Taranaki Regional Council

AGENDA
Policy & Planning

Tuesday 10 October 2023, 10.30am

Policy and Planning Committee

10 October 2023 10:30 AM

Whakataka te hau

Karakia to open and close meetings

Whakataka te hau ki te uru	Cease the winds from the west
Whakataka te hau ki te tonga	Cease the winds from the south
Kia mākinakina ki uta	Let the breeze blow over the land
Kia mātaratara ki tai	Let the breeze blow over the ocean
Kia hī ake ana te atakura	Let the red-tipped dawn come with a sharpened air
He tio, he huka, he hauhu	A touch of frost, a promise of glorious day
Tūturu o whiti whakamaua kia tina.	Let there be certainty
Tina!	Secure it!
Hui ē! Tāiki ē!	Draw together! Affirm!

Nau mai e ngā hua

Karakia for kai

Nau mai e ngā hua	Welcome the gifts of food
o te wao	from the sacred forests
o te ngakina	from the cultivated gardens
o te wai tai	from the sea
o te wai Māori	from the fresh waters
Nā Tāne	The food of Tāne
Nā Rongo	of Rongo
Nā Tangaroa	of Tangaroa
Nā Maru	of Maru
Ko Ranginui e tū iho nei	I acknowledge Ranginui above and
Ko Papatūānuku e takoto ake nei	Papatūānuku below
Tūturu o whiti whakamaua kia tina	Let there be certainty Secure it!
Tina! Hui e! Taiki e!	Draw together! Affirm!

Date 10 October 2023

Subject: **Policy and Planning Committee Minutes – 29 August 2023**

Approved by: A D McLay, Director - Resource Management

S J Ruru, Chief Executive

Document: 3210353

Recommendations

That the Taranaki Regional Council:

a) takes as read and confirms the minutes of the Policy and Planning Committee meeting of the Taranaki Regional Council held in the Taranaki Regional Council chambers, 47 Cloten Road, Stratford on Tuesday 29 August 2023

b) notes the recommendations therein were adopted by the Taranaki Regional Council on Tuesday 19 September 2023.

Matters arising

Appendices/Attachments

Document 3201130: Minutes Policy and Planning – 29 August 2023.

Date 29 August 2023

Venue: Taranaki Regional Council Boardroom, 47 Cloten Road, Stratford

Document: 3201130

Present		C S Williamson	Chairperson
		D M Cram	
		S W Hughes	
		B J Bigham	
		D H McIntyre	
		A L Jamieson	
		C L Littlewood	(*ex officio)*
		N W Walker	(*ex officio)*
		E Bailey	Iwi Representative *(zoom)*
		P Moeahu	Iwi Representative
		G Boyde	Stratford District Council
		L Gibbs	Federated Farmers *(zoom)*
Attending	Mr	S J Ruru	Chief Executive
	Mr	A D McLay	Director - Resource Management
	Ms	A J Matthews	Director – Environment Quality
	Mr	D R Harrison	Director - Operations
	Ms	L Hawkins	Planning Manager
	Mr	F Kiddle	Strategy lead
	Mr	N Bradley-Archer	Policy Analyst
	Mr	C Woollen	Communications Adviser
	Miss	A Smith	Science Communications Adviser
	Mrs	M Jones	Governance Administrator
	Miss	N A Chadwick	Executive Assistant to Chief Executive

The meeting opened with a group Karakia at 10.35am.

Apologies: Were received and sustained from, B Haque, M Ritai, C Filbee,

1. Confirmation of Minutes Policy and Planning Committee 14 March 2023

Resolved

That the Taranaki Regional Council:

a) took as read and confirmed the minutes of the Policy and Planning Committee of the Taranaki Regional Council held at 10.30 on 18 July 2023 at Taranaki Regional Council 47 Cloten Road Stratford

b) noted the recommendations therein were adopted by the Taranaki Regional Council on Tuesday 7 August 2023.

Walker/Cram

2. Freshwater Update

2.1 Ms L Hawkins - Policy Manager, spoke to the memorandum to provide the Committee with an update of the Freshwater Implementation programme.

Resolved

That the Taranaki Regional Council:

a) received the August 2023 update on the freshwater implementation programme.

Hughes/Boyde

3. New Zealand Emission Trading Scheme Submission

3.1 Mr F Kiddle, Strategy Lead, spoke to the memorandum to seek the endorsement of the Committee on the consultation document for the Submission document – New Zealand Emissions Trading Scheme (NZ ETS) on the permanent forest category and the survey for Maximising Forest Carbon Programme.

Resolved

That the Taranaki Regional Council:

a) received the memorandum titled *New Zealand Emissions Trading Scheme Submission*

b) endorsed the submission in Attachment One addressing both the *Review of the New Zealand Emissions Trading Scheme* consultation and the *Redesigned NZ ETS Permanent Forest Category* consultation

c) endorsed the Council's response on the *Maximising Forest Carbon Programme* survey set out in Attachment Two

d) determined that this decision be recognised as not significant in terms of section 76 of the *Local Government Act 2002*

e) determined that it has complied with the decision-making provisions of the *Local Government Act 2002* to the extent necessary in relation to this decision; and in accordance with section 79 of the Act, determined that it does not require further information, further assessment of options or further analysis of costs and benefits, or advantages and disadvantages prior to making a decision on this matter.

Walker/Littlewood

4. National Statement for Indigenous Biodiversity 2023

4.1 Mr F Kiddle – Strategy Lead, spoke to the Memorandum to inform members of the Council's responsibilities relating to the *National Policy Statement for Indigenous Biodiversity 2023.*

Resolved

That the Taranaki Regional Council:

a) received this Memorandum entitled *National Policy Statement for Indigenous Biodiversity 2023*

b) noted that the *National Policy Statement for Indigenous Biodiversity 2023* came into effect on 4 August 2023

c) noted that the *National Policy Statement for Indigenous Biodiversity 2023 will have significant resourcing implications for the Taranaki Regional Council*

d) noted that the most immediate funding priority is to assist territorial authorities in identifying and mapping significant natural areas

e) noted that Council officers will develop an implementation plan for the *National Policy Statement for Indigenous Biodiversity 2023*

f) noted that, to the extent they wish to be involved, council officers will develop the implementation plan in partnership with iwi and the territorial authorities.

Cram/Hughes

5. Spatial Plan Gaps Report

5.1 Ms L Hawkins – Policy Manager, spoke to the Memorandum to present the committee with the final report by BECA for the Spatial Gap Analysis project.

Resolved

That the Taranaki Regional Council:

a) received the memorandum *Spatial Planning Gap Analysis Report*

b) noted the attached report from BECA - *Inputs to support spatial planning decision making (data and information gap analysis)*

c) noted a useful planning framework has been provided for Councils and Iwi to move forward on.

Williamson/Walker

6. National Direction of Greenhouse Gas Emissions from Industrial Process Heat

6.1 Ms L Hawkins - Policy Manager, spoke to the memorandum prepared by N Bradley-Archer - Policy Analyst, to provide the committee with an update of the recent release of the National Environment Standard (NES) and National Policy Statement (NPS) for Greenhouse Gas Emissions from Industrial Heat Process and the implications this will have on Council Operations.

Resolved

That the Taranaki Regional Council:

a) received this Memorandum, *National Direction for Greenhouse Gas Emissions from Industrial Process Heat*

b) noted the content of the NES-GGEIPH and NPS-GGEIPH (Appendix 1 and 2)

c) noted the implementation requirements for the Council associated with the NES-GGEIPH rules framework, amendments to the Regional Air Quality Plan and reporting requirements when requested by the Minister for the Environment as set out in the NPS-GGEIPH

d) endorsed the public notification requirements (Appendix 3) associated with the necessary amendments from the NPS-GGEIPH for Greenhouse Gas Emissions from Industrial Process Heat 2023 via s.55(2) and s.55(2A) of the Resource Management Act 1991.

Jamieson/McIntyre

There being no further business the Committee Chairperson, C S Williamson, declared the meeting of the Policy and Planning Committee closed with karakia at 11.35am.

Policy and Planning Chairperson: _____

C S Williamson

Date 10 October 2023

Subject: **Freshwater Implementation Report October 2023**

Approved by: A D McLay, Director - Resource Management

S J Ruru, Chief Executive

Document: 3209941

Purpose

1. The purpose of this memorandum is to provide the Committee with a Freshwater Implementation project update.

Executive summary

2. Set out in the memorandum is an update on the progress of implementing the Essential Freshwater package from central government. The memorandum focusses on the key tasks undertaken since the previous Committee meeting, and identifies risks associated with the project and achievement of the project timeframe.
3. The attached report focusses on the key streams of work associated with the essential freshwater package. This being policy development as part of the Natural Resources Plan, implementation of the Freshwater Farm Plan regulations and the communications and engagement timeline.

Recommendation

That the Taranaki Regional Council:

a) receives the October 2023 update on the freshwater implementation programme.

Background

4. This memorandum updates members on progress in implementing the Essential Freshwater Package. An implementation programme was previously presented to, and approved by the Committee. This report provides an overview on the progress of the work programme and provides an opportunity for discussion relating to progress and risks identified.

Discussion

5. The attached report (Attachment 1) provides a high level overview of the progress made in the past 6 weeks since the last Committee meeting, and those tasks to be undertaken

in the coming 6 weeks. It also identities risk associated with the programme, and a copy of the high level engagement strategy.

6. Key discussion points are included in this covering memorandum to draw Members attention to key areas of work.

Broader Engagement

7. On the 25th September engagement commenced on components of the essential freshwater policy package. The consultation period runs for 5 weeks until the 27 October. The content covered by the consultation includes the draft objective of Te Mana o Te Wai and the freshwater visions, values and environmental outcomes for each Freshwater Management Unit (FMU). The scientific reports on baselines support this consultation and are available.

8. As reported to the Committee in August the approach to consultation features the following elements:

   8.1. Discussion documents prepared on each FMU setting out a summary of the investigations to date and the detail to inform the consultation. The discussion documents also include the draft policy approach.

   8.2. Online survey – available for each FMU so the community can respond to the FMU of most interest to them, in their own time.

   8.3. Meetings:

   8.3.1. Community sessions targeting catchment communities and focussed on a FMU by FMU discussion. Held in various locations around the region.

   8.3.2. Special interest Group meetings - these have been broken into four areas – Industry and Commerce sector, Primary Sector, Advocacy Groups and Government bodies (central and local).

   8.4. The consultation period will be promoted and supported through a range of means including social media, Talking Taranaki article, promotion through industry bodies and Council's own networks.

9. The feedback received during the consultation phase will help to progress to the next stages of policy development, namely identifying limits and targets for the new plan, which will be the focus of consultation in the new year. The approach to consultation relating to the plan development for freshwater has been designed to take a staged approach.

   - Stage one (last year) – scene setting, values and vision aspirations.
   - Stage two (current) – testing what we heard in the first round as the information gathered has been progressed to draft visions, values and environmental outcomes. The scientific baselines have also informed this work and are available as part of this consultation.
   - Stage three (March / April 2024) – limits and targets setting, along with regional rule development.

10. The format of the consultation stages have been designed to respond to the purpose of each consultation stage and to focus on having high levels of engagement for the matters that are high-risk and where the rubber hits the road. For this reason stage three will be the most engagement heavy phase and will involve a number of face to face opportunities planned for around the region.

Working with iwi

11. Discussions with iwi have continued since the last meeting and have resulted in changes being made to the Pou Taiao Agreement. The changes focus on clarifying the role of the Pou Taiao positions, the deliverables that can be achieved for December 2024 notification of the Freshwater plans and a process to facilitate co-drafting going forward. The approach taken acknowledges that this piece of work focuses on just one part of an ongoing journey to establish a programme of work to implement Government direction and legislation. The development of the partnership between Council and iwi will need to continue to be fostered outside of the specific direction of this agreement.

12. In relation to working with iwi through this next stage of policy development a number of conversations have occurred over the past 6 weeks and will continue moving forward. These hui have focussed on parts of the policy development, discussion documents and baseline reports. Opportunities to discuss this work at the FMU level have been supported by Ngā iwi o Taranaki and as such a series of meetings have been set up. Engagement at the hapū level is being provided as requested by some hapū and will continue to be offered. Information obtained through these discussions will assist to further refine and update the draft framework.

Freshwater Farm Plans (FWFP)

13. At the July 2023 meeting the Committee endorsed a phasing approach to the rollout of the FWFP. This approach was taken so that Council would be ready to submit their proposed phasing to MfE when requested to inform the Order in Council required through the regulations. MfE have recently request this information from all phase three Councils, TRC included. Staff will submit the proposed phasing as per the July meeting to MfE ahead of the deadline of 16 October.

Financial considerations—LTP/Annual Plan

14. This memorandum and the associated recommendations are consistent with the Council's adopted Long-Term Plan and estimates. Any financial information included in this memorandum has been prepared in accordance with generally accepted accounting practice.

Policy considerations

15. This memorandum and the associated recommendations are consistent with the policy documents and positions adopted by this Council under various legislative frameworks including, but not restricted to, the *Local Government Act 2002*, the *Resource Management Act 1991* and the *Local Government Official Information and Meetings Act 1987*.

Iwi considerations

16. This memorandum and the associated recommendations are consistent with the Council's policy for the development of Māori capacity to contribute to decision-making processes (schedule 10 of the *Local Government Act 2002*) as outlined in the adopted long-term plan and/or annual plan. Similarly, iwi involvement in adopted work programmes has been recognised in the preparation of this memorandum. Specific discussions and engagement with iwi are referenced within the body of this memorandum.

Community considerations

17. This memorandum and the associated recommendations have considered the views of the community, interested and affected parties and those views have been recognised in the preparation of this memorandum.

Legal considerations

18. This memorandum and the associated recommendations comply with the appropriate statutory requirements imposed upon the Council.

Appendices/Attachments

3210835 – Freshwater implementation progress report October 2024.

Freshwater Implementation Project Report to Policy & Planning Committee

October 2023

	Progress in the last six weeks	Key tasks in the coming six weeks	Risks
National Policy Statement for Freshwater Management	• Review Pou Taiao Agreement and seek endorsement for any updates. • Finalise consultation material for the draft NOF consultation – including website updates, survey, SIG workshop. • Consultation period for draft NOF consultation begin and carry through to mid October. • Begin work on defining attributes for non-compulsory values – including a process to work with iwi. • Planning and commencing overall Target Attribute State process with science leads, initial focus on compulsory attributes. • Continuing work with iwi regarding Mahinga Kai – specifically the technical process and links with the NOF. • Finalise the architecture of the freshwater components of the NRP and begin drafting region wide provisions. • Review/finalise the nutrient SCAMP mitigations memo, lake water quality modelling report and threatened species report. Working Group on Freshwater Farm Plan process stood up in Council. Some initial conversations with iwi underway.	• Consultation period for draft NOF consultation running until 27 October – includes face to face meetings and an online component. • Continued conversations with Ngā iwi o Taranaki. Pou Taiao agreement focussing on conversation around what it means to give effect to TMOTW through rule development. Direct engagement with iwi and hapu focussing on the draft NOF development. • Refining attribute identification for all values, including conversation with iwi to identify attributes, particularly around Mahinga Kai. Additional attributes are being scoped to measure progress towards achieving environmental outcomes for non-compulsory values such as natural form and character, and fishing. • Planning and commencing overall Target Attribute State process with science leads, initial focus on compulsory attributes. • Begin drafting of region wide objective, policies and rule framework. • Review/finalise the nutrient SCAMP mitigations memo, lake water quality modelling report and threatened species report. • Interviews with farm owners and operators and industry bodies across the region to inform the economic assessment report. • Participation in regional sector response to implementing the RM reform consent duration package with has immediate effect (see paper to the Ops and Regs October Committee). Correspondence to consent holders underway. • The science team is continuing to building its evidence base for informing the target and limit setting process. This involves simulating a range of possible scenarios relating to different water allocation regimes and contaminant load reduction measures.	• Medium risk – Partnership with iwi. Risk that the timeframes, complexity of issues and the need to be working in an agile manner to develop the policy framework will impact on the partnership approach being fostered. Amendments to the Pou Taiao Agreement including the setting up of a steering committee mitigate this risk. • Medium risk – participation in the community engagement is low. Mitigated through continued promotion of process, community meetings switched to being held at various locations, targeted engagement with industry groups to lessen the load on individuals.
Freshwater Farm Plans	• Mapping out of and Project Plan. • Begin conversations with Ngaa Rauru • Standing up of internal working group to manage rollout. • Project and risk planning.	• Continued working group discussions to set project plan and implementation. • Engage with Assure Quality with regard to setting up training module requirements. • Set up discussions with Ngā iwi o Taranaki to develop an approach to matters including CCCV development, certifier & auditor training and engagement with the community.	• TBD based on project and risk planning.

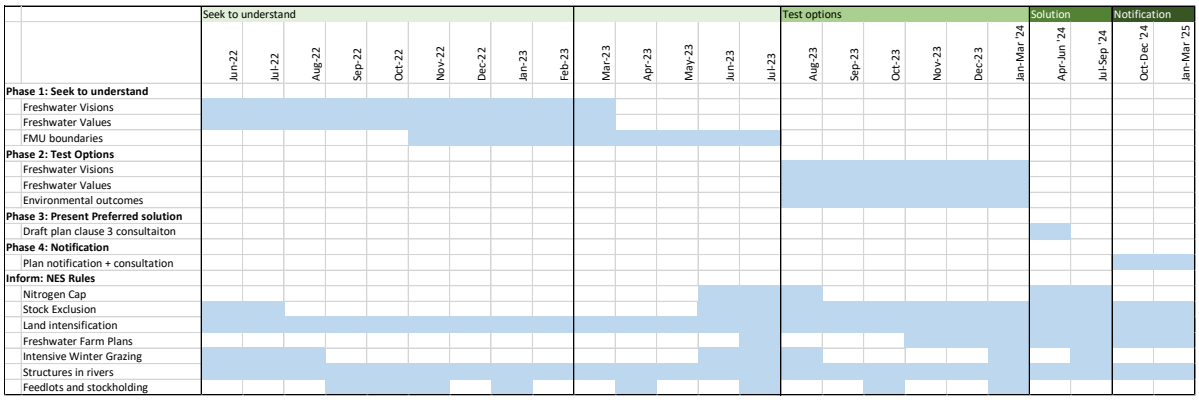
Engagement and Communication Strategy (Policy Development)

Set out below is a high level summary of the engagement approach and timing for key components supporting the policy development. Also noted is a high level timeline for key communications and engagement activity. Note this engagement plan does not including Council working with their tangata whenua partners, this process is subject to an alternative approach led with the Pou Taiao and Council's Iwi communications advisor.

Phase	Stage	What	Who	Timing*
Phase 1	**Seek to understand** Focus: gathering info from audiences about what's important to them	This phase has covered seeking input on a variety of high level freshwater matters including visions for Freshwater in Taranaki, identification of values for freshwater management and feedback on the proposed FMU boundaries. Input has been sought through a variety of mediums including online surveys, social pinpoint, face to face meetings and drop-in sessions (ie Stratford A&P show).	Community and special interest groups.	Apr 2021 to Mar 2023
Phase 2	**Test options** Focus: building and discussion on options that meet the region's wants and needs	There are two key steps in this process: 1. Testing the building blocks of the National Objectives Framework. A discussion document for each FMU is being prepared and will cover visions, values, baselines and environmental outcomes. 2. Testing limits and targets. Continuing to build the National Objectives Framework, this step will present options for the limits and targets for the new plan. This phase will also likely include region wide policy framework discussions.	1. Community – via online consultation opportunity. Special interest groups including industry bodies, catchment groups, government agencies, district councils, environmental NGOs – via workshop discussions. 2. Community and special interest groups. A series of face to face meetings around the region and opportunity for online feedback.	Aug 2023 to Mar 2024
Phase 3	**Present preferred solution** Focus: presentation of best options (draft plan)	A draft plan will be complied and through requirements of the RMA an opportunity for written feedback provided.	Clause 3 – listed in the RMA, and special interest groups.	Mid 2024
Phase 4	**Notification: Public submissions** Focus: formal communication relating to Plan notification	The Freshwater components of the NRP must be notified by December 2024. Once notified all interested parties will have the opportunity formally submit written submissions on the notified plan.	All interested parties.	End 2024 for notification. Submission period early 2025.

* Note the timing is indicative only, as a full programme review is currently being undertaken.

Essential Freshwater Engagement Strategy timeline



Date 10 October 2023

Subject: **NPS-FM Amendments to the Regional Fresh Water Plan for Taranaki**

Approved by: A D McLay, Director - Resource Management

S J Ruru, Chief Executive

Document: 3207526

Purpose

1. The purpose of this memorandum is to inform the Policy and Planning Committee on the amendments to the *National Policy Statement for Freshwater Management 2020* (NPS-FM) and subsequent amendments to the Regional Freshwater Plan for Taranaki (Freshwater Plan).

Executive summary

2. The Government released the *Essential Freshwater package* in August 2020, which came into effect on 3 September 2020. It included the NPS-FM and the *National Environmental Standards for Freshwater Management 2020* (NES-F).
3. Clause 1.7 of the NPS-FM required three clauses to be incorporated into the regional plan using section 55(2) and 55(2A) of the Resource Management Act 1991 (RMA) (i.e without using schedule 1 of the RMA). These transitional clauses were:
    - Clause 3.22(1) Natural inland wetlands
    - Clause 3.24(1) Rivers
    - Clause 3.26(1) Fish passage
4. In 2021, the Council amended the Fresh Water Plan to include these three clauses. Public notification of these amendments was made on 28 July 2021.
5. An update to the NPS-FM and NES-F was undertaken in late 2022 to better support implementation. The amendments took effect from 5 January 2023. These amendments included the expansion of clause 3.22(1) *Natural inlands wetlands*, which was one of the transitional provisions included in the Freshwater Plan in 2021. As per section 55(2) and 55(2A) of the RMA the Council must amend its Fresh Water Plan to insert the updated NPS-FM clause. Staff have made these amendments to the Freshwater Plan.
6. At the same time as updating the transitional provisions to the plan as per the NPS-FM, staff have noticed minor errors including formatting and numbering in the Fresh Water Plan that have now been corrected. These are minor inconsequential changes and do not

have an effect on the interpretation of the plan provisions. These amendments can be made through schedule 1 section 20A which allows amendments without using schedule 1 on an operative plan to correct any minor errors.

7. Section 55(2A) requires local authorities to give public notice of the amendments within 5 working days after making the amendments to its regional plan. Staff are now seeking endorsement of the public notification requirements as set out in Appendix 1.

Recommendations

That the Taranaki Regional Council:

a) receives this Memorandum entitled *Amendments to the Regional Fresh Water Plan for Taranaki*;

b) notes amendments made to the *National Policy Statement for Freshwater Management* 2020 by the Government;

c) notes the implementation requirements for the regional council associated with the NPS-FM including the insertion of transitional provisions to the Regional Freshwater Plan;

d) notes amendments made to the Regional Fresh Water Plan for consistency with the NPS-FM and to fix formatting and minor errors; and

e) notes the public notification requirements (appendix 1) associated with the necessary amendments required by the NPS-FM via s.55(2) and s.55(2A) of the Resource Management Act 1991.

Background

8. The Essential Freshwater package released in August 2020, included the NPS-FM 2020 and the NES-F 2020. Clause 1.7 *Application of section 55(2A) of the Act,* of the NPS-FM 2020 required clauses to be incorporated into the regional plan using section 55(2) and 55(2A) of the RMA (i.e without using schedule 1). These transitional clauses were:

   - Clause 3.22(1) Natural inland wetlands
   - Clause 3.24(1) Rivers
   - Clause 3.26(1) Fish passage

9. A review and subsequent amendments were undertaken on the NPS-FM and came into effect in January 2023.

10. Section 55(2A) to 55(2D) of the RMA set out processes for changing plans to give effect to an NPS. A council must amend its plans or policy statement to include specific objectives and policies or give effect to specific objectives and policies if an NPS directs. Where a direction is made under section 55(2A), councils must directly insert any objectives and policies without using the schedule 1 process (the comprehensive process for the preparation, change and review of policy statement and plans), but must publicly notify the changes within five working days of making them.

11. In 2021, utilising s.55 (2) the Council amended the Fresh Water Plan to include clauses 3.22(1), 3.24(1) and 3.26(1) into section 5A *Transitional provisions - NPS for Freshwater Management*. Public notification of these amendments was made on 28 July 2021.

12. The insertion of the transitional provisions provide guidance during consenting practices and support implementation of the NPS-FM. Transitional clauses remain until they are replaced with a new regional plan that addresses all relevant clauses in the NPS-FM.

NPS-FM (amendments 2023)

13. Following the gazettal of the of the *Essential Freshwater package*, the Ministry for the Environment received feedback through ongoing engagement with councils and stakeholders, resulting in further public consultation and the need to undertake amendments to better support implementation. The Government amended both the NES-F and NPS-FM. These amendments were notified on 8 December 2022 and took effect from 5 January 2023.
14. Amendments included consenting pathways made available for quarrying activities, landfills and cleanfill areas, mineral mining and some urban development. Consent pathways have high threshold tests that relate to the significance of the activity with impacts managed through the effects management hierarchy.
15. The definition of 'natural inland wetland' has also been clarified making it easier to undertake activities that maintain and restore wetlands and ensure only the areas intended are captured by the regulations.
16. Wetland provisions in the NES-F have been amended so that they no longer apply in the coastal marine area and instead will continue to be protected through the New Zealand Coastal Policy Statement and regional coastal plans. Wetlands in the coastal environment inland from the coastal marine area will remain subject to the NES-F.
17. The amendments to the NES-F and NPS-FM improve the clarity of policies, reduce complexity of drafting and, in some cases correct errors. The NES-F amendments have had immediate effect, and the NPS-FM amendments will need to be considered as part of future policy development processes.

