatives and methodologies have been created.
26. A biodiversity credit system *may* have potential in this country. However, the mechanism is relatively new and evidence of its efficacy overseas is still emerging. More work is required before progressing it further.
27. We submit that the Government needs to engage more widely on options for transformational 'green financing', while still progressing investigation of a biodiversity credit scheme. The Discussion Document is an attempt to explore one option in some detail, but it is pre-emptive of other (perhaps better or complementary) opportunities.
28. We emphasise this should not be interpreted as justification for delay on a biodiversity funding mechanism. The biodiversity crisis unfolding at pace does not allow for slow or incremental action. The Government needs to take bold steps to incentivise biodiversity protection, maintenance and restoration at scale and with urgency.

High-level concerns with a BCS

29. The Discussion Document sets out what is a biodiversity credit system. In summary, we understand it to be a system which establishes a biodiversity 'credits' market, whereby nature-positive activities generate biodiversity credits which can be bought or sold. If one was to follow the money, this means that people and organisations can fund (through the purchase of a credit) landowners (who are selling those credits) to reward their activity.
30. Of greatest concern in the prospective settings of a biodiversity credit system is that nature is non-fungible, it is mostly unique to time, space, and type.²⁰ Thus it is almost impossible to price. It is fundamentally different to carbon, which can be unitised, and analogies between the two should not be drawn.
31. Further, we strongly oppose any biodiversity credit system that integrates offsetting (an option put forward in the Discussion Document). Offsetting is now an established resource management principle. It is a measure of last resort, and should only be used when adverse effects cannot be avoided, minimised or remedied. It is intended to achieve a net gain in type, amount and condition of indigenous biodiversity compared to that lost, demonstrated by a like-for-like quantitative calculation.
32. Obtaining financial support in the form of a biodiversity credit for actions undertaken in the course of offsetting is a form of 'double dipping'. In the resource management context, offsetting is redress for environmental harm. It is the *quid pro quo* for being able to undertake environmentally damaging activity. The benefit flowing to the landowner is the right to

²⁰ Brown, M et al (2015), *Vanishing Nature: facing New Zealand's biodiversity crisis*, Environmental Defence Society, Auckland at 23

undertake the activity; any further benefit applied would result in a windfall. *Biodiversity credits are not intended to be offsets for damage, but investments in a nature-positive future.*

33. Also, offsetting has the potential to raise significant issues around the ‘trading-off’ of different habitats and species against others. A biodiversity credit market should not accommodate such trade-offs for the reasons provided above; that nature is unique and cannot be commodified.

Learning from international experience

The Discussion Document does not examine in any detail how other jurisdictions have developed their respective biodiversity credit systems. We encourage the Government to initiate a second phase of research to delve deeper into international examples. As a result of our high level review of international systems, we consider the following to be particularly important considerations in the development of a domestic biodiversity credit system:

- (a) It is crucial to acknowledge that Aotearoa New Zealand faces a significant lack of biodiversity data and knowledge, particularly concerning specific taxa groups and ecosystems in terrestrial, freshwater and marine environments.²¹ Biodiversity data is key in the development of methodologies in other biodiversity credit systems.
- (b) Many international biodiversity credit systems are leveraging advanced technology and tools for the collection and storage of biodiversity data.
- (c) Long-term monitoring will play a pivotal role in ensuring an enhancement of biodiversity.
- (d) Methodologies should not exclude the kind of data collection that tangata whenua and local communities conduct, but rather embrace tangata whenua and local community monitoring efforts as an important part of the process. Data collected by tangata whenua and local communities can be combined with other data sources (including those deriving from external technology, such as remote sensing) and the full package of data can then be subject to third party verification to ensure rigour.
- (e) It is of crucial importance to get the right balance between monitoring burden and verification credibility. If the monitoring burden is too high, the majority of the 'credit' value will be taken up with monitoring effort, and it will be extremely difficult for the credit to achieve its intended biodiversity impact.
- (f) Several ongoing biodiversity credit systems use a third party for the monitoring, verification and reporting, thus fostering independence and accountability within the system.
- (g) Regulating the system can offer greater certainty to landholders and investors.
- (h) Any system introduced would need to address known weaknesses, allow for a sufficient margin of error, and explicitly consider inherent uncertainty.

A better way?

34. The Discussion Document talks about the growing interest in investing in nature, specifically by philanthropists and community groups and corporate and business interests. We do not think

²¹ See more in Department of Conservation (2020), *Biodiversity in Aotearoa an overview of state, trends and pressures*, Wellington

that these revenue streams, channelled through a biodiversity credit system, will be sufficient to breach the funding gap that currently exists for the protection and restoration of biodiversity.

35. Conversely, we see significant potential in carbon credits, generated from indigenous afforestation, financing biodiversity gains. Climate change and biodiversity loss are inextricably linked and need to be addressed simultaneously and synergistically. The Government has acknowledged that nature-based solutions present a cost-effective, multi-benefit opportunity.²² Using carbon credits generated from indigenous afforestation to achieve biodiversity gains will address both crises in tandem, by mitigating climate change (via carbon sequestration) and restoring biodiversity (through the planting and restoration of biodiverse indigenous forests).
36. Indigenous forests have the capacity to remove and store CO₂ over long time horizons. Their natural resilience and adaptive capacity are critical for achieving net-negative emissions from 2050 and beyond.²³ Indigenous forests also offer a pathway to reversing the decline of our indigenous flora and fauna by virtue of addressing a primary driver of human-induced extinction risk: habitat loss arising as a result of land use change. Indigenous afforestation and the restoration of extant native forests present a scalable nature-based solution that can help this country address the interconnected issues of climate change and biodiversity loss.
37. The challenge is that indigenous forests are slow and costly to establish in the short term. Thus scaling up a native afforestation sector will require up-front financial support. A biodiversity *incentives* scheme could be that mechanism, and might be easier to achieve at scale than a biodiversity credit system. Biodiversity grants could be provided to landowners to cover the cost of establishing their nature-positive biodiverse indigenous forests. Once established, carbon credits accrued through the Emission Trading Scheme could come into play and continue to incentivise biodiversity gains and help fund ongoing management over time.
38. Pure Advantage has developed a model based around this approach. Called *Recloaking Papatūānuku*, the model weaves climate and ecological resilience into our whenua. *Recloaking Papatūānuku* advocates for Crown-funded reforestation in return for receiving carbon credits generated as a preferred way forward.
39. The Discussion Document traverses integration of a biodiversity credit system and the carbon market. For example, the Discussion Document describes how a biodiversity credit system could complement the wider system, including the voluntary carbon market (**VCM**), noting that a VCM can offer biodiversity co-benefits that can be priced at a premium, whether the co-benefits are quantified or not.²⁴ Or that biodiversity credits / incentives could be 'stacked' or 'stapled' with carbon credits. For clarity, we consider that the two systems (carbon and biodiversity) *should be separate but complementary*.
40. Biodiversity and its intricacies necessitates a nuanced approach, and not every financing solution will be appropriate for each case. A number of different financing mechanisms are therefore likely to be required. That is another reason why the Government should broaden its focus beyond that of just a biodiversity credit system. *We recommend greater consideration of a biodiversity incentives scheme based on grants.*

²² See *Te Mana o te Taiao – Aotearoa New Zealand Biodiversity Strategy 2020* and the Chapter 4 in New Zealand's Emissions Reduction Plan

²³ The Environmental Defence Society, Pure Advantage and WWF New Zealand, 2023, Submission on Review of the New Zealand Trading Scheme, at 18