Updated transitional provisions

18. As part of the amendments to the NPS-FM clause 3.22(1) *Natural inlands wetlands* was expanded on to reflect the new consenting pathways for certain activities and to make it easier to undertake activities that seek to maintain and restore wetlands. The new clause reads as follows (track changes to show 2023 amendments):

1.1 Natural inland wetlands

(1) Every regional council must include the following policy (or words to the same effect) in its regional plan:

"The loss of extent of natural inland wetlands is avoided, their values are protected, and their restoration is promoted, except where:

(a) the loss of extent or values arises from any of the following:

(i) the customary harvest of food or resources undertaken in accordance with tikanga Māori

~~(ii) restoration activities~~

(ii) wetland maintenance, restoration, or biosecurity (as defined in the National Policy Statement for Freshwater Management)

(iii) scientific research

(iv) the sustainable harvest of sphagnum moss

(v) the construction or maintenance of wetland utility structures (as defined in the Resource Management (National Environmental Standards for Freshwater) Regulations 2020)

(vi) the maintenance or operation of specified infrastructure, or other infrastructure (as defined in the Resource Management (National Environmental Standards for Freshwater) Regulations 2020

(vii) natural hazard works (as defined in the Resource Management (National Environmental Standards for Freshwater) Regulations 2020); or

(b) the regional council is satisfied that:

(i) the activity is necessary for the purpose of the construction or upgrade of specified infrastructure; and

(i) the specified infrastructure will provide significant national or regional benefits; and

(ii) there is a functional need for the specified infrastructure in that location; and

(iii) the effects of the activity are managed through applying the effects management hierarchy; or

(c) the regional council is satisfied that:

(i) the activity is necessary for the purpose of urban development that contributes to a well-functioning urban environment (as defined in the National Policy Statement on Urban Development); and

(ii) the urban development will provide significant national, regional or district benefits; and

(iii) the activity occurs on land identified for urban development in operative provisions of a regional or district plan; and

(iv) the activity does not occur on land that is zoned in a district plan as general rural, rural production, or rural lifestyle; and

(v) there is either no practicable alternative location for the activity within the area of the development, or every other practicable location in the area of the development would have equal or greater adverse effects on a natural inland wetland; and

(vi) the effects of the activity will be managed through applying the effects management hierarchy; or

(d) the regional council is satisfied that:

(i) the activity is necessary for the purpose of quarrying activities; and

(ii) the extraction of the aggregate will provide significant national or regional benefits; and

(iii) there is a functional need for the activity to be done in that location; and

(iv) the effects of the activity will be managed through applying the effects management hierarchy; or

(e) the regional council is satisfied that:

(i) the activity is necessary for the purpose of:

(A) the extraction of minerals (other than coal) and ancillary activities; or

(B) the extraction of coal and ancillary activities as part of the operation or extension of an existing coal mine; and

(ii) the extraction of the mineral will provide significant national or regional benefits; and

(iii) there is a functional need for the activity to be done in that location; and

(iv) the effects of the activity will be managed through applying the effects management hierarchy; or

(f) the regional council is satisfied that:

(i) the activity is necessary for the purpose of constructing or operating a new or existing landfill or cleanfill area; and

(ii) the landfill or cleanfill area:

(A) will provide significant national or regional benefits; or

(B) is required to support urban development as referred to in paragraph (c); or

(C) is required to support the extraction of aggregates as referred to in paragraph (d); or

(D) is required to support the extraction of minerals as referred to in paragraph (e); and

(iii) there is either no practicable alternative location in the region, or every other practicable alternative location in the region would have equal or greater adverse effects on a natural inland wetland; and

(iv) the effects of the activity will be managed through applying the effects management hierarchy."

19. The change to clause 3.22(1) of the NPS-FM requires updating in the Fresh Water Plan, this change is again made through section 55(2) and 55(2A) of the RMA without using the schedule 1 process. Staff have updated the Fresh Water Plan to reflect the 2023 amendments to clause 3.22(1).

20. Section 55(2A) requires local authorities to give public notice of the amendments within 5 working days after making the amendments to its regional plan (Appendix 1). Staff are seeking endorsement to undertake public notification requirements.

Other changes for consistency and formatting

21. Whilst updating the plan to reflect the 2023 amendments staff located an error in the existing transitional provisions, where clause 3.26 Fish passage of the NPS-FM 2020 had been included as a policy rather than an objective. This error has been rectified.

22. Staff have also updated minor errors, including formatting and numbering in the Fresh Water Plan. These are minor inconsequential changes which do not have an effect on the interpretation of the plan provisions.

23. Both of these amendments can be made through Schedule 1 Section 20A which allows amendments, without using the schedule 1, on an operative plan to correct any minor errors.

Financial considerations—LTP/Annual Plan

24. This memorandum and the associated recommendations are consistent with the Council's adopted Long-Term Plan and estimates. Any financial information included in this memorandum has been prepared in accordance with generally accepted accounting practice.

Policy considerations

25. This memorandum and the associated recommendations are consistent with the policy documents and positions adopted by this Council under various legislative frameworks

including, but not restricted to, the *Local Government Act 2002*, the *Resource Management Act 1991* and the *Local Government Official Information and Meetings Act 1987*.

Iwi considerations

26. This memorandum and the associated recommendations are consistent with the Council's policy for the development of Māori capacity to contribute to decision-making processes (schedule 10 of the *Local Government Act 2002*) as outlined in the adopted long-term plan and/or annual plan. Similarly, iwi involvement in adopted work programmes has been recognised in the preparation of this memorandum.

Community considerations

27. This memorandum and the associated recommendations have considered the views of the community, interested and affected parties and those views have been recognised in the preparation of this memorandum.

Legal considerations

28. This memorandum and the associated recommendations comply with the appropriate statutory requirements imposed upon the Council.

Appendices/Attachments

Document 3207375: Public notice for amendments to the Regional Freshwater Plan

Public Notice of Amendments to the Regional Freshwater Plan for Taranaki

The Taranaki Regional Council gives public notice that, in accordance with s55(2A) of the Resource Management Act 1991 (RMA) *the Regional Freshwater Plan for Taranaki* is amended to insert a revised policy for freshwater management as required under clause 1.7 of the National Policy Statement for Freshwater Management 2020 (as amended in 2023) (NPS-FM).

The revised policy in the NPS-FM (as amended in January 2023), is clause 3.22 *Natural inland wetlands* that is now expanded to address additional matters. A correction has also been made to transitional provision 3.26(1) *Fish passage,* amendment made in 2021 to the Regional Freshwater Plan, to correctly refer to the provision as an objective. This error has been rectified.

The Regional Freshwater Plan has also been amended to correct minor errors, including formatting and numbering in accordance with Schedule 1, s20A of the RMA.

Copies of the amended version of the Regional Fresh Water Plan can be obtained from the Taranaki Regional Council premises 47 Cloten Road, Stratford, 4352 or can be found on the Taranaki Regional Council website.

If you have any questions, please contact the Council at info@trc.govt.nz or by phoning 0800 736 222

Steve Ruru

Chief Executive

Date 10 October 2023

Subject: **Proposed National Policy Statement for Natural Hazards Decision Making 2023 Submission**

Approved by: A D McLay, Director - Resource Management

S J Ruru, Chief Executive

Document: 3209539

Purpose

1. The purpose of this memorandum is to bring the Proposed National Policy Statement for Natural Hazards Decision Making 2023 (NPS-NHD) and its consultation period to committee attention and to seek endorsement to prepare a submission covering the high level points discussed in this memorandum.

Executive summary

2. The Proposed NPS-NHD consultation period runs from 18 September 2023 to 13 November 2023. The NPS-NHD aims to direct how decision makers consider natural hazard risk in planning decisions relating to new developments under the Resource Management Act 1991 (RMA).
3. The objective of the NPS-NHD is to minimise the risks from natural hazards to people, communities, the environment, property and infrastructure and on the ability of communities to quickly recover after natural hazard events.
4. We are seeking endorsement from the Policy and Planning Committee to prepare a submission on the proposed NPS-NHD on behalf of Taranaki Regional Council.
5. Based on a decision-maker's assessment of natural hazard risk and the tolerance to the risk, the proposed NPS-NHD will direct the decision-maker to:
    - in high natural hazard risk areas, avoid new development unless the level of risk can be reduced to at least a tolerable level.
    - in moderate natural hazard risk areas, reduce risk to as low as reasonably practicable.
    - in low natural hazard risk areas, enable new development.

Recommendations

That the Taranaki Regional Council:

a) receives the memorandum titled *Proposed National Policy Statement for Natural Hazards Decision Making 2023* Submission.

b) endorses the approach to prepare a high level submission, covering those points contained in this memo, on the draft National Policy Statement for Natural Hazards Decision Making by the due date of 13 November 2023.

c) determines that this decision be recognised as not significant in terms of section 76 of the *Local Government Act 2002*

d) determines that it has complied with the decision-making provisions of the *Local Government Act 2002* to the extent necessary in relation to this decision; and in accordance with section 79 of the Act, determines that it does not require further information, further assessment of options or further analysis of costs and benefits, or advantages and disadvantages prior to making a decision on this matter.

Background

6. The Government recognises that as there is currently no national direction to guide decision-making on development proposals and to require risk assessments where natural hazards are a concern. As a result, decision makers sometimes attribute less weight to natural hazard risk than to other matters, such as the need for new infrastructure and housing. Further, the way local authorities identify natural hazards and assess risk and risk tolerance varies throughout the country, as such the Government is undertaking a phased work programme to improve the management of hazards under the RMA.

7. The proposed NPS-NHD is an interim measure intended to be developed and implemented by early 2024 and will be followed by a proposed comprehensive National Direction for Natural Hazards, which will be developed over the next one-to-two years.

8. Natural hazards are an area in which Council has responsibilities through the RMA and this NPS may have implications for how we undertake investigations and plan for these.[1] District Councils also have a responsibility for controlling the effects of land use and development on the avoidance and mitigation of natural hazards.[2]

9. The proposed NPS-NHD is responding to the following problem[3] : "Aotearoa New Zealand is increasingly at risk from a range of natural hazards, including earthquakes, flooding and landslips. Severe weather events are becoming more frequent due to climate change. Building new developments like houses, office buildings, shops, roads and schools in areas at high risk from natural hazards increases risk to human life, community wellbeing, property, infrastructure, and may lead to adverse effects on the environment".

10. The proposed NPS-NHD applies to new development which has been defined in the document as the development:

    - of new buildings, structures, or infrastructure on land that currently does not have buildings, structures, or infrastructure located on it; or

[1] S.30 Resource Management Act
[2] S.31 Resource Management Act
[3] Proposed National Policy Statement for Natural Hazard Decision-making: Discussion document, executive summary Pg 5.

- that is the extension or replacement of existing buildings, structures, or infrastructure.

11. The NPS-NHD introduces a risk management framework that requires decision makers to determine the level of natural hazard risk for any new developments as either high, moderate or low. In many cases the information that might be available to support the classification of the hazard risk, or indeed identify that one even exists, will be limited making the classification process challenging.
12. Policy 3. Of the NPS-NHD requires a precautionary approach when determining this risk if:

    (a) the natural hazard risk is uncertain, unknown, or little understood; and

    (b) the natural hazard risk could be intolerable.
13. Policy 5 of the proposed NPS-NHD requires the avoidance of new developments in areas defined as high risk and where the consequences could be intolerable (eg, it would cause loss of life or serious damage to infrastructure or property).
14. The proposed NPS-NHD applies to all natural hazards. The Government is, however, open to limiting the scope to certain natural hazards, such as flooding, coastal erosion, active faults, liquefaction and landslips, because they pose the most widespread risk to life and property and guidance is available on assessing the risks from these hazards.
15. The Government's current thinking is set out in *Proposed-National-Policy-Statement-for-Natural-Hazard-Decision-making-Discussion-document* (the Discussion Document). It seeks feedback on a number of high-level design questions.
16. Attachment One contains a copy of the proposed NPS-NHD and the discussion document is included as Attachment Two.

Issues

17. Natural hazards are an area that we have responsibilities through the RMA and this NPS may have implications for how we undertake investigations and plan for these.
18. The Taranaki Region is in a unique position as the majority of properties and population live and work on the volcanic ring plain of the Dormant Taranaki Maunga.

Discussion

19. The framework in the NPS-NHD can be readily applied to assessment of the risks of potential developments prone to climatic hazards like flooding and sea-level rise. Questions arise, however, about the appropriateness of framework for non-climatic hazards like volcanoes, earthquakes and land stability, which although less common could have severe consequences.
20. The proposed NPS-NHD requires decision makers to assess the risk of any proposed new development to all natural hazards and if risks are high to avoid this development unless the risk can be reduced to a tolerable level.
21. When determining the level of risk for any hazard, decision makers must consider the potential frequency and severity of the hazard now and into the future. The NPS-NHD does not provide any guidance around determining risk, which may result in an inconsistent approach around the country and potentially also within the region.

22. Defined risk thresholds and a standardised risk tolerance assessment methodology to define areas that may be 'tolerable' or 'intolerable' to natural hazard risks is in development by central government. However, the NPS-NHD is likely to be in effect prior to the release of this work stream, which could result in inconstancies in implementation.
23. An assessment of the tolerance of the potentially effected community is required as part of any assessment. Tolerance is subjective and the level of tolerance the community may have could change over-time, depending on numerous factors. Therefore, to determine tolerance in any new development in close proximity to a natural hazard, significant and on-going community engagement would be required. Should the NPS-NHD apply to volcanic hazards this would be a significant undertaking for the region.
24. Until an assessment of risk and tolerance to hazard is quantified, a precautionary approach would be required for an event that could result in severe consequences. Should hazards such as a volcanic eruption be covered by the NPS-NHD the impact of this, until such time that an assessment as per the NPS-NHD is in place, could be significant in placing restrictions on future development.
25. There are therefore questions around the suitability of the NPS-NHD being applied to non-climatic hazards. Further work on such hazards will be needed and should be considered as part of the future work programme being undertaken by central government and as such an appropriate framework to investigate and plan for these is required.

Options

26. The options are:
    (a) Endorse a submission being prepared on behalf of the Committee to cover the following points, and any additional points endorsed at the Committee meeting:
        a. Support the general intent of the NPS-NHD.
        b. Identify concerns regarding the potential resourcing implications associated with the hazard risk assessment and community conversations regarding tolerance to risk. Request support is provided to regional and district councils to undertake such investigations in a consistent manner across the country;
        c. Support for the NPS-NHD being limited to liquefaction and climatic natural hazards, such as flooding, coastal erosion and landslips because they pose the most widespread risk to life and property and guidance is available on assessing the risks from these hazards; and
        d. Support the exclusion of volcanic hazards from the NPS-NHD and for continued work to be undertaken by central government, with regional and district councils, to better plan for such hazards including the provision of future guidance; or
    (b) Not progress with an individual TRC submission and submit Taranaki's comments and concerns to Te Uru Kahika for the regional sector submission(s) being prepared. Staff are aware of a section submission being prepared by the Hazards Group.
27. Option (a) is recommended. It is important that the Council submits in some form on the proposal and due to the unique position of the Taranaki Region in relation to the Taranaki Maunga a direct submission, that adds weight to the discussion points, may be

prudent. If Option (a) is endorsed Taranaki Regional Council will still provide input into the Te Uru Kahika submission via the Natural Hazards Group.

Significance

28. This item is assessed as not significant with regards to the Significance and Engagement Policy.

Financial considerations—LTP/Annual Plan

29. This memorandum and the associated recommendations are consistent with the Council's adopted Long-Term Plan and estimates. Any financial information included in this memorandum has been prepared in accordance with generally accepted accounting practice.

Policy considerations

30. This memorandum and the associated recommendations are consistent with the policy documents and positions adopted by this Council under various legislative frameworks including, but not restricted to, the *Local Government Act 2002*, the *Resource Management Act 1991* and the *Local Government Official Information and Meetings Act 1987*.

Iwi considerations

31. This memorandum and the associated recommendations are consistent with the Council's policy for the development of Māori capacity to contribute to decision-making processes (schedule 10 of the *Local Government Act 2002*) as outlined in the adopted long-term plan and/or annual plan. Similarly, iwi involvement in adopted work programmes has been recognised in the preparation of this memorandum.

Community considerations

32. This memorandum and the associated recommendations have considered the views of the community, interested and affected parties and those views have been recognised in the preparation of this memorandum.

Legal considerations

33. This memorandum and the associated recommendations comply with the appropriate statutory requirements imposed upon the Council.

Appendices/Attachments

Document: 3209564 - Proposed National Policy Statement for Natural Hazards Decision Making 2023

Document: 3209989 - Discussion Document National Policy Statement Natural Hazards Decision Making 2023

CONSULTATION DRAFT – NOT GOVERNMENT POLICY

Proposed National Policy Statement for Natural Hazard Decision-making 2023

Ministry for the Environment
Manatū Mō Te Taiao

Te Kāwanatanga o Aotearoa
New Zealand Government

Authority

This National Policy Statement was approved by the Governor-General under section 52(2) of the Resource Management Act 1991 on [to come], and is published by the Minister for the Environment under section 54 of that Act.

Contents

Part 1: Preliminary provisions

1.1 Title

(1) This is the National Policy Statement for Natural Hazard Decision-making 2023.

1.2 Commencement

(1) This National Policy Statement comes into force on [to come].

1.3 Application

(1) This National Policy Statement applies only to planning decisions that result in or enable new development.

1.4 Interpretation

(1) In this National Policy Statement:

Act means the Resource Management Act 1991

commencement date means the date on which this National Policy Statement comes into force, as identified in clause 1.2

decision-maker means any person exercising functions or powers under the Act

high natural hazard risk means a risk from natural hazards that is intolerable

low natural hazard risk means a risk from natural hazards that is generally acceptable

moderate natural hazard risk means a risk from natural hazards that is more than a low risk, but is not intolerable

natural hazard has the meaning in the Act and includes, without limitation, natural hazards arising from the effects of climate change

new development means development:

(a) of new buildings, structures, or infrastructure on land that currently does not have buildings, structures, or infrastructure located on it; or

(a) that is the extension or replacement of existing buildings, structures, or infrastructure.

new hazard-sensitive development means a new development relating to any of the following:

(a) residential dwellings, including papakāinga and retirement villages:

(b) marae:

(c) educational facilities:

(d) emergency services:

(e) hospitals and other health care facilities:

(f) community facilities.

planning decision means a decision on any of the following:

(a) a resource consent:

(b) a regional policy statement or proposed regional policy statement:

(c) a regional plan or proposed regional plan:

(d) a district plan or proposed district plan:

(e) a designation:

(f) a change to a plan requested under Part 2 of Schedule 1 of the Act.

specified Māori land means land that is any of the following:

(a) Māori customary land and Māori freehold land (as defined in Te Ture Whenua Māori Act 1993):

(b) land set apart as a Māori reservation under Part 17 of Te Ture Whenua Māori Act 1993 or its predecessor, the Māori Affairs Act 1953:

(c) land held by or on behalf of an iwi or a hapū if the land was transferred from the Crown, a Crown body, or a local authority with the intention of returning the land to the holders of mana whenua over the land:

(d) land vested in the Māori Trustee that is constituted as a Māori reserve by or under the Māori Reserved Land Act 1955, and remains subject to that Act:

(e) land that forms part of a natural feature that has been declared under an Act to be a legal entity or person (including Te Urewera land within the meaning of section 7 of the Te Urewera Act 2014):

(f) the maunga listed in section 10 of the Ngā Mana Whenua o Tāmaki Makaurau Collective Redress Act 2014:

(g) Treaty settlement land, being land held by a post-settlement governance entity (as defined in the Urban Development Act 2020) where the land was transferred or vested and held (including land held in the name of a person such as a tipuna of the claimant group, rather than the entity itself):

(i) as part of redress for the settlement of Treaty of Waitangi claims; or

(ii) by the exercise of rights under a Treaty settlement Act or Treaty settlement deed.

1.5 Application to intensification planning instruments

(1) In order to minimise disruption and complexity for local authorities, nothing in this National Policy Statement applies to a specified territorial authority (as defined in section 2 of the Act) when it is preparing an intensification planning instrument under section 80F of the Act.

1.6 Relationship with New Zealand Coastal Policy Statement 2010

(1) The provisions of the New Zealand Coastal Policy Statement prevail over the provisions of this National Policy Statement if there is a conflict between them.

Part 2: Objective and Policies

2.1 Objective

Objective: The risks from natural hazards to people, communities, the environment, property, and infrastructure, and on the ability of communities to quickly recover after natural hazard events, are minimised.

2.2 Policies

Policy 1: When making planning decisions, decision-makers are to determine the level of natural hazard risk as high, moderate, or low.

Policy 2: When determining natural hazard risk, decision-makers are to consider:

(a) first, the likelihood of a natural hazard event occurring (either individually or in combination) and the consequences of the natural hazard event occurring, including potential loss of life, serious injury, adverse effects on the environment, and potential serious damage to property and infrastructure; and

(b) second, tolerance to a natural hazard event, including the willingness and capability of those who are subject to the risk (such as a community, Māori, or the Crown) to bear the risk of that natural hazard (including its cost) and any indirect risks associated with it.

Policy 3: Decision-makers must adopt a precautionary approach when determining natural hazard risk if:

(a) the natural hazard risk is uncertain, unknown, or little understood; and

(b) the natural hazard risk could be intolerable.

Policy 4: Natural hazard risk must be a:

(a) matter of control for any new development that is a controlled activity; and

(b) matter of discretion for any new development that is a restricted discretionary activity.

Policy 5: Planning decisions must ensure that:

(a) in areas of high natural hazard risk, new development is avoided unless the level of risk is reduced to at least a tolerable level or:

  (i) the new development is not a new hazard-sensitive development; and

  (ii) there is a functional or operational need for the new development to be located in the area of high natural hazard risk, and

  (iii) there are no practicable alternative locations for the new development; and

  (iv) risk is reduced to as low as reasonably practicable; and

(b) in areas of moderate natural hazard risk, mitigation measures are taken to reduce natural hazard risk to new development as low as reasonably practicable; and

(c) in areas of low natural hazard risk, new development is enabled.

Policy 6: The most effective natural hazard mitigation measures are adopted to reduce natural hazard risk over the life of any proposed new development, provided the natural hazard mitigation measures do not exacerbate natural hazard risks in other areas, and where possible:

(a) nature-based solutions are preferred over hard-engineering solutions; and

(b) comprehensive area-wide measures are preferred over site-specific solutions.

Policy 7: Māori and, in particular, tangata whenua values, interests, and aspirations are recognised and provided for, including through early engagement, when making decisions on new development on specified Māori land where there is a high or moderate natural hazard risk.

Part 3: Implementation

3.1 Outline of Part

(1) This Part sets out a non-exhaustive list of things that local authorities must do to give effect to the objective and policies of this National Policy Statement, but nothing in this Part limits the general obligation under the Act to give effect to that objective and those policies.

3.2 Tangata whenua involvement

(1) Natural hazard risk is a matter that must be discussed with tangata whenua in accordance with existing requirements under the RMA.

3.3 Best information

(1) In giving effect to this National Policy Statement, decision-makers must use the best information available at the time, which means, if practicable, using complete and scientifically robust data.

(2) In the absence of complete and scientifically robust data, the best information may include information obtained from modelling, as well as partial data, local knowledge, and information obtained from other sources, but in this case decision-makers must:

(a) prefer sources of information that provide the greatest level of certainty; and

(b) take all practicable steps to reduce uncertainty (such as through monitoring or the validation of models used).

(3) A local authority:

(a) must not delay making decisions solely because of uncertainty about the quality or quantity of the information available; and

(b) if the information is uncertain, must interpret it in the way that will best give effect to this National Policy Statement.

Part 4: Timing

4.1 Timing

(1) From the date on which this National Policy Statement comes into force, decision-makers must have regard to it when making decisions on:

(a) resource consent applications;

(b) designations; and

(c) a change to a plan requested under Part 2 of Schedule 1 of the Act.

(2) As soon as reasonably practicable, every local authority must give effect to this National Policy Statement by updating their policy statements and plans.

4.2 Existing policy statements and plans

(1) To the extent that policy statements and plans already (at the commencement date) give effect to this National Policy Statement, local authorities are not obliged to make changes to wording or terminology merely for consistency with it.

(2) In case of dispute, the onus is on the local authority to show that, despite the different wording or terminology used, their policy statement or plan does implement this National Policy Statement.

(3) However, if a local authority chooses to amend an operative policy statement or plan by merely changing wording or terminology for consistency with this National Policy Statement, the amendment is to be treated as the correction of a minor error (and therefore, under clause 20A of Schedule 1 of the Act, the amendment can be made without using a process in that Schedule).

Discussion document

He Marohi Kaupapa Here ā-Motu mō ngā Whakataunga Mōreareatanga ā-Taiao

Proposed National Policy Statement for Natural Hazard Decision-making

Under the Resource Management Act 1991

Ministry for the Environment
Manatū Mō Te Taiao

Te Kāwanatanga o Aotearoa
New Zealand Government

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Acknowledgements

The Ministry for the Environment is working closely with Toka Tū Ake EQC to develop the National Policy Statement for Natural Hazard Decision-making and the comprehensive National Direction for Natural Hazards.

Toka Tū Ake EQC

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Contents

Figures

Executive summary

This consultation document seeks your views on the proposed National Policy Statement for Natural Hazard Decision-making (NPS-NHD). The aim of the proposed NPS-NHD is to provide direction to decision-makers[1] on the appropriate weight to attach to natural hazard risk in planning decisions relating to new development under the Resource Management Act 1991 (RMA).

The problem we want to solve

Aotearoa New Zealand is increasingly at risk from a range of natural hazards, including earthquakes, flooding and landslips. Severe weather events are becoming more frequent due to climate change. Building new developments like houses, office buildings, shops, roads and schools in areas at high risk from natural hazards increases risk to human life, community wellbeing, property, infrastructure, and may lead to adverse effects on the environment. It also exposes land owners, councils, the Crown and New Zealanders in general to increased social and economic costs. This issue was highlighted by the impacts of the severe weather events in 2023.

Local authorities are responsible for managing significant risks from natural hazards under the RMA. At the moment, the way local authorities identify natural hazards and assess risk and risk tolerance is variable throughout the country. There is currently no national direction to guide decision-making on development proposals and to require risk assessments where natural hazards are a concern. As a result, decision-makers sometimes attribute less weight to natural hazard risk than to other matters, such as the need for new infrastructure and housing.

Government work programme to address natural hazard risk under the Resource Management Act 1991

The Government has proposed a phased work programme to improve the management of natural hazard risks under the RMA. This programme involves:

- the proposed NPS-NHD (the focus of this consultation process), which is an interim measure intended to be developed and implemented by early 2024
- the proposed comprehensive National Direction for Natural Hazards, to be developed over the next one-to-two years.

The Ministry for the Environment is working closely with the Toka Tū Ake EQC to develop the NPS-NHD and the comprehensive National Direction for Natural Hazards.

The proposed comprehensive National Direction for Natural Hazards will support local authorities to identify natural hazards and risks in a consistent and rigorous way, understand the level of risk tolerance by a community or other party, and provide direction on making decisions on land use in hazard-prone areas. It may also include further guidance on how planning processes support adaptation to climate change.

[1] Decision-makers include local authorities, independent decision-makers appointed by local authorities, the Environment Court and the Minister for the Environment.

The proposed NPS-NHD is a necessary interim step because RMA planning and consenting practices will continue while comprehensive national direction is being developed and resource management reforms are being delivered and implemented. Therefore, action is needed now to limit new development in areas where the risk of natural hazards is intolerable. The NPS-NHD would be included in National Direction for Natural Hazards in the medium to long term, depending on further government decisions. The NPS-NHD would then be transitioned into the National Planning Framework as part of the resource management reforms.

Proposed National Policy Statement for Natural Hazard Decision-making

The proposed NPS-NHD would direct decision-makers to take a risk-based approach to natural hazards when making planning decisions relating to new development.

The proposed NPS-NHD will identify three natural hazard risk categories (high, moderate and low). It will direct decision-makers to address the level of risk based on the likelihood and consequence of a natural hazard event, and then assess the tolerance to a natural hazard event in relation to the proposed new development.

Tolerance is based on many factors, including the willingness and capability of those affected by the risk (eg, the community, Māori or the Crown) to bear the direct and indirect risks and costs of the natural hazard.

Based on a decision-maker's assessment of natural hazard risk and the tolerance to the risk, the proposed NPS-NHD will direct the decision-maker to:

- in high natural hazard risk areas, avoid new development unless the level of risk can be reduced to at least a tolerable level
- in moderate natural hazard risk areas, reduce risk to as low as reasonably practicable
- in low natural hazard risk areas, enable new development.

The NPS-NHD would have an immediate effect, because decision-makers would need to have regard to the NPS-NHD when making decisions on resource consents or designations and give effect to the NPS-NHD for any private plan change decisions on and from the commencement date of the NPS-NHD. Local authorities would also need to give effect to the NPS-NHD through updating their planning instruments as soon as reasonably practicable. Until a plan change has been made, decisions will rely on existing plans, including the plan's rules to trigger the need for a consent. As part of a plan change, local authorities may choose to remap natural hazard risk areas and reclassify the level of natural hazard risk accordingly, but the NPS-NHD will not require them to do so.

Remaining Māori land is disproportionately exposed to natural hazard risk, and developing Māori land can be challenging. The proposed NPS-NHD seeks to acknowledge and deliver on the Treaty of Waitangi principles of active protection and tino rangatiratanga by requiring decision-makers. It will do this by requiring decision-makers to engage early and involve tangata whenua (through existing resource management processes) when making decisions on new developments on specified Māori land where a high or moderate risk exists.

A draft of the proposed NPS-NHD, which outlines the policy intent of the proposal, is included in appendix A, to help with the consultation process. The NPS will likely change when a final version is developed, following this consultation process.

Seeking your feedback

We seek your views on the proposed NPS-NHD by 13 November. This document includes questions to help in providing feedback. You can make a submission by:

- using our online submission tool, available at: https://consult.environment.govt.nz/environment/proposed-nps-for-natural-hazard-decision-making
- writing your own submission. If you are posting your submission, send it to Ministry for the Environment, PO Box 10362, Wellington 6143 or email it to naturalhazardRMA@mfe.govt.nz.

Further information on how to make a submission is provided in Part 4. When the consultation period has ended, officials will analyse and summarise submissions. They will provide final policy advice to the Government on the preferred options later this year. Submissions will inform the final drafting of the NPS-NHD and further decisions required from Cabinet later this year.

Part 1: Context

This part outlines Aotearoa New Zealand's natural hazard risk exposure, how natural hazard risks are managed in Aotearoa under the Resource Management Act 1991 (RMA), and the Government's work programme to improve management of the risks and impacts from natural hazards.

Natural hazard risks and impacts in Aotearoa

Aotearoa is exposed to a range of natural hazards, due to its position on the boundary of the Pacific and Australian tectonic plates and its geography. Natural hazard events include earthquakes, volcanic eruptions, erosion, landslides, floods and tsunami, which are often exacerbated by extreme weather events. Climate change is increasing the severity and frequency of some natural hazards, including flooding, heatwaves, drought, wildfire, sea-level rise, and coastal erosion and inundation.

From 2009 to 2019, Aotearoa had 5 major earthquakes, 35 weather events, 28 flood events and 2 wildfires that have cumulatively cost over $37 billion in damage (NZIER, 2020). The Reserve Bank of New Zealand estimates the total claims cost for private insurance (ie, excluding Toka Tū Ake EQC payouts) from the 2023 Auckland Anniversary flooding will be around $1.6 billion to $2.1 billion, with a further $1.4 billion to $2.1 billion from the effects of Cyclone Gabrielle in February 2023.

Analysis of Toka Tū Ake EQC's claims data between 2000 and 2017 for weather-related damage, by the New Zealand Institute of Economic Research (NZIER), found that Northland, Bay of Plenty, Nelson and Tasman had the highest claims in proportion to their populations. This suggests these regions face high exposure and vulnerability to weather events. Nine regions also face the possibility that their storm costs will grow at a faster rate than their regional incomes, namely: Northland, Auckland, Manawatu–Whanganui, Hawke's Bay, Tasman–Nelson, Bay of Plenty, Waikato, Otago and Canterbury (NZIER, 2020). This analysis further predicted that Auckland could face substantial increases in storm costs because of the growth of its capital asset stock, a prediction proven to be accurate based on the weather-related damage in Auckland in 2023.

Across Aotearoa, climate change projections predict an increase in natural hazard risk. These risks, as outlined in the National Climate Change Risk Assessment (Ministry for the Environment, 2020), include exacerbated risks from existing natural hazards, such as flooding, erosion and drought. Increasing temperatures are also causing sea levels to rise, resulting in new natural hazard risks to coastal communities. With over 65 per cent of New Zealanders living close to the sea or near tidal rivers increased frequency of high-intensity storms and sea-level rise will have a significant impact (OECD, 2019). The costs of natural hazard events will continue to increase for individuals, businesses, and local and central government. Storm damage due to climate change is expected to increase by 3 per cent to 7 per cent between now and 2050 (NZIER, 2020).

Because Aotearoa experiences a range of risks from natural hazards, it is difficult to find sites for our towns and cities to grow and develop. Most growth and development decisions involve weighing and choosing between different interests, constraints and risks, and the many different options (such as stormwater systems, flood flow paths, stop banks) to reduce risks.

Requests for central government support for managing natural hazard risks

Local authorities have requested support from central government for decision-making on new development in high-risk locations (Local Government New Zealand, 2011). They have reported the need for more defined and stringent provisions that will enable them to better consider developments in high-risk areas, and decline resource consents, if appropriate. Local authorities have shared recent examples where they were unable to decline planning consents for properties in areas of high flood risk and the land has since been badly affected by Cyclone Gabrielle and other recent severe weather events.

Recent engagement with local government has also indicated more support is needed from central government through national direction so that local authorities can consider natural hazard risks appropriately alongside other matters, including the need for housing and economic development. This need is also reflected in submissions from councils on the first national adaptation plan (Ministry for the Environment, 2022b).

The insurance industry has requested central government support to prevent development from occurring on flood-prone land, with IAG specifically requesting a national policy statement to cease development in flood-prone locations (IAG, 2022; Insurance Council of New Zealand, 2014). In 2014, the Insurance Council of New Zealand requested a review of the natural hazard regulations under the RMA to introduce changes that would require local authorities to decline consent applications where long-term data shows that the risk from natural hazards will increase.

National Climate Change Risk Assessment and national adaptation plan

The National Climate Change Risk Assessment provides a national picture of how Aotearoa may be affected by climate change-related hazards (Ministry for the Environment, 2020). It identifies the most significant risks and opportunities for Aotearoa from climate change. The first national adaptation plan responds to these risks and sets out the Government's long-term adaptation strategy and priorities for action (Ministry for the Environment, 2022a). Actions in the national adaptation plan include developing national direction under the National Planning Framework on natural hazard risk management and climate adaptation within the Natural and Built Environment Act 2023; improving information about hazards, exposure and vulnerability; and developing interim resilience standards for infrastructure and housing.

Current resource management system

The RMA is the primary land use planning legislation for Aotearoa and provides for the management of significant risk from natural hazards. Other regulatory regimes also manage natural hazard risks and impacts in New Zealand.[2]

The purpose of the RMA is to promote the sustainable management of natural and physical resources (s5). The RMA also identifies the management of significant risks from natural hazards as a matter of national importance (s6). Local authorities have responsibilities to

[2] These include the Building Act 2004, Civil Defence and Emergency Management Act 2002, Local Government Act 2002, Local Government Official Information and Meetings Act 1987 and Climate Change Response Act 2002.

manage the use of land to avoid or mitigate natural hazards. In achieving the purpose of the RMA, local councils also have to consider the effects of climate change (s7). In the context of natural hazard planning, this means considering the exacerbating impacts of climate change on all natural hazards. Also essential to consider is section 8 of RMA, where any decisions made under the Act need to take into account the principles of te Tiriti o Waitangi (the Treaty of Waitangi).

Under the RMA, no comprehensive national direction exists relating to natural hazard risk planning, including data gathering, mapping, managing risk and developing rules for hazard-prone areas. Local authorities (which are primarily responsible for managing significant risks from natural hazards through land use planning) currently identify natural hazards, assess, and manage natural hazard risk and risk tolerance, in a variable and inconsistent way, leading in some locations to limited effectiveness.

In the *New Direction for Resource Management in New Zealand,* the Resource Management Review Panel found a lack of clear national direction has led to issues arising in the management of effects from natural hazards and climate change (Resource Management Review Panel, 2020, p 11).

> Mandatory national direction should be required for: (ii) climate change adaptation and reduction of risk from natural hazards consistent with the national climate change risk assessment and national adaptation plan under the CCRA (Climate Change Response Act).

This affects the extent to which plans address and manage these risks.

A 2015 report by the Parliamentary Commissioner for the Environment provides modelling of the number of homes, businesses and roads that are low lying and likely to be affected by sea-level rise for Auckland, Wellington, Christchurch, Dunedin, Napier, Whakatāne, Tauranga, Motueka and Nelson. The report recommends national direction to "take direction on planning for sea-level rise out of the New Zealand Coastal Policy Statement and put it into another National Policy Statement, such as that envisaged for dealing with natural hazards" (Parliamentary Commissioner for the Environment, 2015, p 73).

Government work programme to reduce natural hazard risks under the Resource Management Act 1991

The Government has proposed a phased work programme to reduce natural hazard risks under the RMA. This involves preparing:

- the proposed National Policy Statement for Natural Hazard Decision-making (NPS-NHD) as a first step in providing national direction on natural hazard risks (the focus of this consultation process)
- the proposed comprehensive National Direction for Natural Hazards.

The Ministry for the Environment is working closely with Toka Tū Ake EQC to develop the NPS-NHD and the comprehensive National Direction for Natural Hazards

Proposed comprehensive National Direction for Natural Hazards

National direction that will build on the proposed NPS-NHD is in development to provide a comprehensive, nationally consistent planning framework for natural hazards under the RMA. It will help address many of the current issues with identifying, assessing and managing risks from natural hazards under the RMA. Potential content will include:

- standardised methodologies for mapping natural hazards and assessing risks to inform land use planning decisions
- defined risk thresholds, established by developing and implementing a standardised risk tolerance assessment methodology to define areas that may be 'tolerable' or 'intolerable' to natural hazard risks
- standardised terms such as 'significant natural hazard risk' and 'intolerable natural hazard risk'
- a nationally consistent policy approach to managing land use activities in areas exposed to natural hazard risks.

Developing comprehensive national direction is expected to take one-to-two years, and local authorities will require further time to implement it.

The NPS-NHD is proposed as a necessary first phase of national direction for natural hazards. The NPS-NHD would either be included in the comprehensive National Direction for Natural Hazards in the medium-to-long term, depending on policy decisions made. The NPS-NHD will then be transitioned into the National Planning Framework as part of the resource management reform.

Resource management reform

The Government has replaced the RMA with the Natural and Built Environment Act 2023 and Spatial Planning Act. The Bills received Royal Assent in August 2023. A major focus of the Natural and Built Environment Act is on promoting positive environmental outcomes, including reducing the risks arising from, and improving environmental resilience to, natural hazards and the effects of climate change. The first National Planning Framework will include natural hazards content that will guide the development of regional spatial strategies under the Spatial Planning Act.

The RMA will remain in force through the transitional period of the Natural and Built Environment Act and Spatial Planning Act. This is expected to take 7 years to 10 years, as the new system is turned on region by region. During the transitional period, RMA plans and policy statements will still have effect and provide the planning framework for decisions on resource consents and designations. National direction will also have effect on RMA plans, consents and designations. Therefore, national direction on natural hazards is a necessary interim step to improve natural hazard risk management for the immediate future.

Climate change and Community-led retreat

The Parliamentary Environment Committee has opened an inquiry into climate adaptation, exploring community-led retreat and adaptation funding – how communities in Aotearoa could

be enabled to relocate from areas vulnerable to climate change. It is also looking at how the costs of adapting to climate change could be met.

Community-led retreat means relocating homes, businesses, cultural sites or taonga out of harm's way, in a carefully planned process, that involves the community at every step. This process can be done before a natural disaster or severe weather event happens, or afterwards.

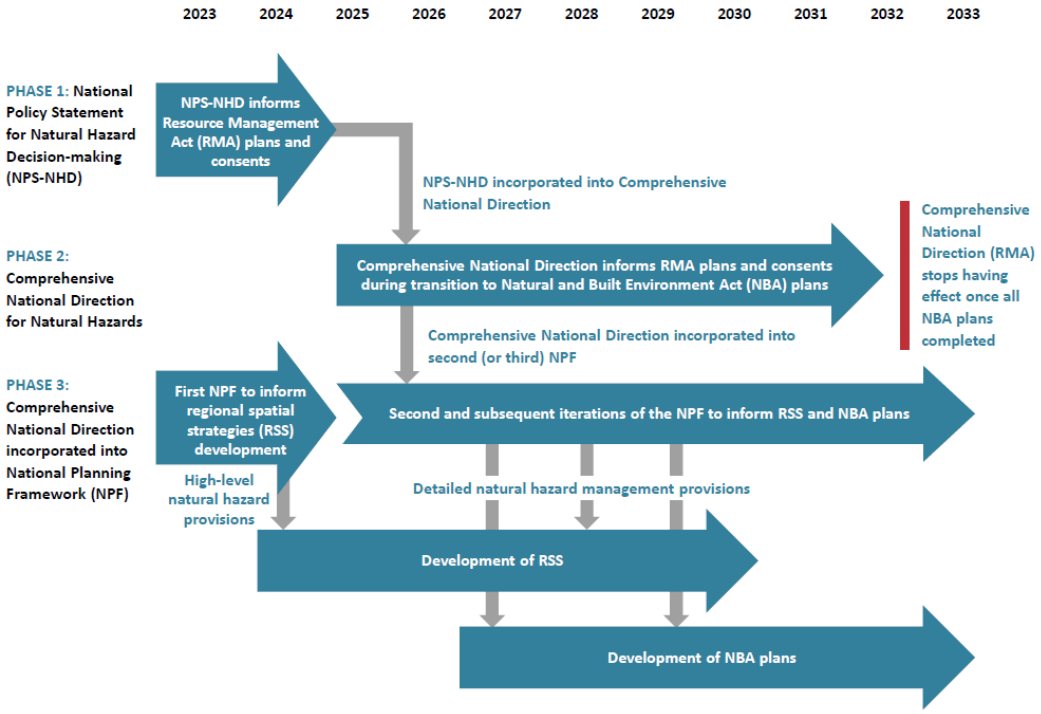
It is one option that can be used to respond to the risks posed by climate change, but there are others. Communities can also choose to remain as they are; to protect assets, for example, by building stop banks, sea walls, or improving stormwater systems; or to accommodate nature, for example, by raising properties.

The proposals relating to natural hazards will sit alongside climate adaptation legislation.

The inquiry's findings are expected to inform development of the Climate Change Adaptation Bill, in 2024. You can find more information on the Ministry's website.

Figure 1 outlines the Government's natural hazard work programme and its interaction with RMA reform.

Figure 1: Government work programme to improve management of natural hazard risks



Related government programmes on natural hazards and climate change adaptation

The Government's work programme to address natural hazard risk under the RMA complements other actions underway to improve the way the Government manages natural hazards under other legislation. The work programme includes the following actions.

- The Treasury and Ministry for the Environment's programme to address the Future of Severely Affected Locations (FOSAL).
- The Ministry of Business, Innovation and Employment (MBIE) guidance on the natural hazard-related provisions of the Building Act 2004.
- The Local Government Official Information and Meetings Amendment Bill to improve natural hazard information in Land Information Memoranda (LIMs).

Part 2: Problems to solve

This part defines the problems with current approaches to managing natural hazard risks under the RMA. In summary, the resource management system is not delivering optimal outcomes for managing risks from natural hazards. Some of the significant issues to address are outlined below, based on discussions and hui held with local authorities, te Tiriti o Waitangi partners and industry stakeholders leading up to this consultation.

Inconsistent identification and assessment of natural hazards and risks

- **Gaps exist in regional and territorial authority approaches to identify and map natural hazards and risks, and risk information is often incomplete or out of date.** Older data and risk assessments still in use do not always incorporate climate change impacts and do not predict what may happen in the future. Information needs to consider future risks across timeframes (eg, in 50 or 100 years), rather than at the time of the resource consent application or plan change.
- **Local authority decision-makers are reluctant to make decisions based on the uncertainties of natural hazard information.** There is no agreed approach on how to obtain robust data, and local authorities are hesitant to address contentious decisions on land use if information is incomplete or not robust. Due to the nature of some natural hazards, it may be impossible for local government to provide the level of certainty about natural hazard likelihood or consequence that community members expect to inform decision-making.
- **Councils face financial constraints.** Obtaining relevant information on natural hazards and risks is expensive.

Variation in resource management planning frameworks for considering natural hazard risks

- **Aotearoa has no agreed framework for how decision-makers should consider natural hazard risks under the RMA**. It is unclear what a ‘significant’ risk is, how to assess risk tolerance, what risks should be assessed (eg, health and safety, economic, cultural, social and environmental risks) and how often assessments should be undertaken.
- **Decision-makers often give more weight to competing priorities that have a stronger mandate to address**. There are complex competing priorities on land use when deciding where to develop. This often involves choosing between different types of constraints and risks and balancing multiple outcomes. Regional policy statements and district plans may contain objectives and policies to consider natural hazard risks, but rules may not be as stringent as needed. National direction has been provided on other matters such as urban development, but there is nothing specific in place on natural hazards.

Lack of involvement of tangata whenua

- **Consideration of natural hazard or climate change impacts on hapū, iwi and Māori is insufficient**. While some RMA plans acknowledge Māori interests in relation to natural hazard risks in their objectives, they contain no clear rules to deliver on these interests.
- **Engagement with Māori on natural hazard responses and climate change varies.** Greater partnership between government and Māori is needed to identify and manage the impacts of natural hazards and ensure mātauranga Māori and Māori worldviews are incorporated into all steps of risk management and assessment processes.

Proposed National Policy Statement for Natural Hazard Decision-making as a first step

Most of the issues outlined above require a long-term work programme to prepare a comprehensive national framework, along with guidance on how to derive consistent technical information that will support decision-making. These measures will be provided through the proposed comprehensive National Direction for Natural Hazards and will take time to develop.

Addressing the weight that decision-makers should give to natural hazards in plans, plan changes, resource consents and designations is a priority for the proposed NPS-NHD. Another priority is to provide a consistent framework to consider and address natural hazard risks regarding new development proposals.

Questions

1 Is more action needed to reduce development from occurring in areas facing natural hazard risk?

2 Are there any other parts of the problem definition that you think should be addressed through the NPS-NHD? Why?

3 Are there other issues that have not been identified that need to be addressed through the NPS-NHD or the comprehensive National Direction for Natural Hazards?

Part 3: Key policy proposals of the proposed National Policy Statement for Natural Hazard Decision-making

This part outlines the purpose and content of the proposed NPS-NHD. It also outlines the policy intent for each objective and policy, and follows up with questions to consider when making a submission. A draft of the proposed NPS, which outlines the policy intent of the proposal, is included in appendix A, to help with the consultation process. The NPS-NHD will likely change when a final version is developed following this consultation process.

Figure 2 gives an outline of the proposed NPS-NHD.

Figure 2: Overview of the proposed National Policy Statement for Natural Hazard Decision-making

Purpose

The overall purpose of the proposed NPS-NHD is to minimise the risks from natural hazards. It will do this by directing decision-makers under the RMA to take a risk-based approach to natural hazards when making planning decisions on new physical development, such as buildings and structures and subdivisions.

The proposed NPS-NHD will support local authorities in their role of managing significant risks from natural hazards as a matter of national importance under section 6(h) of the RMA and in carrying out their functions under section 30 and section 31 of the RMA. It will add weight to the consideration of natural hazards in RMA decision-making because it is a higher-order

document than a local authority regional policy statement or plan. For example, decision-makers must give effect to the proposed NPS-NHD when changing plans and must have regard to it when making decisions on resource consents and proposed designations. The proposed NPS-NHD will provide local authorities with greater certainty and confidence about how to weigh natural hazard risk against other competing interests in decision-making on new development proposals.

National policy statements must be consistent with the purpose of the RMA. The Minister for the Environment must give notice of why they consider the proposed national direction is consistent with the purpose of the RMA under section 46A(4)(a)(ii) to promote the sustainable management of natural and physical resources and, in particular, the need to avoid, remedy or mitigate any adverse effects of activities on the environment.

The purpose and objective of the proposed NPS-NHD is consistent with the purpose of the RMA because it will affect decisions made on the management of physical resources in the form of new dwellings, buildings and structures, subdivisions, and on the wider environment. It will help protect people and communities from the adverse effects of natural hazards by ensuring the risks of a natural hazard to people, communities and property are assessed as part of a plan change, consent application or designation process. As a result of this assessment, appropriate safeguards will then be put in place or, where appropriate, plan changes and consent applications will be declined. The proposed NPS-NHD will also provide for the social, economic and cultural wellbeing of people and communities by enabling new facilities, services and developments for cultural needs and purposes if the risks can be assessed and mitigated appropriately.

Question

4 Do you support the proposed NPS-NHD's requirement that decision-makers take a risk-based approach when making decisions on new development in natural hazard areas? Why or why not?

Proposed scope

The proposed NPS-NHD will apply to all planning decisions made under the RMA on new physical developments, such as buildings and structures, where a risk exists from natural hazards. Planning decisions include decisions on a:

- resource consent application
- regional policy statement or proposed regional policy statement
- regional plan or proposed regional plan
- district plan or proposed district plan
- designation
- change to a plan requested under Schedule 1, Part 2 of the RMA.

The proposed NPS-NHD would apply to all decision-makers under the RMA. Decision-makers can include local authorities, requiring authorities, independent decision-makers, the Environment Court, the Minister for the Environment and the Minister of Conservation.

The proposed NPS-NHD would only affect decisions on new development. It would not affect existing use rights under the following.

- **Existing resource consents approved for new development before the enactment date of the NPS.** New developments, even if they are not yet built but have a resource consent granted, will be able to go ahead without change if the development has started before the consent lapses.
- **Activities currently permitted in district plans unless the activity status is changed through a plan change.** Different types of developments will be permitted in plans that do not require resource consents. These activities will remain unchanged until a local authority initiates a plan change process to give effect to the proposed NPS-NHD. This may change the activity status from permitted to another status, for example, to a controlled or restricted discretionary activity, in which case a consent would be required.

The proposed NPS-NHD will only affect decisions made under the RMA. It will not affect decisions made under the Building Act 2004.

Natural hazards in scope

The proposed NPS-NHD adopts the RMA definition of natural hazards, which would mean that all natural hazards are within scope. Considering the effects of climate change on natural hazards is also part of determining the extent of the natural hazard and the risks associated with an event.

All natural hazards pose risks to human life, property and infrastructure and may have adverse effects on the environment. The impacts of one or more natural hazards can be cumulative. Including all natural hazards within the scope of the proposed NPS-NHD will have greater impact on reducing risks and will also enable decision-makers to consider multiple hazards together.

The NPS-NHD could, however, be limited to certain natural hazards, such as flooding, coastal erosion, active faults, liquefaction and landslips, because they pose the most widespread risk to life and property and guidance is available on assessing the risks from these hazards.

New development activities in scope

The proposed NPS-NHD would apply to planning decisions that result in or enable new physical development of buildings or structures. It defines new development to include all new buildings or structures, extensions to existing buildings, replacement of existing buildings and the construction, extension or replacement of infrastructure. This includes residential and multi-unit dwellings, papakāinga, marae, educational facilities, health facilities, visitor accommodation, community facilities, commercial and infrastructure developments.

The definition does not include the use of land without buildings or structures, for example, for primary production activities or recreation purposes.

Questions

5 Should all natural hazards be in scope of the proposed NPS-NHD? Why or why not?

6 If not all natural hazards are in scope, which ones should be included? Why?

7 Should all new physical development be in scope of the proposed NPS-NHD? Why or why not?

Interaction between the need for housing and protection from natural hazards

Existing direction and policy under the Resource Management Act 1991 (RMA), to enable urban development, includes:

- section 30(1)(ba) and section 31(1)(aa) of the RMA
- the National Policy Statement on Urban Development 2020 (NPS-UD).