²⁴ Discussion Document, at 43

Engagement with tangata whenua and the treatment of Māori-owned land

41. Māori-owned land has a crucial role in supporting indigenous biodiversity. The proportion of indigenous forest that is chronically threatened (10 to 20% remaining vegetation cover) and at risk (20 to 30% remaining cover) is more prevalent on Māori-owned land compared to other private land. Māori-owned land encompasses approximately 33% of New Zealand's remaining indigenous vegetation cover, a substantial difference from the 8% found on other private land.²⁵
42. Structured well, a biodiversity funding mechanism has significant potential to enable the protection and restoration of indigenous biodiversity on Māori-owned land whilst simultaneously enabling iwi, hapū and whanau to realise value from that land – which remains largely under-developed as a result of systemic disadvantage. Ensuring a future biodiversity credit system or other incentives scheme meets this design requirement is critical to the Crown upholding its responsibilities under Te Tiriti o Waitangi.
43. To this end, we consider that a future biodiversity credit system must be designed to ensure tangata whenua and local communities are the primary beneficiaries of the credits, ensuring both biodiversity and socio-economic wellbeing benefits from the credit scheme. Relatedly, we consider that any system that is intended to encourage investment in projects to protect indigenous biodiversity must reflect the views, interests and knowledge of kaitiaki and the people who own most of the land where indigenous biodiversity remains.
44. We note that the Discussion Document recognises that te Tiriti o Waitangi will be critical for the design of a biodiversity credit system, including the support of te ao Māori and treatment of mātauranga Māori.²⁶ We suggest the Government must engage with iwi and hapū at the earliest stages of system design and development to ensure it appropriately reflects te ao Māori perspectives and interests (including those canvassed in “Ko Aotearoa Tēnei”, the seminal Waitangi Tribunal report in respect of the WAI 262 claim).²⁷ This includes countenancing the intrinsic relationship between tangata whenua and te taiao, and the connections iwi, hapū and whanau maintain with taonga species and ecosystems.
45. The NPS-IB recognises the unique relationship of Māori with Aotearoa's indigenous biodiversity and the role of tangata whenua as kaitiaki. We see great potential in using the creation of a biodiversity funding system to strengthen the relationship with Māori working side-by-side, and creating strong partnerships to ensure biodiversity protection and restoration occurs on Māori-owned land.
46. A great deal of conservation work for the restoration and enhancement of our indigenous biodiversity is carried out by local communities and tangata whenua as people ‘on the ground’. Their knowledge of the area, their understanding of specific environments and native and taonga species, and their service to nature are fundamental for the success of biodiversity conservation and restoration projects.
47. Of the international examples we've reviewed, the most effective biodiversity credit systems place at their core the engagement with local communities and Indigenous peoples, involving them both in the initial design of the system (i.e. Nature Repair Market) and in the establishment of biodiversity projects (i.e. Terrasos, South Pole-EcoAustralia Credits, ValueNature, Nature Repair Market).

²⁵ Biodiversity Collaborative Group (2018), *Report of the Biodiversity Collaborative Group*, New Zealand, at 19

²⁶ Discussion Document, at 22 and 32

²⁷ Waitangi Tribunal (2011) *Ko Aotearoa Tēnei: A Report into Claims Concerning New Zealand Law and Policy Affecting Māori Culture and Identity*

48. With this in mind, we urge the Government also to engage and collaborate with communities, conservation groups and tangata whenua involved in place-based biodiversity projects, recognising their valuable work and knowledge to create a comprehensive and equitable system. As noted by the Biodiversity Collaborative Group – “improved biodiversity outcomes will not be achieved without the critical link of empowering people.”²⁸
49. In this regard, we further submit that for the establishment of a biodiversity credit system, the Government should enable a collaborative policy development process in which participating parties jointly agree on the system purpose, outcomes, and particular framework.

Conclusion

50. It is beyond doubt that there is a strong need for a biodiversity financing system in this country. Provided key design parameters are met in a future system (no offsetting, benefits accrue in the right place, appropriate treatment of te Tiriti interests, engagement with local communities, etc), a biodiversity credits system may have potential. Consideration should also be given to potentially better, or at least complementary, options. Work on other options, and further investigation into a biodiversity credit system, should be prioritised.
51. The state of our indigenous biodiversity demands urgent action.

²⁸ Biodiversity Collaborative Group (2018), *Report of the Biodiversity Collaborative Group*, New Zealand, at 41