The NPS-UD ensures the towns and cities of Aotearoa New Zealand are well-functioning urban environments that meet the changing needs of the country's diverse communities. It includes provisions that direct councils to enable urban intensification and provide land to support housing supply so that housing affordability, access and choice are improved.

Changes to the RMA, introduced by the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021 (RMA-EHS), were designed to rapidly accelerate the intensification of housing in the main existing urban areas of Aotearoa. The RMA-EHS does this by bringing forward the implementation of the intensification requirements in the NPS-UD, and by incorporating the Medium Density Residential Standards (MDRS) in RMA district plans. The RMA-EHS requires plan changes (or variations) through an intensification planning instrument.

The MDRS provide a set of development standards that must be incorporated into district plans. They enable three dwellings of up to three storeys per site as a permitted activity. To enable a rapid housing supply response, the MDRS have immediate legal effect when applied in existing residential areas once the intensification planning instrument has been publicly notified, unless a qualifying matter applies or more lenient density standards have been applied. The MDRS apply to all tier 1 urban environments under the NPS-UD, and to Rotorua, and will apply to existing residential areas except for large settlement zones, offshore islands, and urban environments with a population of less than 5,000.

The proposed NPS-NHD would not alter the NPS-UD requirements for local authorities to provide sufficient land for new development.

To minimise disruption and complexity for local authorities, the proposed NPS-NHD would not require changes to be made to the intensification planning instruments that territorial authorities are currently progressing to implement the NPS-UD and the MDRS, in accordance with section 80F of the RMA. Territorial authorities are in the process of changing plans to provide land for development, and these processes will continue. Most local authorities have applied natural hazard risk as a qualifying matter to their proposed plan changes. In these areas, intensification would be limited, to protect and provide for qualifying matters (in this case, natural hazard risk).

The proposed NPS-NHD would not change the existing qualifying matters framework under the NPS-UD. Relevant local authorities can modify the intensification requirements to accommodate a qualifying matter, such as natural hazards, if the qualifying matter would make the required level of development inappropriate.

Question

8 What impact do you think the proposed NPS-NHD would have on housing and urban development? Why?

Proposed objective

The proposed NPS-NHD includes one objective to set clear direction on the outcome it seeks to achieve:

> The risks from natural hazards to people, communities, the environment, property, and infrastructure, and to the ability of communities to quickly recover after natural hazard events, are minimised.

The objective sets direction on the broad spectrum of potential impacts from natural hazards that decision-makers must consider when making decisions on regional policy statements, plans, resource consents and designations in relation to new development.

Question

9 Do you agree with the proposed objective of the NPS-NHD? Why or why not?

Policy 1 and definitions: natural hazard risk categories

Under the proposed NPS-NHD, policy 1 will require decision-makers, when making planning decisions under the RMA, to determine whether a natural hazard risk is high, moderate or low.

- **High natural hazard risk** means a risk from natural hazards that is intolerable.
- **Moderate natural hazard risk** means a risk from natural hazards that is more than a low risk but is not intolerable.
- **Low natural hazard risk** means a risk from natural hazards that is generally acceptable.

The definitions provide a transparent, certain and consistent approach to categorising risk. The categories are principle-based rather than highly prescriptive, to provide decision-makers with discretion on how to apply them.

Question

10 What are the pros and cons of requiring decision-makers to categorise natural hazard risk as high, moderate or low?

Policy 2: Assessing natural hazard risks

Policy 2 outlines the criteria that decision-makers must consider when determining whether a natural hazard risk, in relation to new development, is high, moderate or low under policy 1. These criteria include consideration of:

- first, the likelihood of a natural hazard event occurring (either individually or in combination) and the consequences of the natural hazard event occurring, including potential loss of life, serious injury, adverse effects on the environment, and potential serious damage to property and infrastructure
- second, tolerance to a natural hazard event, including the willingness and capability of those who are subject to the risk (such as a community, Māori or the Crown) to bear the risk of that natural hazard (including its cost) and any indirect risks associated with it.

The criteria are principle-based rather than overly prescriptive. The criteria provide local authorities with the discretion to apply them in a way that reflects regional and local circumstances, the type of natural hazard and the type of new development, and to apply the existing information a region or district holds on natural hazards.

Question

11 What are the pros and cons of directing decision-makers to assess the likelihood, consequence and tolerance of a natural hazard event when making planning decisions?

Policy 3: Precautionary approach in decision-making

Policy 3 would direct decision-makers to adopt a precautionary approach when determining natural hazard risk, if the risk from natural hazards is uncertain, unknown or little understood and where the natural hazard risk could be intolerable.

Policy 3 recognises that information gaps exist on natural hazards and their associated risks across regions and districts (as outlined in part 2) and that, where this occurs, a precautionary approach is required in decision-making on new development. This approach has been taken to avoid placing undue burden on local authorities to gather new information immediately.

Question

12 What are the pros and cons of directing decision-makers to adopt a precautionary approach to decision-making on natural hazard risk?

Policy 4: Restricted discretionary and controlled activities

Policy 4 would ensure that natural hazard risk is included as a matter of control for any new development that is classified as a controlled activity in a plan, and as a matter of discretion for any new development that is classified as a restricted discretionary activity.

This policy would ensure that decision-makers consider natural hazard risk where a plan does not currently specify it as a matter of control or discretion.

The Minister is also considering whether it would be more appropriate to implement the intended policy in the form of national environmental standards.

Question

13 What are the pros and cons of requiring natural hazard risk as a matter of control for any new development classified as a controlled activity in a plan, and as a matter of discretion for any new development classified as a restricted discretionary activity?

Policy 5: Direction on new development in areas of high, moderate and low risk

Policy 5 directs decision-makers to take specific actions when assessing new developments based on the level of natural hazard risk. The proposed NPS-NHD directs decision-makers to:

- avoid new development in high natural hazard risk areas unless:
  - the level of risk is reduced to at least a tolerable level **or**
  - the development is not defined as a new hazard-sensitive development,[3] a functional or operational need exists, no practicable alternative locations exist, and the risk is reduced to as low as reasonably practicable
- reduce natural hazard risk to new development in areas of moderate natural hazard risk to a level that is as low as reasonably practicable
- enable new activities in areas of low natural hazard risk.

Policy 5 aims to provide a clear, consistent approach for decision-makers when addressing natural hazard risk. Giving certainty to decision-makers on how to address natural hazard risk at different risk levels will enable people, communities, investors, developers, and service and infrastructure providers to confidently plan for and use land.

Decision-makers will need to apply policy 5 when assessing each resource consent, designation and private plan change application, where natural hazard risk is within their discretion. When local authorities pursue plan changes, they will need to apply this direction within the scope and boundaries of the plan change.

The proposed NPS-NHD seeks to avoid new development in areas of high natural hazard risk (except where one of the exemptions above can be met) because the level of natural hazard risk is intolerable (eg, it would cause loss of life or serious damage to infrastructure or property).

The proposed NPS-NHD also enables new commercial and infrastructure development in areas of high natural hazard risk in limited circumstances. This aims to balance the objective to reduce the amount of development going ahead in areas at high risk from natural hazards, with the reality that, in some situations, new commercial or infrastructure development (eg, a port) may need to occur in areas of high natural hazard risk so that a community can continue to function.

3 Hazard-sensitive developments are defined as residential dwellings, including papakāinga and retirement villages, marae, educational facilities, emergency services, hospitals and other health care facilities, and community facilities.

The proposed NPS-NHD seeks to allow new development in areas of moderate natural hazard risk because the level of risk is tolerable, even though a natural hazard event would likely cause some damage. While development is likely to be allowed in these areas, the proposed NPS-NHD directs decision-makers to reduce risk to as low as reasonably practicable.

The proposed NPS-NHD directs local authorities to enable new development in areas of low natural hazard risk because the level of risk is acceptable. Enabling development in areas of low natural hazard risk will help to address the need for housing supply, while still preventing sensitive new development in high-risk areas.

Applying Policy 5: Development in high, moderate or low risk areas

Kevin, who owns a property in an urban area, has now gathered information and talked to his local council to understand the known likelihood, consequences and tolerance of natural hazard risk as it applies to his proposed development decision-making. These discussions have established that some parts of Kevin's site have 'high natural hazard risk'. This is based on the likelihood of there being frequent flood events that would cause serious damage to a building in this location and serious injury to occupants, and that level of risk would be considered intolerable.

Other areas of the site have risk that is not intolerable, but still not acceptable. Kevin won't be able to develop in those areas with intolerable risk, because it is unlikely effective works to reduce risk to tolerable levels can be taken. Kevin can proceed with development in areas where there is less than intolerable risk but will need to undertake mitigation risk reduction works (such as raised floor levels and ensure access to the street after a flood) that will remain effective for the lifetime of the proposed development, to reduce risk to as low as reasonably practicable.

Questions

14 What are the pros and cons of requiring planning decisions to ensure the specific actions to address natural hazard risk outlined in policy 5?

15 What is the potential impact of requiring decision-makers to apply this framework in their decision-making? Will it improve decision-making?

Policy 6: Reducing natural hazard risks through mitigation

Policy 6 directs decision-makers to adopt the most effective natural hazard mitigation measures to reduce the level of natural hazard risk, provided those measures do not exacerbate an existing natural hazard risk or create a new risk either on the site or on the surrounding area.

Mitigation measures could include, but are not limited to, avoiding development on part of a site, physical works (including structures), management of stormwater flow, management of vegetation and limited duration of resource consents for certain activities.

Policy 6 also directs decision-makers to prefer:

- nature-based solutions,[4] where they are possible and effective, because they can be more resilient and effective and have environmental co-benefits
- comprehensive area-wide mitigation measures, where they are possible and effective, because they are more likely to be effective at reducing natural hazard risk over a larger area. These are likely to be more appropriate for plan changes rather than individual applications.

The proposed NPS-NHD will still allow for site-specific and hard-engineering measures,[5] if they are possible or more effective. Site-by-site measures will still be relevant to decisions on resource consents, designations and private plan changes.

Question

16 What are the pros and cons of providing direction to decision-makers on the types of mitigation measures that should be adopted to reduce the level of natural hazard risk?

Policy 7: Recognising and providing for Māori and tangata whenua interests and te Tiriti principles

Policy 7 recognises and provides for Māori and, in particular, tangata whenua values, interests and aspirations as well as partnership under te Tiriti. It does this by requiring decision-makers to engage early and involve tangata whenua when making decisions (through existing resource management processes) on new developments on specified Māori land in high or moderate natural hazard risk areas. Māori will also be involved in assessing the tolerance of a natural hazard event in relation to new development on specified Māori land.[6]

The proposed NPS-NHD aims to acknowledge and deliver on te Tiriti principles of active protection and tino rangatiratanga. The NPS-NHD would protect Māori people and communities from the impacts of natural hazards. It provides for Māori land and Māori development aspirations and requires a tailored approach to meet partnership commitments through te Tiriti and legal obligations made through Tiriti settlements.

Policy 7 is important because Māori land is disproportionately exposed to natural hazard risk. According to several reports, 80 per cent of the around 800 marae in the country are in low-lying coastal areas or near flood-prone rivers (Insurance Council of New Zealand, 2022, p 22).

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4 Examples of nature-based solutions include planting or retaining forests and vegetation to stabilise slopes to reduce the risk of landslides, protecting and enhancing wetlands to help regulate flooding, and enhancing coastal vegetation and sand dunes to protect the area from storm surges and coastal inundation.

5 Examples of hard-engineering solutions include concrete stop banks, culverts, sea walls, soil nails and other engineering solutions. Where hard-engineering solutions are considered necessary, the form and location of any protection structures are to be designed to minimise adverse effects on the natural environment. This is a requirement in the coastal environment and coastal marine area under the New Zealand Coastal Policy Statement.

6 Specified Māori land in the NPS-NHD has the same definition as used in the NPS – Indigenous Biodiversity, to provide consistency between national direction.

Te Ture Whenua Māori Act 1993 recognises land as taonga tuku iho for its owners, their whānau and hapū and promotes the retention, occupation and development of that land.

Policy 7 is supported by clause 3.2, which makes it clear that local authorities must discuss natural hazard risk with tangata whenua in accordance with existing requirements under the RMA. Adapting to environmental change is not new to Māori: it has always been a part of traditional Māori knowledge systems. Māori, iwi and hapū have a deep understanding of the impact of natural hazards on their whenua, and the potential exists to incorporate this understanding into risk and tolerance assessments. Policy 7 encourages local authorities to engage with tangata whenua to discuss and agree on whether and how these knowledge systems can be incorporated into local authority assessment of natural hazard risk. Further guidance will be provided on this subject.

There is work underway on climate adaptation more broadly, including particular implications for Māori. This work focusses on how to enable communities in Aotearoa to relocate from areas vulnerable to climate change. It is also looking at how the costs of adapting to climate change could be met. The inquiry will consider how a Tiriti-based adaptation system could work for iwi, hapū and Māori communities, especially for decisions affecting whenua and whānau, and how lessons learned from past severe weather events and natural disasters might be considered for recoveries in the future. You can find more information on the Ministry for the Environment website.

Questions

17 Does policy 7 appropriately recognise and provide for Māori rights, values and interests? Why or why not?

18 Can traditional Māori knowledge systems be incorporated into natural hazard risk and tolerance assessments?

19 Does the requirement to implement te Tiriti settlement requirements or commitments provide enough certainty that these obligations will be met? Is there a better way to bring settlement commitments into the NPS?

Implementation timing

The proposed NPS-NHD will have legal effect on the date of commencement. The commencement date is based on 28 days from notifying the NPS-NHD in the *New Zealand Gazette*.

From the date the NPS comes into force, decision-makers must have regard to this NPS-NHD when considering resource consent applications, designations and give effect to the NPS-NHD in private plan changes. Until a local authority makes a plan change, decisions will rely on existing plans, including the plan's rules to trigger the need for a consent. Local authorities must give effect to the NPS in changes to their regional policy statements and plans, as soon reasonably practicable.

The proposed NPS-NHD includes an implementation provision outlining that, if a local authority's planning documents already include objectives and policies that are consistent with the NPS-NHD, then the local authority is not required to provide further consideration to the NPS-NHD in planning decisions. The aim of this provision is to minimise disruption and implementation costs for local authorities that already have effective risk-based decision-making approaches for natural hazard management.

Until a local authority makes a plan change, decisions will rely on existing plans including their rules to trigger the need for a consent. Where the consent required is a restricted discretionary activity or controlled activity, it would require that a matter of discretion or matter of control for natural hazards (or similar) is present in the existing plan. If a consent is required for a restricted discretionary activity or controlled activity, and there is no natural hazard matter of discretion or matter of control, the NPS will not be something to consider in the decision-making process for that consent.

Questions

20 Is the implementation timeframe workable? Why or why not?

21 What do you consider are the resourcing implications for you to implement the proposed NPS-NHD?

Implementation guidance

To support the implementation of the proposed NPS-NHD, the Government intends to work with iwi, hapū and Māori and local government in preparing guidance to help local authorities implement the policies in the proposed NPS-NHD.

Question

22 What guidance and technical assistance do you think would help decision-makers to apply the proposed NPS-NHD?

Links to other national direction

National Policy Statement on Urban Development

The National Policy Statement on Urban Development (NPS-UD) ensures the towns and cities of Aotearoa are well-functioning urban environments that meet the changing needs of the country's diverse communities. It includes policies that direct councils to enable urban intensification and housing supply, to improve housing affordability, access and choice.

The proposed NPS-NHD would not alter the NPS-UD requirements for local authorities to provide sufficient land for new development.

To minimise disruption and complexity for local authorities, the proposed NPS-NHD will not require changes to the intensification planning instruments that relevant local authorities are progressing to implement the NPS-UD and the Medium Density Residential Standards, in accordance with section 80F of the RMA. Many territorial authorities have completed or are near the end of the planning process to provide development capacity, and these processes will continue. Clause 1.5 of the NPS-NHD makes this intention clear.

New Zealand Coastal Policy Statement

The New Zealand Coastal Policy Statement 2010 (NZCPS) (Department of Conservation, 2010) guides local authorities in their day-to-day management of the coastal environment and coastal

marine area. It includes objectives and policies relating to the identification of coastal hazards, and the subdivision, use and development of the coastal environment.

The NZCPS includes 'avoidance policies' in relation to activities taking place in the coastal environment and coastal marine area that could increase harm from coastal hazards, along with activities involving the redevelopment, or change in land use, that would increase the risk of adverse effects from coastal hazards. The NZCPS also encourages redevelopment, or change in land use, where it would reduce the effects of coastal hazards, including managed retreat.

The policies in the proposed NPS-NHD are not inconsistent with the NZCPS. For example, policy 1 and policy 2 require a risk-based approach to identify risks from natural hazards. In providing direction on development in each risk category, policy 5 may be more lenient and allow for some level of increased risk. In contrast, the NZCPS direction does not allow for any level of increased risk in the coastal environment. Clause 1.6 of the NPS-NHD stipulates that the NZCPS will prevail over the proposed NPS-NHD in the coastal environment, if there is a conflict between the two documents.

Further information

For more information about the impact of the proposed NPS-NHD and an assessment of the alternative options, see the *Supplementary analysis report* on the Ministry's website. An evaluation report required under section 32 of the RMA will be provided with the final NPS-NHD for government decisions.

Part 4: How to have your say

The Government welcomes your feedback on this consultation document. The questions presented throughout the document are a guide only. You do not have to answer all the questions, and all comments are welcome. To ensure others clearly understand your point of view, you should explain the reasons for your views and give supporting evidence if needed.

Timeframes

This consultation starts on 18 September 2023 and ends on 13 November 2023. When the consultation period has ended, officials will analyse and summarise submissions. They will provide final policy advice to the Government on the preferred options later this year. Submissions will inform the final drafting of the proposed NPS-NHD and further decisions required from Cabinet later this year.

How to make a submission

You can make a submission in two ways:

- via Citizen Space (our consultation hub)
- by writing your own submission.

We request that you do not email or post submissions as this makes analysis more difficult. However, if you need to, please send written submissions to Ministry for the Environment, PO Box 10362, Wellington 6143 and include:

- your name or organisation
- your postal address
- your telephone number
- your email address.

If you are emailing your submission, send it to naturalhazardRMA@mfe.govt.nz as a:

- PDF, or
- Microsoft Word document (2003 or later version).

Submissions close at 11.59pm on 13 November 2023.

For more information

Please direct queries to naturalhazardRMA@mfe.govt.nz.

Publishing and releasing submissions

All or part of any written submission (including names of submitters) may be published on the Ministry for the Environment's website, environment.govt.nz. Unless you clearly specify otherwise in your submission, the Ministry will consider that you have consented to website posting of both your submission and your name.

Contents of submissions may be released to the public under the Official Information act 1982 following requests to the Ministry for the Environment (including via email). Please advise if you have any objection to the release of any information contained in a submission and, in particular, which part(s) you consider should be withheld, together with the reason(s) for withholding the information. We will take into account all such objections when responding to requests for copies of, and information on, submissions to this document under the Official Information Act 1982.

The Privacy Act 2020 applies certain principles about the collection, use and disclosure of information about individuals by various agencies, including the Ministry for the Environment. It governs access by individuals to information about themselves held by agencies. Please clearly indicate in your submission if you do not wish your name to be included in any summary of submissions that the Ministry for the Environment may publish.

Questions

1 Is more action needed to reduce development from occurring in areas facing natural hazard risk?

2 Are there any other parts of the problem definition that you think should be addressed through the NPS-NHD? Why?

3 Are there other issues that have not been identified that need to be addressed through the NPS-NHD or the comprehensive National Direction for Natural Hazards?

4 Do you support the proposed NPS-NHD's requirement that decision-makers take a risk-based approach when making decisions on new development in natural hazard areas? Why or why not?

5 Should all natural hazards be in scope of the proposed NPS-NHD? Why or why not?

6 If not all natural hazards are in scope, which ones should be included? Why?

7 Should all new physical development be in scope of the proposed NPS-NHD? Why or why not?

8 What impact do you think the proposed NPS-NHD would have on housing and urban development? Why?

9 Do you agree with the proposed objective of the NPS-NHD? Why or why not?

10 What are the pros and cons of requiring decision-makers to categorise natural hazard risk as high, moderate or low?

11 What are the pros and cons of directing decision-makers to assess the likelihood, consequence and tolerance of a natural hazard event when making planning decisions?

12 What are the pros and cons of directing decision-makers to adopt a precautionary approach to decision-making on natural hazard risk?

13 What are the pros and cons of requiring natural hazard risk as a matter of control for any new development classified as a controlled activity in a plan, and as a matter of discretion for any new development classified as a restricted discretionary activity?

14 What are the pros and cons of requiring planning decisions to ensure the specific actions to address natural hazard risk outlined in policy 5?

15 What is the potential impact of requiring decision-makers to apply this framework in their decision-making? Will it improve decision-making?

16 What are the pros and cons of providing direction to decision-makers on the types of mitigation measures that should be adopted to reduce the level of natural hazard risk?

17 Does policy 7 appropriately recognise and provide for Māori rights, values and interests? Why or why not?

18 Can traditional Māori knowledge systems be incorporated into natural hazard risk and tolerance assessments?

19 Does the requirement to implement te Tiriti settlement requirements or commitments provide enough certainty that these obligations will be met? Is there a better way to bring settlement commitments into the NPS?

20 Is the implementation timeframe workable? Why or why not?

21 What do you consider are the resourcing implications for you to implement the proposed NPS-NHD?

22 What guidance and technical assistance do you think would help decision-makers to apply the proposed NPS-NHD?

Appendix A: Proposed National Policy Statement for Natural Hazard Decision-making

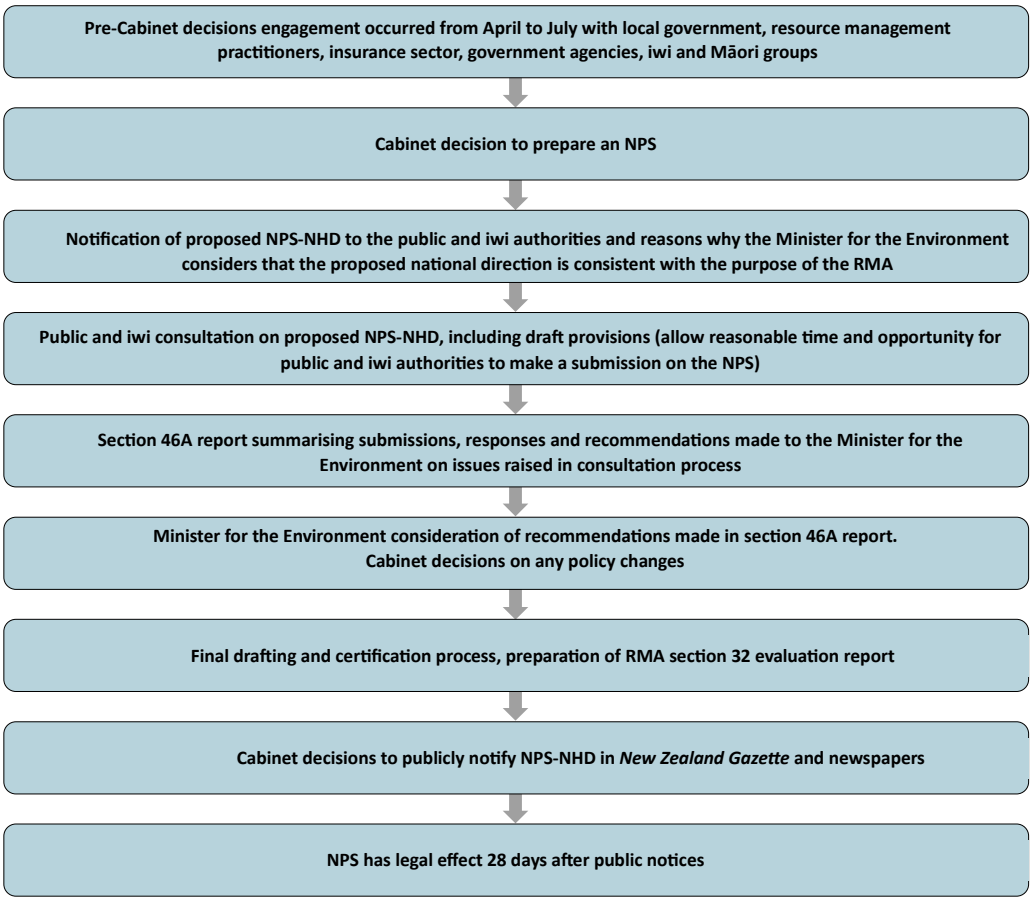
Read the proposed National Policy Statement for Natural Hazard Decision-making on the Ministry for the Environment's website.

Appendix B: Process for developing a national policy statement

The statutory requirements for preparing national policy statements are outlined in section 46A of the Resource Management Act 1991 (RMA) and can involve either a Minister for the Environment single-led process or a Board of Inquiry decision-making process.

The process for preparing the National Policy Statement for Natural Hazard Decision-making (NPS-NHD) is a single process under section 46A(4) of the RMA, as figure B.1 outlines. The Minister for the Environment has selected this approach due to the need for urgent national direction to support decision-making on development exposed to natural hazard risks, and on the basis of the engagement that has occurred on the need for this proposed NPS-NHD.

Figure B.1: National policy statement development process



Note: NPS = National policy statement; NPS-NHD = National Policy Statement for Natural Hazard Decision-making; RMA = Resource Management Act 1991.

References

Department of Conservation. 2010. *New Zealand Coastal Policy Statement 2010.* Wellington: Department of Conservation.

IAG. 2022. *IAG seeks three step plan for natural hazard prone New Zealand homes.* Retrieved 3 July 2023.

Insurance Council of New Zealand. 2014. *Protecting New Zealand from Natural Hazards.* Wellington: Insurance Council of New Zealand.

Insurance Council of New Zealand. 2022. *ICNZ submission on the draft National Adaptation Plan Including Managed Retreat.* Wellington: Insurance Council of New Zealand.

Local Government New Zealand. 2011. *The Local Government Case for a National Policy Statement for Flood Risk.* Wellington: Local Government New Zealand.

Ministry for the Environment. 2020. *National Climate Change Risk Assessment for Aotearoa New Zealand: Main Report – Arotakenga Tūraru mō te Huringa Āhuarangi o Aotearoa: Pūrongo whakatōpū.* Wellington: Ministry for the Environment.

Ministry for the Environment. 2022a. *Aotearoa New Zealand's First National Adaptation Plan.* Wellington: Ministry for the Environment.

Ministry for the Environment. 2022b. *National Adaptation Plan: Summary of Submissions.* Wellington: Ministry for the Environment.

NZIER (New Zealand Institute of Economic Research). 2020. *Investment in natural hazards mitigation-Forecasts and findings about mitigation investment.* Wellington: NZIER.

OECD (Organization for Economic Co-operation and Development). 2019. *Responding to Rising Seas: OECD Country Approaches to Tackling Coastal Risks.* Paris, France: OECD.

Parliamentary Commissioner for the Environment. 2015. *Preparing New Zealand for rising seas: Certainty and uncertainty.* Wellington: Parliamentary Commissioner for the Environment.

Resource Management Review Panel. (2020). *New directions for resource management in New Zealand*. Wellington: Resource Management Review Panel.

Toka Tū Ake EQC. 2023. *Risk Tolerance Methodology*. Wellington: Toka Tū Ake EQC.

Date 10 October 2023

Subject: **Biodiversity Credit System Submission**

Approved by: A D McLay, Director - Resource Management

S J Ruru, Chief Executive

Document: 3207624

Purpose

1. To seek endorsement for a submission on the New Zealand Government's (the Government) discussion document on exploring a biodiversity credit system for New Zealand.

Executive summary

2. The Government has released a discussion document on the design of biodiversity credit system for New Zealand. Biodiversity credits recognise in a consistent way projects and activities that protect or enhance indigenous biodiversity. By purchasing credits, people and organisations can finance and claim recognition for actions and outcomes related to protecting and enhancing nature. Attachments One and Two contain the discussion document and its summary.
3. With biodiversity in decline, including in Taranaki, an effective and efficient credit system could be an important tool for ecosystem restoration. However, system design will be a difficult and long process.
4. The draft submission included in Attachment Three is strongly supportive of developing a biodiversity credit system. However, it notes it will be challenging to develop an effective and efficiently system. Ongoing engagement from regional councils will be important to support the design of the system that can be implemented on the ground and is responsible to regionally-specific biodiversity priorities.

Recommendations

That the Taranaki Regional Council:

a) receives the memorandum titles *Biodiversity Credit System Submission*

b) endorses the submission in Attachment One on the *Helping nature and people thrive: Exploring a biodiversity credit system for Aotearoa New Zealand – Discussion document*

c) determines that this decision be recognised as not significant in terms of section 76 of the *Local Government Act 2002*

d) determines that it has complied with the decision-making provisions of the *Local Government Act 2002* to the extent necessary in relation to this decision; and in accordance with section 79 of the Act, determines that it does not require further information, further assessment of options or further analysis of costs and benefits, or advantages and disadvantages prior to making a decision on this matter.

Background

5. Indigenous biodiversity around the world is in crisis. Wildlife populations have decreased by an average of 69 per cent in under 50 years. And human activities have caused an acceleration in extinctions between 1,000 and 10,000 times higher than the natural rate.
6. New Zealand is not immune to these trends. We have the highest proportion of threatened species in the world, at one third of species being listed as such. With a further third listed as 'data deficient', it is likely the true amount of threatened species is even higher. Compounding this issue is that around 40% of plants, 90% of fungi, 70% of animals and 80% of freshwater species are endemic to New Zealand. Meaning that if they are lost here, they are lost entirely.
7. The maintenance of indigenous biodiversity is part of the core responsibilities of the Council, with biodiversity issues threaded across many different business areas. As set out in the Biodiversity Strategy for the Taranaki Regional Council, the regional vision is:
    - The full range of Taranaki's indigenous ecosystems and species are maintained in a healthy and fully functioning state, from the mountain to the ocean depths and from protected areas to productive landscapes.
    - Agencies, community groups and individuals work cooperatively in partnership, taking an integrated, efficient and cost effective approach that is based on sound science.
    - People living in Taranaki value and better understand biodiversity so that we can all enjoy and share in its benefits, as the foundation of a sustainable economy and society.
    - Taranaki's own unique character and the biodiversity matters of national importance are sustained and enhanced now and into the future.
8. To better incentivise the protection and restoration of indigenous biodiversity, the Government is investigating the potential of a biodiversity credit system. Biodiversity credits recognise in a consistent way projects and activities that protect or enhance indigenous biodiversity. By purchasing credits, people and organisations can finance and claim recognition for actions and outcomes related to protecting and enhancing nature.
9. The Government's current thinking is set out in *Helping nature and people thrive: Exploring a biodiversity credit system for Aotearoa New Zealand – Discussion document* (the Discussion Document). Thinking for how a credit system could operate within New Zealand is at the early stages. The Discussion Document represents this, providing a high-level and broad overview of how a system could operate. It seeks feedback on a number of similarly high-level design questions.
10. Attachment One contains a summary of the full discussion document that is included as Attachment Two.

Issues

11. Biodiversity is in decline, including in Taranaki. An effective and efficient biodiversity credit system has the potential to substantively better incentivise protection and restoration activities. However, designing such a system is far from straight forward.

Discussion

12. Overall, the discussion document does a good job of setting out the many considerations that need to go into designing a biodiversity credit system. Many questions in the document are difficult to answer definitively due to how various design decisions interact. For example, a decision to have the credit system apply only on private land would largely invalidate the question on if the system should apply in the coastal marine area.
13. Appendix Three contains the Council's detailed comments on the Discussion Document. It is strongly supportive of developing a credit system, but notes the complexity of designing an effective and efficient one. It also raises two key design matters not addressed in the Discussion Document. These are if credits should be repaid if biodiversity gains are lost in the future, and what types of groups should be available to receive credits. Council is not in a position to answer these questions, but they need to be considered in system design.
14. If the Government progresses with developing a biodiversity credit system, its design will be an ongoing and iterative process. It will be important for the Council to stay involved in these discussions, especially as they become more detailed and technical. The discussion document also asks for potential volunteers to trial a credit system. The Council's submission indicates its willingness to do so, presenting the Key Native Ecosystem and Wild For Taranaki as initiatives that could be built upon.

Options

15. The options are:
    (a) Endorse the submission as attached.
    (b) Endorse the submission subject to changes as requested by the Policy and Planning Committee.
    (c) Not progress the submission.
16. Either option a or option b is recommended. It is important that the Council submits in some form on the proposal. A biodiversity credit system has the potential to substantially benefit the delivery of Council's biodiversity responsibilities.

Significance

17. This item is assessed as not significant with regards to the Significance and Engagement Policy.

Financial considerations—LTP/Annual Plan

18. This memorandum and the associated recommendations are consistent with the Council's adopted Long-Term Plan and estimates. Any financial information included in this memorandum has been prepared in accordance with generally accepted accounting practice.

Policy considerations

19. This memorandum and the associated recommendations are consistent with the policy documents and positions adopted by this Council under various legislative frameworks including, but not restricted to, the *Local Government Act 2002*, the *Resource Management Act 1991* and the *Local Government Official Information and Meetings Act 1987*.

Iwi considerations

20. This memorandum and the associated recommendations are consistent with the Council's policy for the development of Māori capacity to contribute to decision-making processes (schedule 10 of the *Local Government Act 2002*) as outlined in the adopted long-term plan and/or annual plan. Similarly, iwi involvement in adopted work programmes has been recognised in the preparation of this memorandum.

Community considerations

21. This memorandum and the associated recommendations have considered the views of the community, interested and affected parties and those views have been recognised in the preparation of this memorandum.

Legal considerations

22. This memorandum and the associated recommendations comply with the appropriate statutory requirements imposed upon the Council.

Appendices/Attachments

Document 3207665: Discussion document summary for a biodiversity credit system

Document 3207668: Discussion document for a biodiversity credit system

Document 3207780: Submission on discussion document for a biodiversity credit system

A snapshot

Te āwhina i te taiao me ngā tāngata kia puāwai

Helping nature and people thrive

Exploring a biodiversity credit system for Aotearoa New Zealand
Snapshot of the consultation

Ministry for the Environment
Manatū Mō Te Taiao

Department of Conservation
Te Papa Atawhai

Indigenous biodiversity

Nature needs our help. The twin climate change and biodiversity crises are putting at risk Aotearoa New Zealand's unique wildlife, plants and habitats. This is due to human impact and environmental pressures such as land-use change, introduced pests, weeds and diseases, rising temperatures and increased droughts and floods.

While many landholders are working hard to protect and restore our unique wildlife, we risk losing many of these species and habitats without increased support. To do so risks our own wellbeing, given the many ways the environment supports us. We can't rely on government funding and the goodwill of landholders – including whenua Māori – to address these emerging challenges. The biodiversity crisis is a shared challenge that needs new approaches and increased support.

The growing interest in investing in nature

There is growing global awareness of biodiversity and climate challenges and their environmental, economic and social implications. Philanthropists, businesses, investors and the wider community in Aotearoa and overseas are increasingly looking at new and effective ways to invest in positive outcomes for nature.

Biodiversity credit systems (BCSs) are emerging as an increasingly popular way of using private sector funding to support landholder and central and local government efforts to protect, maintain and enhance biodiversity. A BCS would complement the National Policy Statement for Indigenous Biodiversity by recognising landholders who protect and restore nature.

This consultation

We are seeking feedback on the discussion document to help with the design of and the preferred role of government in a biodiversity credit system. Your feedback will help us develop a biodiversity credit system with impact, integrity and tailored to the unique context and challenges faced in Aotearoa.

Biodiversity credit systems

Biodiversity credits recognise in a consistent way projects and activities that protect or enhance indigenous biodiversity (that is, species or habitats), against which 'nature-positive' claims can be made. By purchasing credits, people and organisations can finance and claim recognition for actions and outcomes related to protecting and enhancing nature on public and private land, including whenua Māori.

A biodiversity credit could represent achieving a positive outcome for biodiversity (outcome-based systems), for projects (project-based systems) and/or activities that are likely to benefit biodiversity (activities-based systems).

Why a biodiversity credit system?

Biodiversity credits could help:

- address Aotearoa New Zealand's biodiversity crisis
- tackle the climate emergency
- support sustainable farming, forestry and tourism.

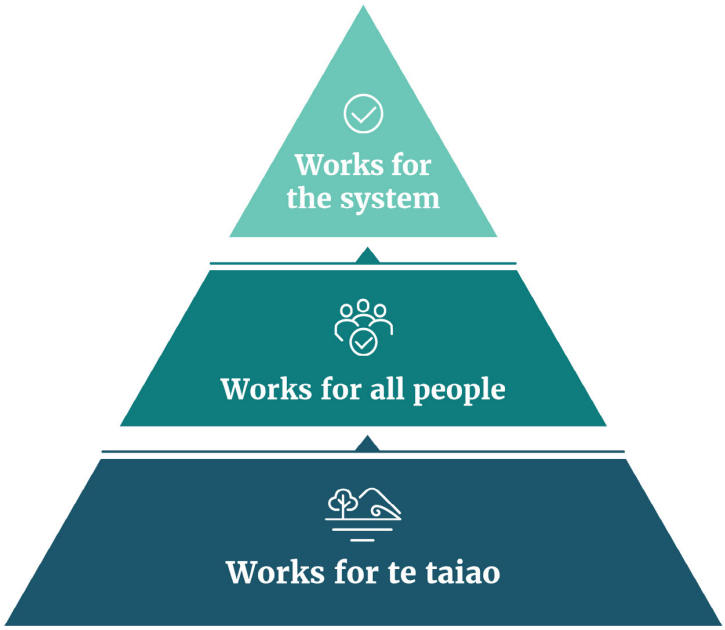
A biodiversity credit system could mobilise investment to support landholders with protecting, maintaining and restoring indigenous biodiversity in and around significant natural areas and in the wider landscape. Such a system would be particularly beneficial for attracting finance to support Māori in protecting biodiversity on whenua Māori, given the significant remaining presence of indigenous biodiversity on that land.

Prospective purchasers will need to have confidence that biodiversity credits have integrity, and investment will effectively protect and restore at-risk species and habitats.

Principles of designing and implementing a biodiversity credit system

The government must consider how a biodiversity credit system might be best tailored to Aotearoa's unique circumstances.

To do so, a BCS needs to support te ao Māori and mātauranga Māori and give effect to te Tiriti o Waitang We also need to consider what additional principles will lay the foundation for a credible, high-integrity BCS in Aotearoa.

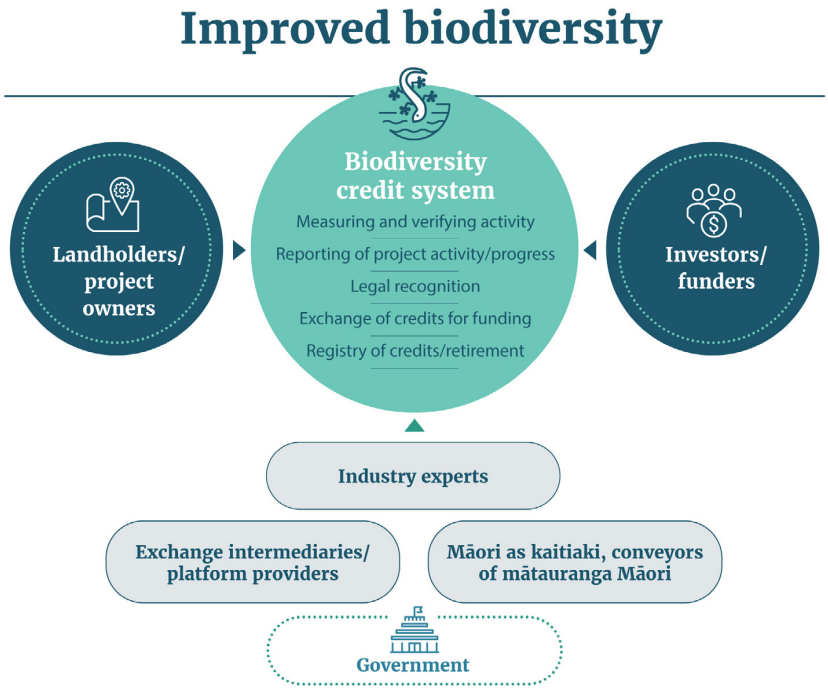


Potential underlying principles of a biodiversity credit system

Potential principle
Permanent (over 100 years), or has a long-term (25-year) positive impact
Transparent, verifiable claims
Robust, with measures to prevent abuse of the system and to address reversals in outcomes
Rewards nature-positive activities additional to business as usual
Complements domestic and international actions for biodiversity
Clear rules for the claims investors can make for their impact, with ways to prevent 'greenwashing'
Maximise positive impact on biodiversity (including uplifting mauri and mana of biodiversity)

Components of a biodiversity credit system

An effective biodiversity credit system has multiple components. Biodiversity credits with integrity and credibility need to demonstrate their impact through robust and cost-effective approaches to monitoring, verification and reporting.



The role of government

For a market to be trusted and grow and operate effectively, those participating in it need to be assured of the integrity and impact of the system.

The government could support a biodiversity credit system through:

- Market enablement – where the government seeks to influence the outcomes and operation of the market, using non-regulatory tools (such as good practice guidance for the development and uptake of voluntary schemes), and potentially funding system development as the market is established.
- Market administration – where the government establishes a regulatory framework, with tools to direct the outcomes and the operation of the market.

A blend of these options may be appropriate, with non-regulatory and regulatory tools applied to different components of a BCS. The approach could evolve over time as experience with the market beds in. Regulatory choices may also be informed by international frameworks. This will be particularly important if credits are to be traded internationally, or purchased by transnational corporates, for instance, in the trans-Tasman context.

Make your voice count

Join the kōrero and have your say:

- @environmentgovtnz
- @environmentgvnz
- facebook.com/environmentgovtnz
- linkedin.com/company/environmentgovtnz

Help shape the development of a biodiversity credit system

For full details on the proposals, the problems we are trying to solve, and the possible options being considered, read the full discussion document.

You can provide a submission through Citizen Space, our consultation hub, by either following the feedback form or by uploading your own written submission.

We would prefer that you don't email or post your submission to us as this makes our analysis more difficult. However, if you need to, mail your written submission to Water and Land Use Policy, Ministry for the Environment, PO Box 10362, Wellington 6143.

If you are emailing your submission, send it to biocredits@mfe.govt.nz.

Submissions close at 11:59pm on Friday 3 November 2023.

What happens next

The Government will consider the submissions to help with design choices and the preferred role of Government in a biodiversity credit system, along with working with key stakeholders.

Te Kāwanatanga o Aotearoa
New Zealand Government

Published by the Ministry for the Environment
INFO 1156

Te āwhina i te taiao me ngā tāngata kia puāwai

Helping nature and people thrive

Exploring a biodiversity credit system for Aotearoa New Zealand
Discussion document

Ministry for the Environment
Manatū Mō Te Taiao

Department of Conservation
Te Papa Atawhai

Te Kāwanatanga o Aotearoa
New Zealand Government

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Message from the Minister of Conservation

Aotearoa New Zealand has an abundance of unique and diverse plants and animals. From the towering kauri in the North to the iconic kākāpō in the South. We are a global biodiversity hotspot, with many of our species found nowhere else on earth. For example, 100 per cent of our reptiles, frogs and bats, and 72 per cent of our birds are only found here.

Our connection with indigenous biodiversity runs deep. It is part of our identity and inherent to the whakapapa relationship Māori have with te taiao, the natural world. In te ao Māori, we acknowledge the interconnected and holistic relationship that we have with living things, as well as our obligations as kaitiaki to look after te taiao.

Across the motu, many of us, from government and communities to individual landholders, are doing our best to help biodiversity thrive, but it needs more help. We have one of the highest percentages of threatened indigenous species in the world, and we have lost 79 species to extinction since the arrival of humans here. If we want future generations to enjoy our thriving ecosystems and habitats, we need to do more.

We know that biodiversity provides a wide range of benefits. Many people enjoy the social, cultural and environmental benefits. For example, visitors who come to Aotearoa to enjoy our beautiful national parks, whānau gathering mahinga kai, or people keeping healthy by going for walks in local forests.

We need to look at new and innovative ways to support landholders to protect and restore our indigenous biodiversity and ensure the range of ecosystems in Aotearoa are protected and restored. With the right financial incentives in place, we could do more.

A biodiversity credit system could be influential in improving the health and vibrancy of indigenous biodiversity by ensuring extra funding goes towards positive biodiversity outcomes. This would help us meet international obligations to protect biodiversity and deliver on outcomes sought through Te Mana o te Taiao – the Aotearoa New Zealand Biodiversity Strategy.

It could also supplement work already happening in our communities and on public land, ensuring that our prosperity as a people is intrinsically linked to the prosperity of the plants and animals that call Aotearoa home.

I encourage you to submit your thoughts on the potential for a biodiversity credit system in Aotearoa, and how to ensure such a system will work for all.

Hon Willow-Jean Prime
Minister for Conservation

Message from the Associate Minister for the Environment (Biodiversity)

Nature is being lost more rapidly now than at any time in human history, with an estimated one million species threatened with extinction.

Primarily as a result of human activity, Earth's wildlife populations have plunged by an average of 69 per cent in just under 50 years. The rate of species extinction today is somewhere between 1,000 and 10,000 times higher than it would be if our actions weren't making it so much more extreme.

In Aotearoa, we are not immune. New Zealand currently has one of the worst rates of extinction in the world. Species like the kākā, Bartlett's rātā, Archey's frog and the Otago skink are in decline due to predation from introduced pests, climate change, the spread of weeds, land- and sea-use change, and habitat loss.

Despite some incredible conservation success stories, and sustained efforts by landowners, hapū, iwi and community groups, the overall picture in Aotearoa is one of continued depletion.

Sixty-three per cent of our ecosystems are now threatened, and a third of our native species are threatened or at risk of extinction.

In the face of this escalating crisis, it is critical that we find a way to better reward those who are helping to protect and restore our native flora and fauna. Current investment and conservation actions fall far short of what is needed.

Whilst public conservation land and water is an important refuge for some of our most threatened species and ecosystems, a significant amount of New Zealand's last remaining indigenous biodiversity is on private and Māori land.

Given many of our threatened and at-risk species and habitats are found outside of conservation land, solutions to the biodiversity crisis need to involve the whole community, including our business sectors. It's time we make it simpler and more cost effective to support the good work that landowners and tangata whenua are already doing on their land.

An effective system of biodiversity credits and incentives could go a long way towards that goal. It could help to recognise farmers and other landowners, hapū and iwi for their stewardship of nature and resource them to go further. It could help to close the gap in economic returns between fast-growing exotic monocrop forests and slower-growing, but more biodiverse, indigenous forests.

But biodiversity credits and incentives aren't without risk or controversy. Any system would need unimpeachable environmental integrity. There are concerns about the commodification of nature, indigenous rights, and cultural and intellectual property.

Many of us feel a strong connection to our native plants and wildlife. We're lucky enough to have ancient rainforests, tussock grasslands and braided rivers right on our doorstep.

We would like your help in resolving these questions as we consider what the best design of a system of biodiversity credits and incentives might look like for Aotearoa. Please let us know what you think.

Hon James Shaw
Associate Minister for the Environment (Biodiversity)

Summary

Nature needs our help. The twin crises of climate change and biodiversity are putting at risk many of Aotearoa New Zealand's unique wildlife, plants and habitats. This is due to human impact and environmental pressures (land-use change, introduced pests, weeds and diseases, rising temperatures, and more frequent droughts and floods).

We have a strong attachment to our country's landscapes, natural heritage and unique indigenous species. It is one of the features that defines us as a nation and as a people. While many landholders are doing great work to protect and restore species and habitats, without greater support to address these crises, we risk losing more species and habitats. This risks our own wellbeing, given the many ways in which the natural world supports us. We can't just rely on government funding and the goodwill of landholders.

This is a shared challenge that needs new approaches and greater financial support.

A new way to finance 'nature-positive' projects

Looking after our richly diverse species and habitats is not only good for the environment it is essential to our wellbeing, economy and way of life. But to properly protect nature, much greater funding is needed to support the efforts of both public and private landholders.

One solution for bridging this funding gap is a 'biodiversity credit system' (BCS). This is an emerging approach that is gaining considerable interest internationally. In June this year 14 world leaders[1] wrote an open letter calling for a green transition and for new, innovative and sustainable sources of finance and more trusted carbon and biodiversity credit markets.

Biodiversity credits are a way of attracting funding from the private sector, to invest in efforts by landholders to protect, maintain and enhance indigenous vegetation and habitats, including shrublands, grasslands, wetlands and natural and regenerating native forests.

The credits recognise, in a consistent way, landholder projects or activities that provide positive outcomes for indigenous biodiversity (species and habitats).

By purchasing credits, people and organisations can finance and claim credit for their contribution to 'nature-positive' actions and outcomes.[2] In Aotearoa, these relate to protecting, restoring and enhancing nature on public and private land, including whenua Māori (Māori land).

Such an approach has the potential to complement traditional ways of financing projects that support and conserve nature. It could help support the implementation of the National Policy Statement for Indigenous Biodiversity and support landholder responses to our climate change emergency, by mobilising the funding and approaches needed to support their efforts.

Demand for credits is expected to increase over time as businesses look to understand and address their impacts on nature and protect the environment they operate it. Business drivers

1 *The Guardian.* 2023. 'A green transition that leaves no one behind': world leaders release open letter. 21 June.

2 Nature-positive refers to activities that lead to nature being restored and regenerated instead of declining.

for this investment include: meeting stakeholder, customer and employee expectations, enhancing reputation and brand, addressing current and emerging industry and corporate reporting standards and building meaningful relationships with mana whenua and communities.

For a market to grow and operate effectively for nature, those participating will need assurances that biodiversity credits have integrity. Prospective investors will want to be confident that biodiversity credits can be trusted and have impact, and project developers and landholder will want certainty about what is expected of their projects.

Consequently, the Government is exploring the roles it could play to support the establishment of a BCS for Aotearoa that would operate with both integrity and impact and that suits the country's unique circumstances. These include the need to recognise that iwi and hapū[3] have unique rights, interests and obligations guaranteed under te Tiriti o Waitangi and Treaty settlements for safeguarding te taiao and kaitiaki relationships with taonga species.

A credit system could particularly benefit indigenous biodiversity on whenua Māori for those landholders who wish to protect and enhance indigenous biodiversity, given the large areas of remaining native vegetation still found on this land. It could do so by complementing other tools, such as carbon credits, to support sustainable land use.

This discussion document explores broad roles that the Government could play in different parts of a biodiversity credit system, for instance, using non-regulatory tools, such as guidance, or establishing regulatory tools to direct the operation and administration of the market.

Consultation

The Government is exploring its role alongside iwi and hapū in setting up a BCS for Aotearoa.

We are seeking feedback on the need for and the design of a BCS, and the different roles of government and Māori in implementing it. Our aim is for a system that has impact and integrity, tailored to Aotearoa New Zealand's unique context and challenges. This includes how it could work with other programmes that support the environment.

Consultation is open from 7 July to 3 November 2023.

To make a submission, go to: https://consult.environment.govt.nz/biodiversity/nz-biodiversity-credit-system

Please contact us at biocredits@mfe.govt.nz for more information or to set up an online conversation.

[3] Including post-settlement governance entities.

1 What is a biodiversity credit system?

This section covers the following.

- What is a biodiversity credit?
- International approaches
- Potential use in different habitats
- Different biodiversity credit system approaches
- Activities a biodiversity credit could fund
- Biodiversity **credits** versus biodiversity **offsets**

For a detailed outline of the threat to Aotearoa New Zealand's diverse species and ecosystems, see section 2: Why do we need a biodiversity credit system?.

What is a biodiversity credit?

Biodiversity credits are a type of 'green financing' mechanism. They are used to encourage and facilitate private investment in protecting the environment. The credits are measurable and traceable units representing projects or activities to protect, restore or enhance indigenous biodiversity. Some are tradeable. They recognise, in a consistent way, projects and activities that bring 'nature-positive' outcomes for biodiversity.

A biodiversity credit has been defined as a legal instrument that has been certified under a specific system.[4] It represents the environmental action made or outcomes achieved, where it took place, who developed it, under what methodologies and timeframes. By purchasing credits, people and organisations can finance environmental projects and activities. Purchasers can then claim credit for their contribution to nature-positive actions and outcomes related to the protection, restoration and enhancement of indigenous biodiversity on public and private land.

What is a biodiversity credit market?

A biodiversity credit market is a market for buying and selling biodiversity credits, see section 3: Approaches to trading credits.

What is a biodiversity credit system?

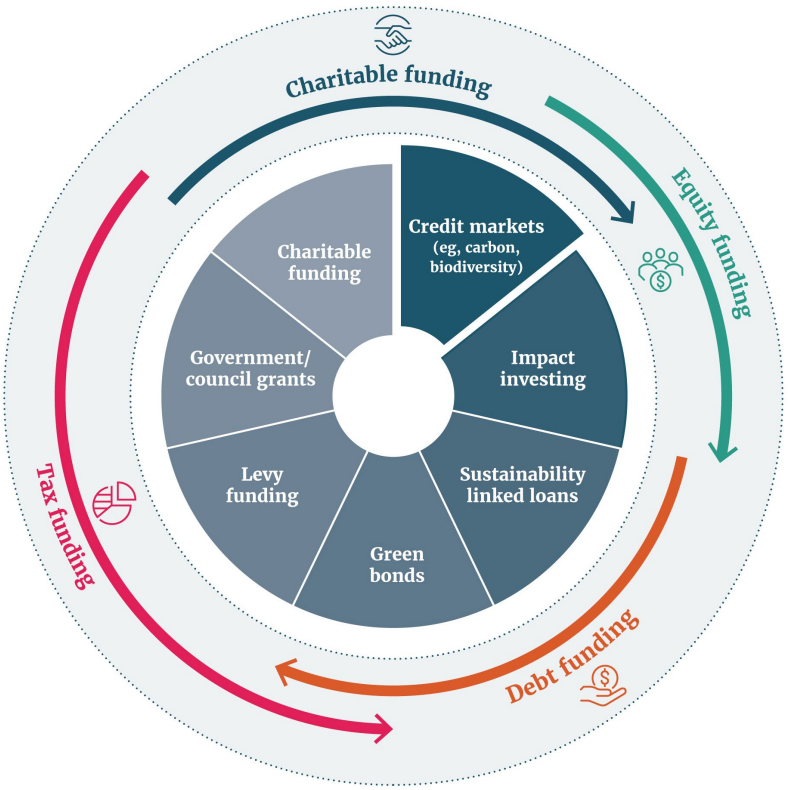
A biodiversity credit system (BCS) provides the institutional settings, methods, systems and processes that enable and govern the creation, sale and purchase of, and claims made against, biodiversity credits.

4 Carbon Credits. *Biodiversity Credits: A New Way of Funding Nature Protection*. Retrieved 23 June 2023.

How does a biodiversity credit system relate to other green financing mechanisms?

A range of financing mechanisms can be used to provide funding for environmentally friendly projects. Some provide either grants, debt funding or provide equity (figure 1).

Figure 1: Green financing mechanisms



International approaches

Different approaches to BCSs and markets are emerging both internationally and domestically. For example, United Nations agencies are jointly supporting the Biodiversity Credit Alliance. This comprises field-based conservation practitioners and academics who are developing guidance for developing credible and scalable biodiversity credit markets, based on global principles.

World leaders[5] are calling for a green transition and for new, innovative, and sustainable sources of finance and more trusted carbon and biodiversity credit markets.

Emerging government-supported and private sector approaches include the following (see also appendix 2).

5 *The Guardian.* 2023. 'A green transition that leaves no one behind': world leaders release open letter. 21 June.

Nature repair market – Biodiversity certificates

The Australian Government is establishing a 'nature repair market', as part of its Nature Positive Plan. The aim is to make it easier for companies and other businesses to invest in projects that improve biodiversity across Australia. To support this, the Nature Repair Market Bill 2023 (the Bill) has been introduced into the Australian Parliament, to provide a framework for this market. Eligible landholders (including First Nations people, conservation groups, state governments and farmers), will be able to participate in the market. Landholders taking environmental action to protect, restore or establish habitat would be able to receive a tradeable certificate that will be tracked through a national register. Eligible projects will be subject to various permanence periods based on prescribed methods or the Bill minimum periods of 25 or 100 years. Examples of projects include:

- improving or restoring native vegetation
- planting a mix of local native species
- re-establishing coral reefs
- protecting rare grasslands that provide habitat for an endangered species.

This framework is intended to facilitate private investment in biodiversity, including where carbon storage projects also benefit biodiversity.

VERRA – Nature-positive credits

VERRA is a non-profit organisation in the United States of America that sets standards for climate action and sustainable development. It manages the voluntary carbon market verified carbon standard programme. It is developing a biodiversity methodology for assessing and quantifying the benefits from conservation and restoration activities. The biodiversity standard will be used to certify the benefits of environmental projects verified by the Sustainable Development Verified Impact Standard (SD VISta) and allow market participants to make claims (a verified statement of a project's measured benefits).

Wallacea Trust – Biodiversity credits

The Wallacea Trust is a United Kingdom charity that leads projects to protect ecosystems and biodiversity in developing countries. It is designing a BCS based on at least five metrics, to represent conservation objectives within an ecoregion. Objectives can be a measured uplift in biodiversity, a future uplift in biodiversity against a reference site, or avoidance of anticipated loss in biodiversity. Proposed projects are independently verified, and biodiversity credits issued by an international standards body (eg. Plan VIVO).

Greencollar – NaturePlus credit scheme

GreenCollar is a private Australian environmental market investor and project developer. It has developed a BCS trademarked as NaturePlus. Credits are awarded for delivered and third-party audited and certified restoration in high conservation value landscapes. Credits are issued at project level for activities such as:

- reducing loss and degradation
- improving the connectiveness and resilience of ecosystems
- maintaining and improving native habitat.

Once areas have been improved to sustainable levels, credits can be generated from successfully maintaining that condition. Each credit represents 1 hectare of achieved conservation or restoration over one year. Environmental conditions are benchmarked against the Australian Accounting for Nature Framework.

ClimateTrade and Terrasos – voluntary biodiversity credits

Spain's ClimateTrade™ and Colombia's Terrasos have joined forces to promote voluntary biodiversity credits to support habitat banking. Each credit corresponds to 30 years of conservation and restoration of 10 metres of habitat of threatened species. Credit generation is determined by the International Union for Conservation of Nature's threat category for the ecosystem, subject to the preservation, restoration and duration of the project. Voluntary biodiversity credits allow companies to meet their decarbonisation targets, while becoming nature positive.

EKOS – Sustainable Development (Biodiversity) Units (NZ)

Sanctuary Mountain Maungatautari is an ancient ecosystem near Hamilton. It is the site of a project to restore an environment where some of New Zealand's most endangered species, including birds, bats and reptiles, can be safely reintroduced.

To support the project, in July 2022 the New Zealand company EKOS launched the country's first private sector biodiversity credit offering. Through EKOS's Sustainable Development Unit programme, Sanctuary Mountain Maungatautari sold biodiversity units to Hamilton business Profile Group Ltd. This sale enabled the sanctuary to control pests and weeds over 83 hectares, for one year.

The integrity of the initiative is based on an environmental markets quality system. This includes a standard and methodologies developed by EKOS and validated by environmental auditing firm McHugh and Shaw Ltd.

'The EKOS approach does not put a price on nature. It puts a price on the human labour and technology cost to look after nature,' said the company's Chief Executive Officer, Dr Sean Weaver.

Voluntary carbon market

The voluntary carbon market (VCM) is a closely related mechanism to tackle climate change and drive mitigation action, by recognising carbon removals from the atmosphere. The VCM enables the sale and purchase of carbon credits. Each credit represents 1 tonne of carbon dioxide equivalent either removed from the atmosphere or reduced from emissions. Some voluntary carbon credits also include the added value of biodiversity co-benefits, which may or not have been quantified. Carbon credits with biodiversity co-benefits are increasingly sought after and generally sell at a premium, compared with similar carbon credits without biodiversity co-benefits.[6]

6 Ministry for the Environment. Unpublished. *Voluntary carbon and biodiversity markets – summary findings*. Wellington: Ministry for the Environment.

Potential use in different habitats

A BCS could recognise efforts to protect, enhance and restore indigenous biodiversity in any habitat (on land, in freshwater, or coastal and marine environments) or only in some. Likewise, a credit could represent work on whole ecosystems or catchments, or focus on endangered or taonga species or remnant habitats.

Most current international BCSs recognise work on land only. This is likely because we know more about biodiversity on land than elsewhere.

However, examples are increasing of systems that recognise work in other ecosystems, such as Niue's Ocean Conservation Credit scheme.

The BCS proposed in Australia's Nature Repair Bill aims to recognise projects both on land and in freshwater, coastal and marine environments, including, potentially, coral re-establishment projects.

New Zealand could start small, focusing on certain ecosystems and activities, to pilot this approach or to establish the framework for a system across all ecosystems and activities.

This will depend in part on the availability of suitable methodologies and data for each ecosystem.

Different biodiversity credit system approaches

A biodiversity credit could represent a measured positive outcome for biodiversity or for projects and activities that are likely to benefit biodiversity. Three broad approaches are emerging for the design of BCSs: outcome, activity and project based.

By outcome

VERRA and Operation Wallacea are examples of primarily an outcome-based approach, where one credit represents a 1 per cent increase (or avoided decrease) in the indigenous biodiversity of a hectare. This is also a unit-based approach. The aim is to simplify the valuation of the impact of different activities to a single unit of credit, to represent equivalent outcomes for biodiversity. This is intended to operate in a similar way to carbon markets: 1 tonne of carbon dioxide removed from the atmosphere by certain activities is recognised globally as a carbon credit and is considered to have an equivalent benefit in reducing global warming regardless of location.

By activity

The EKOS Sustainable Development Unit approach for 'life on land' is a type of BCS based mainly on the quantification of activities and effort to support biodiversity outcomes such as:

- hectares of wetland indigenous revegetation in a defined project area with a minimum planting density
- hectares of land managed for invasive pest or weed control.

This approach mainly recognises activities to improve biodiversity.

By project

The Australian Nature Repair Framework is an example of a project-based approach, issuing a certificate for biodiversity projects instead of credits. It uses standard methods and assessments, which specify what kinds of projects can be covered, and standardised presentation of project information. This ensures that projects are described accurately and consistently, so that the market can compare their biodiversity value.

Table 1: Pros and cons of different biodiversity credit system approaches

Approach	Advantages	Disadvantages
By outcomes	• Good recognition of benefits to biodiversity • Outcomes are generally easier to see and understand for lay-people • Comparative impact of credits easier to value on a unit basis • Credits generally not given until outcomes achieved	• Perception of commodification of nature • Could lead to focus on achieving outcomes that are less challenging • Generally longer timeframe to see value from credits (outcomes take time) • Factors outside of the control of participants can affect outcomes • May require complicated and expensive methodology to monitor, measure, verify and report a basket of indicators for identifying progress against outcomes.
By activities	• Recognises time and actions of land owners and holders • Value of credit tied to activity rather than the biodiversity itself • Credits received faster (front footed) • Lends itself well to a faster implementation timeline	• Positive outcomes for biodiversity are assumed based on activities • Difficult to attribute benefits of activities • Moderate monitoring, verification and reporting costs • Outcomes may not be achieved
By project	• More flexibility in the types of activities and/or outcomes that qualify • Recognises time and actions of land owners and holders • High transparency in projects and how they fit in wider landscape • Ability for participants to choose to support projects that align with their values and/or outcomes sought • Easier to align with other related priorities (eg, climate)	• Difficulty in deciding what projects are in or out (where to draw the line) • Each credit is likely to be more complicated with many facets • Challenging to compare impact across projects and therefore harder to consistently value project certificates • Likely to require a long implementation timeline to set up

Activities a biodiversity credit could fund

Under an activity- or project-based approach, a biodiversity credit could support different types of activities. In a New Zealand context, this could include any or all of the following:

1. maintaining or restoring areas of existing indigenous biodiversity (shrublands, native grasslands, tussocklands, natural and regenerating forests and wetlands) by improving ecosystem integrity within significant natural areas (eg, pest, browser and weed control, stock- or predator-proof fencing, interplanting)

2. expanding indigenous biodiversity around significant natural areas (eg, creating buffer zones and ecological corridors around and between forest remnants, natural wetlands or other natural areas)
3. creating new areas of indigenous biodiversity (eg, by planting indigenous forest species, supporting transition from exotic to native forests, re-establishing wetlands, riparian planting using native plants along side lakes, rivers and streams, recreating seagrass beds, native grasslands and shrublands)
4. specific interventions for indigenous or taonga species (eg, to improve species number, diversity, range)
5. enhancing legal protection of existing significant areas of indigenous biodiversity (eg, supporting the establishment of Queen Elizabeth II National Trust Act 1977 or Conservation Act 1987 covenants, Ngā Whenua Rāhui kawenata, conservation easements, or land use restrictions)
6. Māori-led initiatives to restore, maintain and/or improve indigenous biodiversity in accordance with local expressions of mātauranga Māori
7. Activities may also be distinguishable based on the type of land (eg, public conservation land and regional parks, or private land including whenua Māori).

Biodiversity credits versus biodiversity offsets

Biodiversity **credits** operate in the voluntary market and are intended to bring benefits for indigenous biodiversity, against which nature-positive claims can be made.

Biodiversity **offsets** are a regulatory option. They are used as a requirement to offset negative impacts of development on indigenous biodiversity in limited circumstances. Offsets are designed to compensate for damage to nature with 'equivalent' or better improvements to indigenous biodiversity elsewhere.

In Aotearoa a requirement for a biodiversity offset is a resource management tool. It is available only in limited circumstances to provide redress for impacts on indigenous biodiversity that cannot be avoided, arising from the subdivision, use or development of land. Offsets are subject to national direction[7] and principles.

Some overlap may occur between activities that could generate a biodiversity credit and those required to achieve net biodiversity gains as part of offsets. Offsets must generate a 'like for like' replacement and can be location dependent.

Both approaches require similar supporting tools and processes, such as measurement, monitoring and verification systems (section 3).

Whether credits are used as an offset or not could be a design choice for a BCS. If allowed, the credit would need to satisfy the requirements of both approaches and could not be used to make nature-positive claims. Alternatively, landholders who are developing projects that would

7 Ministry for the Environment. 2023. *National Policy Statement for Indigenous Biodiversity 2023.* Wellington: Ministry for the Environment.

generate biodiversity credits could have the option of selling into either the biodiversity credits market or to a developer as an offset.

Closing a BCS to the regulated offsets market would reduce one potential source of investment interest but might make the market more attractive to other investors.

Questions	
1	Do you support the need for a biodiversity credit system (BCS) for New Zealand? Please give your reasons.
2	Below are two options for using biodiversity credits. Which do you agree with? (a) Credits should only be used to recognise positive actions to support biodiversity. (b) Credits should be used to recognise positive action to support biodiversity, and actions that avoid future decreases in biodiversity. Please answer (a) or (b) and give your reasons.
3	Which scope do you prefer for a biodiversity credit system? (a) Focus on terrestrial (land) environments. (b) Extend from (a) to freshwater and estuaries (eg, wetland, estuarine restoration). (c) Extend from (a) and (b) to coastal marine environments (eg, seagrass restoration). Please answer (a) or (b) or (c) and give your reasons.
4	Which scope do you prefer for land-based biodiversity credits? (a) Cover all land types, including both public and private land including whenua Māori. (b) Be limited to certain categories of land, for example, private land (including whenua Māori). Please answer (a) or (b) and give your reasons.
5	Which approach do you prefer for a biodiversity credit system? (a) Based primarily on outcome. (b) Based primarily on activities. (c) Based primarily on projects. Please answer approach (a) or (b) or (c) and give your reasons.
6	Should there also be a requirement for the project or activity to apply for a specified period to generate credits? Please answer Yes/No and give your reasons.
7	Should biodiversity credits be awarded for increasing legal protection of areas of indigenous biodiversity (eg, QEII National Trust Act 1977 covenants, Conservation Act 1987 covenants or Ngā Whenua Rāhui kawenata? Please answer Yes/No and give your reasons.
8	Should biodiversity credits be able to be used to offset development impacts as part of resource management processes, provided they meet the requirements of both the BCS system and regulatory requirements?

2. Why do we need a biodiversity credit system?

This section gives an overview of the:

- benefits a BCS might bring
- challenges to the environment that it might address
- considerations relating to te Tiriti o Waitangi
- interest that is growing internationally and domestically in this new way to invest in nature.

Why a biodiversity credit system?

Government, Māori, businesses, philanthropists, environmentalists and community groups are looking for new ways to invest in projects that protect indigenous species and habitats, as well as those that address the climate crisis. Alongside governments, communities and landholders, they want to ensure that nature continues to thrive and support us and our wellbeing.

An emerging approach is to use BCSs. Overseas, both governments and the private sector are interested in developing and operating such systems to attract new sources of funding (see section 1).

Benefits

A BSC would directly benefit indigenous biodiversity and the wider environment by:

- complementing the National Policy Statement on Indigenous Biodiversity 2023. It could help to attract the funding landholders need, to protect significant natural areas and habitats of taonga species, and to restore indigenous biodiversity in the wider landscape
- help to protect and reconnect important remaining remnants of indigenous biodiversity and to build the resilience of land and soils in the face of climate change
- help landholders (including of whenua Māori) as stewards and kaitiaki
- support New Zealand's response to the climate emergency.

To make the most of this opportunity, prospective investors will need to have confidence that biodiversity credits have integrity and that their investments have impact to support at-risk species and habitats.

Activities for credits must also recognise the unique rights, interest and obligations of Māori to taonga species and mātauranga Māori.

Nature needs our help

Aotearoa was isolated from the rest of the world for 80 million years. As a consequence, many indigenous species and habitats were not well prepared to adapt to the challenges of human settlement, or to the new domestic and pest animals and weed species brought here by European settlement. Climate change driven by rising greenhouse gas levels is adding pressure, with rising temperatures and more frequent floods and droughts.

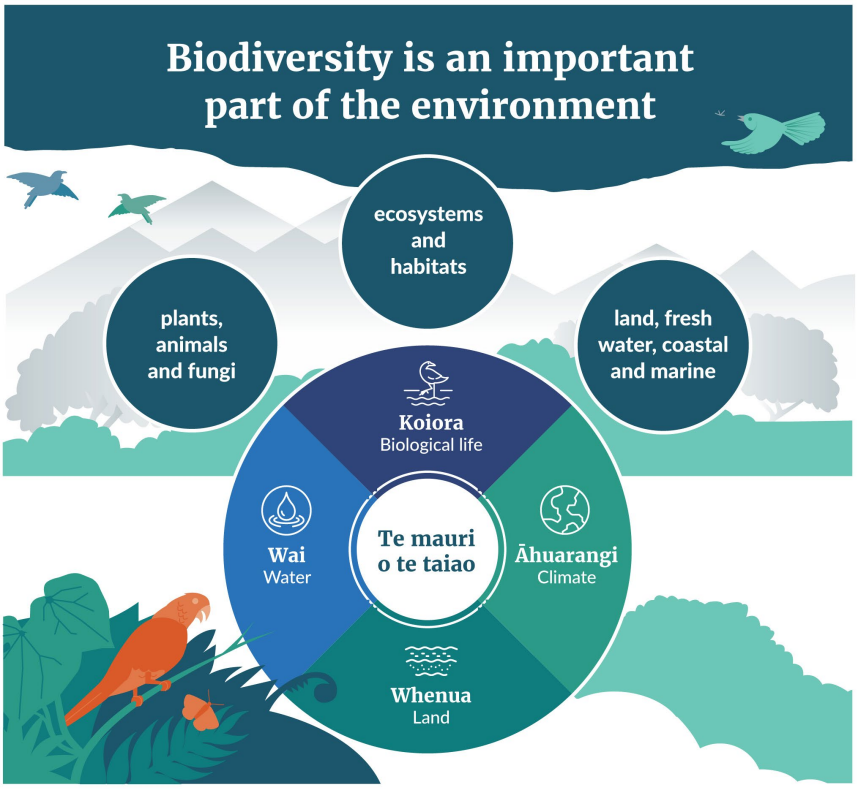
Aotearoa has one of the highest proportions of threatened indigenous species in the world.

This includes 22 per cent of our terrestrial species, 17 per cent of freshwater species and 32 per cent of marine species.[8] This is on top of the 79 species of birds, plants and other creatures we have already lost over recent centuries.

Almost two-thirds of Aotearoa New Zealand's rare and 'naturally uncommon' ecosystems are also at risk. For example, less than 10 per cent of our inland wetlands remain.

If we don't act to support the unique biodiversity in Aotearoa, we risk losing many more unique species and habitats.

Figure 2: Biodiversity is an essential part of the natural world that contains and surrounds us



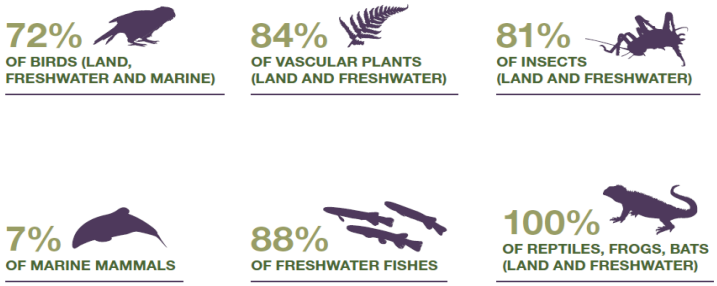
8 Department of Conservation. 2020. *Te Mana o te Taiao – Aotearoa New Zealand Biodiversity Strategy 2020.* Wellington: Department of Conservation.

Aotearoa New Zealand's wildlife, plants and habitats are unique

New Zealanders treasure their country's biodiversity, which is part of the world's shared heritage.

Aotearoa is a global biodiversity hotspot, and a huge proportion of species here are found nowhere else on earth. For example, we have more endemic[9] seabirds than any other country.[10]

Figure 3: Aotearoa New Zealand's unique wildlife[11]



Proportion of New Zealand's indigenous species found nowhere else on Earth. Data does not include extinct species.

We need the environment to thrive for people to thrive

Aotearoa New Zealand's future and all aspects of our wellbeing are dependent on the health of the natural world. The natural environment provides us with fertile and stable soils, clean air and water, flood control, plant pollination, recreation, food, shelter, culture benefits and spiritual connection.

Te Oranga o te Taiao recognises:

(a) the health of the natural environment

(b) the essential relationship between the health of the natural environment and its capacity to sustain life

(c) the interconnectedness of all parts of the environment

(d) the intrinsic relationship between iwi and hapū and te Taiao.

Upholding Te Oranga o te Taiao supports the wellbeing of present and future generations.

9 Endemic to Aotearoa New Zealand means that the species do not breed anywhere else in the world.

10 Department of Conservation. 2020. *Te Mana o te Taiao – Aotearoa New Zealand Biodiversity Strategy 2020.* Wellington: Department of Conservation.

11 Macfarlane et al, 2010; Gordon, 2013, NZTCS 2019 in Department of Conservation. 2020. *Biodiversity in Aotearoa – an overview of state, trends and pressures.* Wellington: Department of Conservation.

More than half the world's gross domestic product is moderately to highly dependent on nature and the services it provides to communities and economies.[12]

Aotearoa New Zealand's economic and social wellbeing is highly dependent on nature, with over 10 per cent of annual output derived from the food and fibre industries (including primary products, such as dairy farming, and the subsequent processing and commercialisation industries, such as dairy product manufacturing)[13] and around 10 per cent from tourism.[14]

A healthy and biodiverse environment also provides greater resilience, particularly the ability to adapt to and recover from the impacts of a changing climate.

When nature is in trouble, so are we.

Protecting the environment is critical to Māori

The relationship between whānau, hapū and iwi with their taiao is complex. Whānau, hapū and iwi share inherent whakapapa relationships, interconnectedness and an interdependency with their taiao. They will have interests in proposed solutions that are grounded in te ao Māori and enable the application of mātauranga Māori.

The Government has ongoing obligations under te Tiriti o Waitangi and in Treaty settlements and other agreements entered into between the Crown and iwi or hapū.

Te Tiriti o Waitangi and Treaty settlements provide guarantees to Māori for exercising tino rangatiratanga and kaitiakitanga in relation to taonga species and places.

A BCS must give effect to te Tiriti. This will be a critical consideration in the design of a BCS for Aotearoa.

When we act, nature responds

When we remove or manage threats to biodiversity, restore habitats and modify how we interact with nature, nature will recover. We can turn the tide of biodiversity decline, for those species and habitats that remain.

Aotearoa is a world leader and pioneer in bird conservation, research and management. Active management (eg, pest control, fencing, planting) has resulted in the population growth of 23 bird species, but many of these need ongoing support to continue to thrive.[15]

12 World Economic Forum. 2020. *Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy.* Switzerland: World Economic Forum.

13 Ministry for Primary Industries. 2002. *Situation and Outlook for Primary Industries.* Wellington: Ministry for Industries. This includes data for the year to 31 March 2021.

14 Stats NZ. 2002. *Tourism satellite account: Year ended March 2022.* Retrieved 24 June 2023.

15 Department of Conservation. 2020. *Te Mana o te Taiao – Aotearoa New Zealand Biodiversity Strategy 2020.* Wellington: Department of Conservation.

Much is to be learned from mātauranga Māori, for example, Ngāpuhi mātauranga of rongoā species and how forests regenerate has helped to identify research pathways to address kauri dieback disease.[16] The application of mātauranga Māori will be essential for addressing the biodiversity and climate crisis. BCS developers will need to consider how whānau, hapū and iwi kaitiaki are empowered to apply mātauranga Māori in keeping with their local tikanga and kawa.

A growing number of individuals, communities, whānau, hapū and iwi, farmers, foresters, businesses and private landholders, and others are doing critical work to re-establish, restore and protect indigenous biodiversity on private land.

In many cases, this brings benefits for other land uses, such as farming. For example, landholders protecting forest remnants and natural wetlands with Conservation or QEII covenants or Ngā Whenua Rāhui kawenata, or planting indigenous shelterbelts and river margins to provide shade, improve water quality, prevents erosion and provides habitat for indigenous birds and insects including pollinators.

A BCS has the potential to support landholders with their stewardship of land and help Aotearoa transition to more sustainable land uses.

Te Hanga Kawenata
Photo: Ngā Whenua Rāhui

16 Sources: Lambert et al (2008); Scott et al (2019) and Department of Conservation. 2020. *Te Mana o te Taiao – Aotearoa New Zealand Biodiversity Strategy 2020.* Wellington: Department of Conservation.

Farming with Native Biodiversity pilot

The Farming with Native Biodiversity pilot project has been developing an approach with industry to enhance, manage and protect native biodiversity on farm. The goal has been to develop training materials and resources and share information from experts that will support farm advisors and farmers with the skills and confidence to bring native biodiversity into on-farm planning. The resources and planning approach aim to encourage farmers to take long-term affirmative action.

This pilot aimed to develop win–win solutions and practical actions, making sustainable practices normal practice and returning the pride to farming through responsible land stewardship. One outcome was that the team worked with 40 farms across Aotearoa New Zealand, and produced 39 farm biodiversity management plans that would potentially see 224 individual biodiversity management projects being carried out including enhancement, management or restoration on:

- 34 wetlands
- 29 forest remnants
- 63 riparian margin restorations
- 460-plus hectares of native plantings
- 580 hectares of marginal land retired into supporting native biodiversity on private land.

Biodiversity credits may provide a potential source of funding to support the implementation of biodiversity management plans on farm.

The New Zealand Landcare Trust is leading this project with support from Fonterra Living Water, Silver Fern Farms and the BioHeritage National Science Challenge Ngā Koiora Tuku Iho. The Ministry for Primary Industries Sustainable Food and Fibre Futures fund has provided funding for this project.

Photo: Courtesy of Farming with Native Biodiversity.

A shared global challenge

The world is waking up to the dual challenges of the climate change and biodiversity crises, and the risks they pose for the nations and people of the world.

In June 2023 world leaders[17] Emmanuel Macron (France), Joe Biden (United States), Rishi Sunak (United Kingdom), Mia Mottley (Barbados), Luiz da Silva (Brazil), Ursula von der Leylen (EU Commission), Charles Michel (EU Council), Olaf Scholz (Germany), Fumio Kishida (Japan), William Ruto (Kenya), Macky Sall (Senegal), Cyril Ramaphosa (South Africa) and Mohamed Al Nahyan (United Arab Emirates) released an open letter calling for a green transition that leaves no one behind. The letter noted amongst other things 'the need for new, innovative, and sustainable sources of finance, such as debt buy-backs, engagement from sectors that prosper thanks to globalisation, and more trusted carbon and biodiversity credit markets.'

New Zealand is party to the Convention on Biological Diversity. This promotes the development of global targets, national strategies and action plans for the conservation and sustainable use of biodiversity.

In December 2022, Convention on Biological Diversity parties agreed to the Kunming-Montreal Global Biodiversity Framework (the Framework), under which they committed to contribute to 4 global goals and 23 global targets to halt and reverse biodiversity loss by 2030. This includes a commitment to scale up positive incentives for the conservation and sustainable use of biodiversity.

Te Mana o te Taiao – Aotearoa New Zealand Biodiversity Strategy forms part of Aotearoa New Zealand's commitment to help halt global biodiversity loss under the Convention on Biological Diversity. It sets out our approach to the protection, restoration and sustainable use of biodiversity for the next 30 years.

The Aotearoa New Zealand Biodiversity Strategy Implementation Plan calls for the exploration of tools, products, services and financial incentives for positive biodiversity. This could include a BCS.

In response to the climate change crisis, Aotearoa is also party to the Paris Agreement. This notes the importance of ensuring the integrity of all ecosystems and protecting biodiversity when addressing climate change. Aotearoa New Zealand's first National Adaptation Plan and Emissions Reduction Plan include actions that will help improve the alignment between climate and biodiversity actions.

A BCS could support these endeavours. It would encourage investment using nature-based solutions to reduce emissions, enhance biodiversity and increase Aotearoa New Zealand's resilience and adaptation to a changing environment.

17 *The Guardian.* 2023. 'A green transition that leaves no one behind': world leaders release open letter. 21 June.

Te Hoiere/Pelorus Catchment restoration project – using nature-based solutions

Identified as a priority by the Kotahitanga mō te Taiao Alliance, the Te Hoiere project is a partnership for environmental leadership across the Top of the South Island. Its purpose is the restoration of mauri and wairua of the river and estuary from the mountains to the sea.

Participants:

- iwi
- local government
- central government (Department of Conservation priority and Ministry for the Environment at-risk catchment)
- community and land owners
- farming and fishing industry.

Interventions:

- riparian fencing, weed control and native planting using eco-sourced plants
- use of dung beetles on pasture.

Outcomes:

- increased water quality, soil stability and biodiversity
- reduced run-off and increased fertilisation of pastures
- communities enjoy wellbeing of the river
- supports local aquaculture
- supports increased resilience of State Highway H6.

Closing the funding gap

Despite this expertise and the enthusiasm and efforts of landholders, iwi, hapū, and of the wider community, current public and private investment is falling short of what we need to protect nature.

Many 'at-risk' species and habitats are found outside the 30 per cent New Zealand managed by the Department of Conservation. Instead, they are present on private land.

Many farmers, foresters, other landholders, iwi, hapu, environmental and community groups are investing substantial amounts and forgoing significant development opportunities[18] to protect and manage indigenous species and habitats on private and Crown lease land. This is happening either independently or in partnership with: QEII National Trust, Ngā Whenua Rāhui, Department of Conservation and other groups and councils. This work is appreciated by the wider community and often has additional benefits. However, actively managing and protecting indigenous biodiversity can also be costly, and can limit other uses for that land.

18 Investment in Covenanted Land Conservation – University of Waikato Institute of Business Research 2017 – QEII National Trust

Landholders need more encouragement and financial support to build on these efforts to protect, maintain, restore and enhance the biodiversity on their land, and to share the cost of action.

QEII covenantor Michael Kelly stands next to 'Kelly's Black Creek Bush', a 4.3-hectare remnant bush block in Rua Roa, 20 kilometres west of Dannevirke, that he protected with a QEII Open Space Covenant in 2019.
Photo: QEII National Trust

The funding gap

In 2021 the Department of Conservation (DOC) estimated that 547 land-based and wetland species had conservation management plans in place, and that to fully fund them would cost up to an average of $95 million a year.

Extrapolating that for all species needing help, it was estimated to cost around $696 million per year. At the time, DOC spent $36 million per year on managing threatened, at-risk and conservation-dependent species. These figures are estimates and do not factor in the costs to landholders and the wider community of private efforts to protect nature, nor do they include the costs of the wider biodiversity work by DOC including for marine species.

Internationally, an estimated $722 billion to $967 billion[19] is needed annually to halt global biodiversity loss. Work is being done to address the biodiversity crisis, but a global shortfall in funding is estimated of between US$598 billion and US$824 billion annually.

Biodiversity credit systems are a way to bridge this gap and finance actions that conserve and restore nature.

[19] Deutz, A. et al. 2020. *Financing Nature: Closing the Global Biodiversity Financing Gap*. Paulson Institute, The Nature Conservancy and the Cornell Atkinson Center for Sustainability.

Growing interest in investing in nature

With increasing awareness of the biodiversity and climate challenges and their environmental, economic and social implications,[20] philanthropists, businesses, investors and the wider community here and overseas are looking at new ways to invest in nature[21] that have both integrity and impact.

Philanthropists and community groups

Aotearoa New Zealand's environment and conservation philanthropic sector receives a small fraction of overall charitable income: just over 1.5 per cent ($368 million of a total of $24 billion in 2021). Although this is a small part of overall donations, giving to the environment is among the country's fastest growing sectors. Between 2017 and 2020 it grew by 48 per cent.[22]

Corporate and business interests

Predicting demand is challenging, even for established markets, but several signs can be seen that demand will increase over coming years.

Aotearoa New Zealand's corporate and business giving is about $84 million, 0.1 per cent or $77.4 billion in pre-tax profits in 2019/20, against the global goal of 1 per cent.[23] Businesses in the United States of America, for example, are giving just under 1 per cent of pre-tax profits for community causes including conservation. However, investment in environmental causes is trending upwards.

Investment into biodiversity outcomes is already occurring through the Voluntary Carbon Market (VCM) and New Zealand Emissions Trading Scheme (NZ ETS), where several credits include biodiversity co-benefits (typically linked with native forestry) and other impact-investing platforms.

Surveys of businesses indicate that businesses expect this investment will increase over time.

- A 2022 Sustainable Business Network survey of mainly smaller enterprises (less than 50 employees) found that about a fifth were considering increasing financial support for environmental causes.[24]
- A follow-up Sustainable Business Network–Ministry for the Environment survey, which received 105 responses, found 14 per cent of respondents indicated their business is investing in a carbon credit with a biodiversity or native component. Additionally, over 20 per cent of respondents indicated they were investing in a combination of biodiversity

[20] World Economic Forum. 2020. *Nature Risk Rising: Why the crisis engulfing nature matters for business and the economy*. Switzerland: World Economic Forum. World Economic Forum. 2022. *The global risks report 2022, 17th edition*. Switzerland: World Economic Forum.

[21] McKinsey (2022). Where the world's largest companies stand on nature | McKinsey Sustainability

[22] JBWere. 2021. *New Zealand Cause Report*. Wellington: JBWere.

[23] JBWere. 2022. *The Corporate Support Report: The evolution of corporate giving and community investment in New Zealand*. Wellington: JBWere.

[24] Sustainable Business Network. 2022. *Business survey: challenges and opportunities in nature regeneration*. Retrieved 25 June 2023.

projects and carbon-only credits. Most expected their nature-related investment to increase in the next five years, mostly in biodiversity-related projects.

- Qualitative research undertaken by PricewaterhouseCoopers for the Ministry for the Environment in 2023 involving corporates, financial institutions and project developers indicates there is either demand or interest in investments in biodiversity (either as co-benefits or separate projects) but that this interest would be contingent on the approach taken for a BCS.
- Investment into biodiversity outcomes is already occurring through the VCM where several credits include biodiversity co-benefits (typically linked with native forestry) and other impact-investing platforms. Three-quarters of interviewees indicated they were willing to pay a higher price for carbon credits with co-benefits. Biodiversity co-benefits (60 per cent) were ranked as the most desirable co-benefit of a VCM credit. Of survey respondents, 71 per cent stated that they anticipate demand for biodiversity-related projects will increase in the future, while 67 per cent stated that they expect their organisation's investment in biodiversity-related projects will expand in the future.

These surveys indicate that business motivations for financially supporting nature vary:

- regulatory compliance, for instance, to offset emissions, or comply with legislated financial disclosure obligations
- industry standards and strategies, for instance, the International Air Transport Association requires airlines to offset carbon emissions
- stakeholder and employee expectations, voluntary or industry corporate social responsibility standards, such as environmental, social and governance reporting
- voluntary support for reputation and brand enhancement, market positioning or market access reasons
- as an investment opportunity where the investor might purchase the right to make a nature-positive claim but then looks to on-sell that claim for a profit instead of using it.

Many industries are now recognising their impact on nature. For instance, the second phase of the Tourism Industry Transformation Plan, created in partnership by representatives from the tourism industry, unions, government, workers and Māori, includes, as one of its goals, for tourism operators to understand their own impact on biodiversity, act to minimise that impact, and contribute more broadly.

This is in keeping with international developments. Increasingly, European listed companies are acknowledging biodiversity challenges in company reports (increasing from 74 per cent to 85 per cent between 2018 and 2021) and are including indicators as part of circular economy reporting (increasing from 22 per cent to 30 per cent between 2018 and 2021).[25]

Such expectations will become business as usual over time, particularly with the emerging Taskforce on Nature-related Financial Disclosures framework. This enables corporates and large business to report and act on nature-related risks and opportunities. It follows Taskforce on

[25] Marco-Fondevila M, Álvarez-Etxeberría I. 2023. Trends in private sector engagement with biodiversity: EU listed companies' disclosure and indicators. *Ecological Economics* 210.

Climate-Related Financial Disclosures, which is now a regulatory requirement in New Zealand for some large financial market participants.[26, 27]

Over time, these trends are likely to encourage greater investment in biodiversity and climate change projects by corporates and businesses to demonstrate they are nature positive.

Many of Aotearoa New Zealand's corporates operate on both sides of the Tasman. The development of a nature repair market in Australia (section 1), and growing corporate awareness internationally of the biodiversity crisis, may generate trans-Tasman interest in an Aotearoa biodiversity credit market.

However, the business surveys suggest that a biodiversity credit market would need to have integrity to be attractive to investment and reach scale. Sustainable Business Network–Ministry for the Environment survey respondents indicated the following would support confidence in nature-based markets: standards such as for

- measurement, monitoring and reporting (62 per cent of respondents)
- information tools (52 per cent)
- having regulatory oversight (eg, by government) (42 per cent).

Clear biodiversity outcomes

When considering new tools, such as a BCS, we must have a clear understanding of the outcomes we want to achieve and how to achieve them. Such tools need to work for Aotearoa and our unique circumstances.

Outcomes to aim for

We think an ideal BCS in Aotearoa needs to:

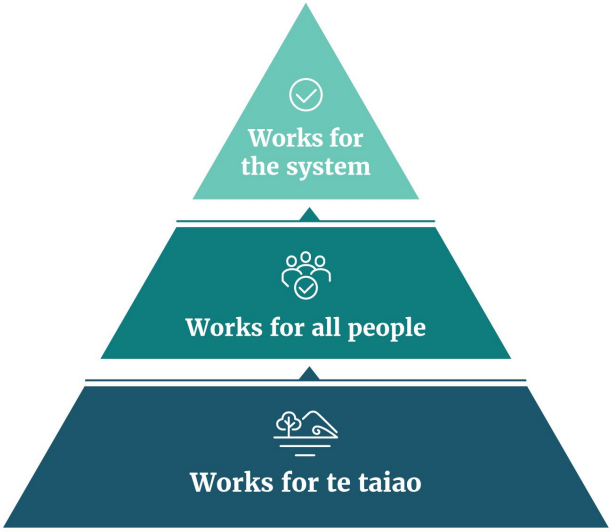
1. work for the environment by:
   (a) attracting investment to close the biodiversity funding gap
   (b) having the impact to protect, maintain and restore biodiversity, resulting in nature-positive outcomes.
2. Work for all people by:
   (a) honouring and giving effect to te Tiriti o Waitangi
   (b) recognising the work landholders do for biodiversity, including on whenua Māori
   (c) giving investors, businesses and communities a trustworthy way to invest in biodiversity protection and restoration.
3. Work as part of a wider system by:

[26] In Aotearoa New Zealand, this applies to large publicly listed companies, insurers, banks, non-bank deposit takers and investment managers.

[27] The Taskforce on Climate-Related Financial Disclosures is the underpinning framework for the Financial Sector (Climate-related Disclosures and Other Matters) Amendment Act 2021 that requires Aotearoa New Zealand's largest companies to report annually on their climate-related risks and opportunities.

(a) complementing and contributing to the wider system of tools, policies and programmes to address the biodiversity and climate crisis (which the Government, iwi and hapū, communities, businesses and others contribute to) (see section 4).

Figure 4: Principles of a biodiversity credit system



Outcomes to avoid

Private sector credit systems are emerging in Aotearoa and overseas with or without government help (section 2 – International approaches). Left to their own devices, the risk is that poorly designed systems might:

- fail to stop, or even enable, biodiversity loss (eg, by failing to support lasting, nature-positive impacts)
- lack transparency and integrity, or encourage 'greenwashing'
- fail to attract investment and stifle innovation
- fail to support investment in high-impact action, including action that addresses the most urgent biodiversity needs
- fail to give effect to te Tiriti, or adequately provide for the rights and interests of iwi and hapū[28] under te Tiriti or as part of Treaty settlements
- discourage productive land uses that also improve biodiversity outcomes
- create mismatch or conflict with other government and community programmes and policies
- lack mechanisms to police and remedy abuse, such as fraud (domestic or international).

Another undesirable outcome would be overwhelming potential investors with too many different BCSs, each with different standards and meanings.

[28] Including post-settlement governance entities.

To make decisions, investors need assurance this will not happen. This is why certain markets and economic instruments are often regulated to require upfront and ongoing disclosures.

As well as addressing the biodiversity crisis, opportunities exist to align or blend a BCS with other environmental tools to provide co-benefits (eg, food and erosion risk reduction, improving water quality, climate change mitigation and adaptation and resource management reform). See section 4.

Questions	
9	Do you think a biodiversity credit system will attract investment to support indigenous biodiversity in New Zealand? Please give your reasons.
10	What do you consider the most important outcomes a New Zealand biodiversity credit system should aim for?
11	What are the main activities or outcomes that a biodiversity credit system for New Zealand should support?

3. How should we design and implement a biodiversity credit system?

This section discusses:

- principles that could apply to the design of a government-supported BCS
- components of a fully functioning system, including measurement, verification and reporting, legal recognition, approaches to trading credits, and the role of experts
- the potential role of government.

Principles of design and implementation

People need to know what they can expect when they participate in a BCS and what is expected of them. Clear principles are critical to this.

Chosen principles should work to make the system deliver the outcomes we want, and none we want to avoid.

The principles may be operational, ecological, social or financial. Some might have sub-principles. For example, the principle of integrity could include a sub-principle that requires activities beyond business as usual, to earn credit for demonstrating additionality (extra biodiversity benefits).

To uphold government obligations under te Tiriti o Waitangi, a BCS will need to be guided by the following principles:

- supports te ao Māori and mātauranga Māori
- gives effect to te Tiriti o Waitangi principles.

Example principles

Many different principles could lay the foundation of a credible, high-integrity BCS in Aotearoa New Zealand. Table 4 lists principles that could be relevant to the outcomes the Government is seeking.

Table 2: Potential underlying principles for a biodiversity credit system

Potential principle
Permanent (over 100 years) or long-term (25-year) positive impact
Transparent, verifiable claims
Robust, with measures to prevent abuse of the system and to address reversals in outcomes
Reward nature-positive activities additional to business as usual
Complement domestic and international actions for biodiversity

Potential principle
Clear rules for the claims investors can make for their impact, with ways to prevent 'greenwashing'
Maximise positive impact on biodiversity (including uplifting mauri and mana of biodiversity)

Decisions need to be made on the principles to pursue. Choosing a long list or focusing on certain principles is likely to result in a large and complicated system. For example, a system that focuses on verification and additionality and permanence will likely be more costly and might take longer to yield benefits. A system that achieves long-term impacts would need a mechanism to monitor, report, and address changes of ownership.

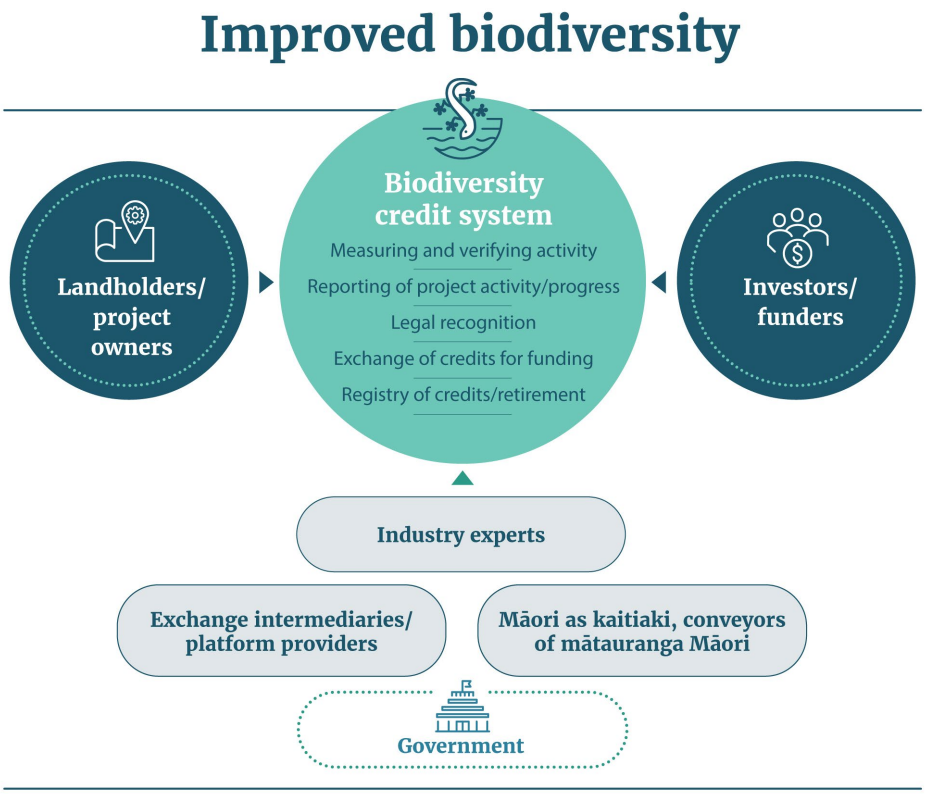
Choosing only a few principles might result in a smaller, more targeted system, but may affect the confidence of stakeholders to invest.

Input from the public on which principles are most important will help shape the Government's next steps in developing a system.

System components

An effective BCS is made from multiple components (figure 5).

Figure 5: Components of a biodiversity credit system



Measurement, verification and reporting

If biodiversity credits are to have integrity and credibility, they must demonstrate their impact through robust and cost-effective approaches to measurement, verification and reporting (MVR). Differences in approach will dictate what will be measured. Many MVR standards have been developed by independent international practitioners (eg, VERRA, Eco-Markets Australia, Accounting for Nature, Plan Vivo Foundation). Some have built off approaches to measure carbon removals from the atmosphere.

International organisations (eg, the Taskforce on Nature Markets, World Economic Forum – Financing for Nature Global Initiative, the International Union for the Conservation of Nature – Global Standard for Nature-based Solutions) as well as governments (eg, Australia) are working to develop a best practice for MVR. Most of these approaches have a strong focus on outcomes.

Many overseas BCSs measure outcomes with a 'basket-of-metrics' approach. This means measuring multiple indicators over time (eg, species diversity and numbers, fragmentation of habitats). It provides a more holistic and robust assessment of the state of biodiversity and the impact of activities and projects.

This requires an in-depth knowledge of the local ecosystem, which reinforces the need to work closely with Māori, landholders and local communities.

Such approaches can be expensive and time consuming. They must be flexible enough to take advantage of innovations and new technologies as they become available, as well as emerging practices focusing on ecosystem integrity.

It will also be important to consider project scale and the level of verification and auditing needed at different scales (with smaller scale projects having less rigorous monitoring requirements to reflect lower levels of financial risk.)

Innovative tools exist, or are being developed, to make the systems more feasible by reducing the cost of MVR.[29]

Independence and accountability will also be important for MVR to have integrity, with differing levels of government involvement.

Emerging innovations to support measurement, verification and reporting

Remote sensing techniques (eg, satellite, aerial and drone mapping technology, bioacoustics), artificial intelligence and modelling that supports expert judgement (including mātauranga Māori) could make measurement, verification and reporting more cost effective.

Another example is using environmental DNA techniques to determine the presence and diversity of species by testing soil, water or air samples in project areas for traces of species DNA. Other tools, such as distributed ledger technology or blockchain technology, can make registering biodiversity credits more cost effective and transparent.

[29] Nature Finance and Taskforce on Nature Markets. 2023. *The Future of Biodiversity Credit Markets: Governing High-Performance Biodiversity Credit Markets.* Switzerland: Nature Finance and Taskforce on Nature Markets.

Legal recognition

Without specific regulations, the sale and purchase of emerging biodiversity credits would be covered by contract (and common) law and consumer law.

It may be difficult to cover all circumstances and eventualities using contracts, potentially resulting in possible legal ambiguity and a risk of gaming. Disputes could be expensive to resolve relying on court processes.

Contracts may not be an ideal way to ensure transparent and ongoing disclosures. Regulation can often provide a higher level of disclosure and scrutiny tailored to the system.

To attract investment, it may be desirable to have some form of legal recognition of nature-positive claims. This may require regulation, to ensure proper disclosure and transparency of information about who can make claims and on what basis. Sellers of credits will also need to demonstrate that they have the legal right to carry out biodiversity activities in the area (eg, permission of land owners or beneficial owners, and resource consents if needed).

For example, in the case of natural features granted legal personhood (eg, Te Urewera Forest, Whanganui River), where a custodian board has been appointed, a biodiversity credit project carried out on this land would require consent on behalf of the natural feature.

Transparency of data access and information sharing will be expected under a BCS, while enabling protection of privacy, indigenous knowledge and commercial-in-confidence information.

Another consideration for an Aotearoa BCS is the rights and interests of Māori, as kaitiaki of taonga species. A BCS will need to reflect the recommendations of the Waitangi Tribunal for Te Tumu mō Te Pae Tawhiti Wai 262 claim, and the Government response.

What is the Wai 262 claim?

Wai 262 was lodged on 9 October 1991. It concerns who controls Māori traditional knowledge, artistic and cultural works, and the environment that created Māori culture.

It also concerns the place in contemporary Aotearoa New Zealand life of core Māori cultural values. These include the obligation of iwi and hapū to act as kaitiaki (cultural guardians) towards taonga (treasured things), for example, traditional knowledge, important places, and flora and fauna that are significant to iwi or hapū identity.

The Waitangi Tribunal report on Wai 262, *Ko Aotearoa Tēnei* (2011)[30] made several recommendations, including:

- new partnership models for conservation
- expanded roles for Māori advisory bodies
- amendments to laws relating to environmental protection
- amendments to laws covering resource management wildlife, conservation, environmental protection, patents and plant varieties, and more.

30 Waitangi Tribunal. 2011. *Ko Aotearoa Tēnei*. Wellington: Waitangi Tribunal.

Approaches to trading credits

The central function of a biodiversity credit market is to facilitate the buying and selling of credits.

For this to occur smoothly and with integrity, prospective buyers need to:

- be aware of available biodiversity credit investment opportunities
- be well informed about, and compare, different biodiversity credit offers according to their investment objectives
- have confidence in the information provided.

Information will also be important to avoid scenarios such as double-selling and claiming of credits where more than one purchaser claims the same outcome.

Ideally, a market would also offer a range of projects for different investment preferences. This requires that exchange requirements should not be overly burdensome for credit sellers. Different options are available for how credits produced by project or landholders could be issued for sale to prospective buyers with various levels of government involvement:

- they could be directly sold by project managers or land owners, once their efforts or biodiversity outcomes have been independently measured and verified; or
- an overview body could issue credits for measured and verified projects or activities, and traded via a centralised platform (similar to the NZ ETS); and/or
- third-party or independent brokers could be involved in the sale of credits, for example, through an online digital platform.

Establishing a registry of biodiversity credits and verified biodiversity-related activities would:

- allow tracking of credits and outcomes (eg, with a unique identifier for each credit and activity)
- facilitate the issuing of verified credits after registration
- facilitate the trading and retirement or cancellation of credit claims
- avoid double-counting of credit claims (transaction registry).

Registry accounting would take place alongside a data management system that recorded information about credits and activities. This would not necessarily be stored in a transaction registry but would be required for transparency.

Role of experts

Landholders must be helped by people with the right knowledge and skills to support nature. A BCS must recognise and provide for this. The *Outrage to Optimism* ministerial inquiry into land uses in Tairawhiti and Wairoa acknowledges that, to improve environmental resilience, it is critical to build a “skilled and experienced labour force, environmental management and

governance capability needed to tackle the task of transforming our most vulnerable land to forest".[31]

A scheme such as Mahi mō te Taiao – Jobs for Nature that creates nature-based projects, could support a BCS. It could, for instance, support environmental services such as weed and pest management, and freshwater and environmental restoration.

Likewise, expertise will be required to support functions such as MVR, and expertise in mātauranga Māori about taonga species at the appropriate whānau, hapū and iwi scales.

Mahi mō te Taiao | Jobs for Nature

The Jobs for Nature programme is part of the Government's response to New Zealand's economic recovery from the impact of COVID-19 by delivering nature-based employment. The programme funds nature-based work activities spread across Aotearoa New Zealand, including vegetation planting for freshwater and biodiversity restoration, fencing waterways, pest control (including wilding pines and other pest plants), fish passage remediation, building capability and capacity in freshwater management, and skills training to support career development. The programme is due to end in June 2025, when most projects conclude.

Photo: Ministry for the Environment.

Certain functions may require accountability, to ensure the integrity of the system. Options could be to use existing systems and processes or for additional government involvement, such as through occupational licensing.

Several organisations could also provide important expertise. For example, the following organisations could provide enhanced legal protection and monitoring for projects that are generating biodiversity credits.

- The QEII National Trust and Banks Peninsula Conservation Trust support land owners to protect biodiversity on their land through permanent covenants and by contributing to fencing, monitoring and advising on management of covenanted land.
- The Ngā Whenua Rāhui Fund supports the protection of indigenous biodiversity on Māori-owned land using kawenata (covenants) while enabling whānau, hapū and iwi to apply local mātauranga Māori in accordance with their tikanga.

Other organisations that could provide expertise to land owners for biodiversity credit projects include:

31 Ministerial Inquiry into Land Uses in Tairawhiti and Wairoa. 2023. *Outrage to Optimism: Report of the Ministerial Inquiry into land use associated with the mobilisation of woody debris (including forestry slash) and sediment in Tairawhiti/Gisborne and Wairoa District.* page 20.

- regional and district councils
- Predator Free NZ
- Project Crimson Trust – Trees that Count
- Tāne's Tree Trust
- NZ Landcare Trust – Farming with Native Biodiversity
- Reconnecting Northland
- iwi trusts and incorporations
- primary sector industry sustainability advisors.

Potential government roles

Section 2 outlined the outcomes we want to aim for and those to avoid. For a market to be trusted, and to grow and operate effectively, the participants need assurance about the integrity and impact of the system.

Sophus zu Ermgassen – an ecological economist at Oxford University noted in a recent interview[32] that:

"the ecological success of voluntary biodiversity credit market will be almost entirely determined by the quality of the governance mechanisms and the measurement methods used."

"We need an ecosystem of innovation with really good environmental and social science, underpinned by strong oversight to ensure credits are really delivering what they say they are, that also works for the local communities where the projects are taking place."

The two broad roles the Government could play to support a biodiversity credit system are:

1. market enablement: where it provides policies and guidance for the development and uptake of voluntary schemes in New Zealand, and potentially funding for system development as the market is established
2. market administration: where it establishes and manages a voluntary biodiversity scheme and is active in the ongoing management and administration.

An enablement role seeks to influence the outcomes and operation of the market, using non-regulatory tools such as good practice guidance, optional standards (when compliant, accreditation issued) and direct investment in market systems and methods, and in the market itself.

A market administration role includes setting a regulatory framework, with tools to direct the outcomes and the operation of the market. Examples include determining standard methodologies for projects, entry and exit control measures, and establishing a regulatory body empowered to issue biodiversity credits, monitor, verify and enforce compliance and oversee the operation of the system.

32 *Carbon Pulse*. 2023. Interview: In biodiversity, more private finance must mean more state oversight. 19 June.

A blend of these options may be appropriate, which could evolve over time. If regulations were in place, information and education would support compliance. Another consideration would be how to enforce any regulations.

Deciding on the best approach will be informed by the guiding principles for a BCS and a clear understanding of the risks. Any measures would need to allow the market to evolve towards promoting the best possible biodiversity outcomes and to enhance the credibility of the market.

Regulatory choices may also be informed by international frameworks, such as the Taskforce on Nature Based Financial Disclosures, the Australian Nature Repair legislation, Biodiversity Credit Alliance and other biodiversity credit market developers. This will be particularly important if credits are to be traded internationally or purchased by transnational corporates that may attribute integrity to consistency with other schemes they deal with. This could be relevant in the trans-Tasman context.

To justify a regulatory system it would need to deliver, over time, a stream of benefits or positive outcomes in excess of negative outcomes.

Another issue is how to distribute the costs and benefits of regulation and non-regulation.

Table 3: Possible roles of government

Component	Possible roles of central and local government	
	Market enablement	**Market administration**
Domains and aims	Provide guidance	Circumscribe domains and aims in line with proscribed methods and standards (see below)
Methodologies and standards	Fund market to collectively develop and adapt open-source methodologies This includes encouraging industry to involve Māori and mātauranga	Fund the development of methodologies Approve methodologies for particular contexts This would require involvement of Māori and mātauranga
Verification and certification	Third parties accredited to measure, verify and certify claims This includes encouraging industry to involve Māori in identifying taonga interests in projects, and involve Māori in projects with significant taonga interests	Regulator performs verification and certification This could require involvement of Māori in identifying taonga interests in projects, and an ongoing role in projects with significant taonga interests
Legal rights	Develop non-regulatory tools that help provide certainty of legal rights and remedies for market participants	Registry infrastructure (eg, expansion of Environment Protection Agency-administered registry) Regulate for iwi to receive recompense from projects Government develops regulatory tools to provide certainty of legal rights and remedies for market participants
Disclosure and reporting	Develop template reporting frameworks	Regulate disclosure and reporting
Claims and retirement	Provide clear guidance on: claims, using credits for RMA offsets, 'retiring' credits	Require public disclosure of claims, retirements Certify claims
Data	Continue to invest in national data sets, making them freely available	Regulate credit projects to provide data for national data sets
Government as an investor	Potential co-investor in development of standards and methodologies for biodiversity credit system Possible role as investor in biodiversity credit projects or pilots to give confidence to the market, or to endorse certain approaches	Investor in development of standards and methodologies for biodiversity credit system Possible role as investor in biodiversity credit projects or pilots to give confidence to the market, or to endorse certain approaches

Questions	
12	Of the following principles, which do you consider should be the top four to underpin a New Zealand biodiversity credit system? Principle 1 – Permanent or long-term (eg, 25-year) impact Principle 2 – Transparent and verifiable claims Principle 3 – Robust, with measures to prevent abuse of the system Principle 4 – Reward nature-positive additional activities Principle 5 – Complement domestic and international action Principle 6 – No double-counting, and clear rules about the claims that investors can make Principle 7 – Maximise positive impact on biodiversity
13	Have we missed any other important principles? Please list and provide your reasons.
14	What assurance would you need to participate in a market, either as a landholder looking after biodiversity or as a potential purchaser of a biodiversity credit?
15	What do you see as the benefits and risks for a biodiversity credit market not being regulated at all?
16	A biodiversity credit system has six necessary components (see figure 5). These are: project provision, quantification of activities or outcomes, monitoring measurement and reporting, verification of claims, operation of the market and registry, investing in credits. To have the most impact in attracting people to the market, which component(s) should the Government be involved in? Please give your reasons.
17	In which areas of a biodiversity credit system would government involvement be most likely to stifle a market?
18	Should the Government play a role in focusing market investment towards particular activities and outcomes and if so why? For example, highlighting geographic areas, ecosystems, species most at threat and in need of protection, significant natural areas, certain categories of land.
19	On a scale of 1, not relevant, to 5, being critical, should a New Zealand biodiversity credit system seek to align with international systems and frameworks? Please give your reasons.
20	Should the Government work with private sector providers to pilot biodiversity credit system(s) in different regions, to test the concept? If you support this work, which regions and providers do you suggest?

4. How a biodiversity credit system could complement the wider system

This section discusses how a biodiversity credit system could work with other programmes and policies, to support the environment and address the climate crisis.

Links between policies that address the climate and biodiversity crises

The climate and biodiversity crises are inextricably linked. Tensions can exist between the policies that address these challenges. Aligning work on climate change, biodiversity and the environment is critical to support positive environmental outcomes for the long term.

A BCS has the potential to complement freshwater reform, other climate change programmes and tools, current resource management reform and national direction including the National Policy Statement for Indigenous Biodiversity. It would encourage nature-based solutions to maintain and enhance indigenous biodiversity.

New Zealand Emissions Trading Scheme (NZ ETS) and voluntary carbon market (VCM)

A carbon credit[33] represents 1 tonne of carbon dioxide equivalent greenhouse gas emitted. Aotearoa has a regulated compliance market, that is, the government-administered NZ ETS, and also a VCM, where government currently has a limited role.

A review of the NZ ETS is underway. Matters under consideration include:

- the level of emission removals from exotic and indigenous forests
- redesign of the permanent forest category
- how to improve NZ ETS incentives for indigenous afforestation
- how to include additional sources of emission removals in the NZ ETS
- the extent to which the design of the NZ ETS should support emission reductions or a range of co-benefits.

An NZ ETS that provides stronger incentives for indigenous biodiversity by, for example, preferentially recognising native ecosystems, including planting or assisted reversion of indigenous vegetation, could support positive outcomes for biodiversity. The Climate change Commission's draft advice on the Government's emission reduction plan notes that, without incentives, native afforestation will be slow and small scale.

[33] A carbon credit under the NZ Emission Trading System is called a New Zealand Emission Unit (NZU)

Aotearoa New Zealand's current VCM is largely under-developed and unregulated. Many participants see an opportunity to increase its size and scale.[34]

Some carbon credits, particularly in the VCM, can have biodiversity co-benefits and can be priced at a premium, whether the co-benefits are quantified or not.[35]

Some international voluntary carbon credit certification frameworks recognise biodiversity co-benefits. These include Verra (the Climate, Community and Biodiversity Standards) and Plan Vivo (Plan Vivo Biodiversity+, still under development).[36]

Carbon credits with an 'attached' biodiversity co-benefit are one way to encourage positive outcomes for climate change and biodiversity. This assumes buyers will pay a premium for carbon credits with biodiversity benefits, such as reforestation using indigenous tree species, and that biodiversity benefits will be provided.

Biodiversity credit system approach

BCSs focus on more accurately reflecting what biodiversity gains from activities. This could allow carbon credit systems to focus on removing carbon. Also, if the incentives for gross versus net emission reductions change, an independent BCS would help ensure enduring incentives for indigenous biodiversity.

Stand-alone biodiversity credits could be 'stacked' with a carbon credit or 'stapled' to a carbon credit. A stacked credit is where a carbon and biodiversity credit is issued for the same project. The Australian NaturePlus™ credit is an example.[37] The independent stacked credits can be purchased by separate buyers or by buyers who want both carbon and biodiversity outcomes.

A stapled credit represents a carbon and biodiversity credit issued from separate projects but traded together as a whole product. The EcoAustralia credit is an example. The purchaser can claim a positive impact for both carbon and biodiversity.

Stacking and stapling different types of credits is generally done by private market intermediaries.

Carbon Neutral Government Programme

The Carbon Neutral Government Programme requires certain government agencies to be carbon neutral by 2025, including to offset any hard-to-abate emissions. The Programme may contribute to New Zealand's Nationally Determined Contribution under the Paris Agreement.

A biodiversity credit system could facilitate investment in ecosystem restoration, which could also contribute carbon sequestration that could be counted towards New Zealand's Nationally

[34] Ministry for the Environment. Unpublished. *Voluntary carbon and biodiversity markets – summary findings*. Wellington: Ministry for the Environment.

[35] Ministry for the Environment. Unpublished. *Pollination – Investigating the use of carbon and biodiversity markets to scale financing of nature-based solutions in Aotearoa New Zealand*. Wellington: Ministry for the Environment.

[36] Ibid.

[37] Ibid.

Determined Contribution. Further analysis would be needed, to ensure that claims over any gains made under a credit system would be of the highest integrity.

Resource management reform and national direction

The Government is reforming the resource management system to transform the way the environment is managed in Aotearoa by enacting new legislation, including the Natural and Built Environment Act.

Objectives of the proposed system include protecting and restoring the environment and its capacity to provide for the wellbeing of present and future generations, and to give effect to the principles of te Tiriti.

Integral to the purpose of the Act is Te Oranga o te Taiao, a concept drawn from te ao Māori. It is an intergenerational ethic that emphasises the importance of the health and wellbeing of te taiao for current and future generations. One outcome in the Bill is the protection and, if degraded, restoration of the ecological integrity of indigenous biodiversity. We expect work to set limits and targets to occur between early 2024 and 2026.

The Government has also introduced national direction: National Policy Statement for Indigenous Biodiversity 2023 and National Policy Statement for Freshwater Management 2020. Both support biodiversity and freshwater outcomes under the Resource Management Act 1991. These national policy statements will be transitioned and incorporated into the National Planning Framework, which will replace Resource Management Act 1991 national direction.

A credit scheme could complement the objectives of these reforms, and the implementation of national direction and the National Planning Framework, specifically for areas of significant biodiversity and significant natural areas on land and in freshwater habitats.

Encouraging land uses that support biodiversity

The Ministerial Inquiry into Land Uses in Tairawhiti and Wairoa recently published its findings, Outrage to Optimism[38] The inquiry identified the potential for a BCS to support the return of erosion-prone land to permanent native forest.

The report emphasised (page 18) the need for catchment-based planning, "incorporating mosaics of activities that reflect the specific characteristics of the catchment". Such regional transformation is hampered by the current resource management system, which is not fit for purpose. Access to capital, particularly on whenua Māori, is also a barrier.

The report recommended setting up a world-leading BCS, to incentivise permanent indigenous forests, to be piloted in the Tairawhiti–Wairoa region.

The recommendations are designed to lead to a vision of "flourishing biodiversity; healthy catchments, waterways, and coastlines; and resilient infrastructure and diversified economy" (page 38).

[38] Ministerial Inquiry into Land Uses in Tairawhiti and Wairoa. 2023. *Outrage to Optimism: Report of the Ministerial Inquiry into land use associated with the mobilisation of woody debris (including forestry slash) and sediment in Tairawhiti/Gisborne and Wairoa District.*

A BCS could be a source of finance, to make it feasible to invest in land-use changes (with core biodiversity benefits).

A BCS could be particularly beneficial for protecting and enhancing biodiversity on whenua Māori if that is the preference of the land holder. Many of the remaining at-risk species and habitats outside public conservation lands are on this land. An important benefit of credits would be as a mechanism for Māori to raise finance without the need to provide security against land. This has been one of the traditional challenges for developing whenua Māori.

In keeping with the Waitangi Tribunal's findings in the Wai 1200 report, it will be important to consider how any government policies can best ensure that Māori realise the economic potential from whenua Māori.

Credits would not necessarily require any particular connection to land title. They could be project focused (credits in overseas schemes can also be attached to a public space, such as the Great Barrier Reef in the Australian scheme).

For instance, biodiversity credit projects could support catchment-scale land-use changes across multiple holdings. Credits could support groups of land owners with restoration of indigenous biodiversity in urban or rural settings. Credits could be applied to projects initiated by landholders on Crown land, such as pastoral leasehold land or on land administered by the Department of Conservation or other Crown agencies.

Sharing methodologies to support land-use change

Under the current resource management system

The National Policy Statement for Indigenous Biodiversity includes four criteria for a Significant Natural Area (SNA), each with several attributes. The issuance of a biodiversity credit could be linked directly with SNAs, using these criteria. If credits were directly linked with SNAs, we would need to analyse the importance of management (eg, voluntary fencing, invasive weed and pest control) in issuing credits. Another consideration is how to encourage the prioritisation of SNA activities as part of a credit system.

The Department of Conservation's natural heritage management includes tools to identify conservation priorities and monitor the impacts of its natural heritage work. The Department also uses an outcome monitoring framework to inform policy and management. Methodologies behind these systems could be useful for validating BCS claims alongside mātauranga indicators.

Questions	
21	What is your preference for how a biodiversity credit system should work alongside the New Zealand Emissions Trading Scheme or voluntary carbon markets? (a) Little/no interaction: biodiversity credit system focuses purely on biodiversity, and carbon storage benefits are a bonus. (b) Some interaction: biodiversity credits should be recognised alongside carbon benefits on the same land, via both systems, where appropriate. (c) High interaction: rigid biodiversity 'standards' are set for nature-generated carbon credits and built into carbon markets, so that investors can have confidence in 'biodiversity positive' carbon credits. Please answer (a) or (b) or (c) and give your reasons.
22	Should a biodiversity credit system complement the resource management system? (Yes/No) For example, it could prioritise: • Significant Natural Areas and their connectivity identified through resource management processes • endangered and at-risk taonga species identified through resource management processes.
23	Should a biodiversity credit system support land-use reform? (Yes/No) (For example, supporting the return of erosion-prone land to permanent native forest, or nature-based solutions for resilient land use.)

5. Next steps

Help shape the development of a biodiversity credit system

How to make a submission

Submissions close at 11:59pm on Friday 3 November 2023.

The Government welcomes your feedback on this discussion document. The questions posed throughout this document are summarised in the next section. They are a guide only and all comments are welcome. You do not have to answer all of the questions.

To ensure your point of view is clearly understood, you should explain your rationale and provide supporting evidence, where appropriate.

To help shape the future design of a BCS, you can provide a submission through Citizen Space, our consultation hub, by either following the feedback form or by uploading your own written submission.

We would prefer that you don't email or post your submission to us because this makes our analysis more difficult. However, if you need to, mail your written submission to Water and Land Use Policy, Ministry for the Environment, PO Box 10362, Wellington 6143.

Please include in your submission:

- your name or name of the organisation you represent
- postal address
- telephone number
- email address.

If you are emailing your submission, send it to biocredits@mfe.govt.nz as a:

- PDF
- Microsoft Word document (2003 or later version).

Publishing, releasing and analysing submissions

All or part of any written comments (including names of submitters), may be published on the Ministry for the Environment's website, environment.govt.nz. Unless you clearly specify otherwise in your submission, the Ministry will consider that you have consented to online posting of both your submission and your name.

Contents of submissions may be released to the public under the Official Information Act 1982 following requests to the Ministry for the Environment (including via email). Please advise if you have any objection to the release of any information contained in a submission and, in particular, which part(s) you consider should be withheld, together with the reason(s) for withholding the information. We will take into account all such objections when responding to

requests for copies of, and information on, submissions to this document under the Official Information Act.

The Privacy Act 2020 applies certain principles about the collection, use and disclosure of information about individuals by various agencies, including by the Ministry for the Environment. It governs access by individuals to information about themselves held by agencies. Any personal information you supply to the Ministry in the course of making a submission will be used by the Ministry only in relation to the matters covered by this document. Please clearly indicate in your submission if you do not wish your name to be included in any summary of submissions that the Ministry may publish.

If you have any questions or want more information about the proposed changes or the submission process, please email biocredits@mfe.govt.nz.

What happens next

Proposed biodiversity credits system

The Government will consider the submissions, to help with design choices and the preferred role of government in a biodiversity credit system, along with working with key stakeholders.

Consultation questions

Questions	
1	Do you support the need for a biodiversity credit system (BCS) for New Zealand? Please give your reasons.
2	Below are two options for using biodiversity credits. Which do you agree with? (a) Credits should only be used to recognise positive actions to support biodiversity. (b) Credits should be used to recognise positive action to support biodiversity, and actions that avoid decreases in biodiversity. Please answer (a) or (b) and give your reasons.
3	Which scope do you prefer for a biodiversity credit system? (a) Focus on terrestrial (land) environments. (b) Extend from (a) to freshwater and estuaries (eg, wetland, estuarine restoration). (c) Extend from (a) and (b) to coastal marine environments (eg, seagrass restoration). Please answer (a) or (b) or (c) and give your reasons.
4	Which scope do you prefer for land-based biodiversity credits? (a) Cover all land types, including both public and private land including whenua Māori. (b) Be limited to certain categories of land, for example, private land (including whenua Māori). Please answer (a) or (b) and give your reasons.
5	Which approach do you prefer for a biodiversity credit system? (a) Based primarily on outcome. (b) Based primarily on activities. (c) Based primarily on projects. Please answer approach (a) or (b) or (c) and give your reasons.
6	Should there also be a requirement for the project or activity to apply for a specified period to generate credits? Please answer Yes/No and give your reasons.
7	Should biodiversity credits be awarded for increasing legal protection of areas of indigenous biodiversity (eg, QEII National Trust Act 1977 covenants, Conservation Act 1987 covenants or Ngā Whenua Rāhui kawenata? Please answer Yes/No and give your reasons.
8	Should biodiversity credits be able to be used to offset development impacts as part of resource management processes, provided they meet the requirements of both the BCS system and regulatory requirements?
9	Do you think a biodiversity credit system will attract investment to support indigenous biodiversity in New Zealand? Please give your reasons.
10	What do you consider the most important outcomes a New Zealand biodiversity credit system should aim for?
11	What are the main activities or outcomes that a biodiversity credit system for New Zealand should support?
12	Of the following principles, which do you consider should be the top four to underpin a New Zealand biodiversity credit system? Principle 1 – Permanent or long-term (eg, 25-year) impact

Questions	
	Principle 2 – Transparent and verifiable claims Principle 3 – Robust, with measures to prevent abuse of the system Principle 4 – Reward nature-positive additional activities Principle 5 – Complement domestic and international action Principle 6 – No double-counting, and clear rules about the claims that investors can make Principle 7 – Maximise positive impact on biodiversity
13	Have we missed any other important principles? Please list and provide your reasons.
14	What assurance would you need to participate in a market, either as a landholder looking after biodiversity or as a potential purchaser of a biodiversity credit?
15	What do you see as the benefits and risks for a biodiversity credit market not being regulated at all?
16	A biodiversity credit system has six necessary components (see figure 5). These are: project provision, quantification of activities or outcomes, monitoring measurement and reporting, verification of claims, operation of the market and registry, investing in credits. To have the most impact in attracting people to the market, which component(s) should the Government be involved in? Please give your reasons.
17	In which areas of a biodiversity credit system would government involvement be most likely to stifle a market?
18	Should the Government play a role in focusing market investment towards particular activities and outcomes and if so why? For example, highlighting geographic areas, ecosystems, species most at threat and in need of protection, significant natural areas, certain categories of land.
19	On a scale of 1, not relevant, to 5, being critical, should a New Zealand biodiversity credit system seek to align with international systems and frameworks? Please give your reasons.
20	Should the Government work with private sector providers to pilot biodiversity credit system(s) in different regions, to test the concept? If you support this work, which regions and providers do you suggest?
21	What is your preference for how a biodiversity credit system should work alongside the New Zealand Emissions Trading Scheme or voluntary carbon markets? (a) Little/no interaction: biodiversity credit system focuses purely on biodiversity, and carbon storage benefits are a bonus. (b) Some interaction: biodiversity credits should be recognised alongside carbon benefits on the same land, via both systems, where appropriate. (c) High interaction: rigid biodiversity 'standards' are set for nature-generated carbon credits and built into carbon markets, so that investors can have confidence in 'biodiversity positive' carbon credits. Please answer (a) or (b) or (c) and give your reasons.
22	Should a biodiversity credit system complement the resource management system? (Yes/No) For example, it could prioritise: • Significant Natural Areas and their connectivity identified through resource management processes • endangered and at-risk taonga species identified through resource management processes.
23	Should a biodiversity credit system support land-use reform? (Yes/No) (For example, supporting the return of erosion-prone land to permanent native forest, or nature-based solutions for resilient land use.)

Appendix 1: Glossary

Glossary of technical terms

Biodiversity	The variability among living organisms from all sources, including land, marine and freshwater ecosystems, and the ecological complexes of which they are a part. This includes diversity within species (including genetic diversity), between species, and of ecosystems (based on the definition of the Convention on Biological Diversity).
Biodiversity credit	A type of economic instrument that recognises in a consistent way projects or activities that provide positive outcomes for biodiversity, against which 'nature-positive' claims can be made.
Biodiversity credit market	A market for buying and selling biodiversity credits.
Biodiversity credit system	The institutional settings, systems and processes that enable and govern the creation, sale and purchase of, and claims made against, biodiversity credits.
Biodiversity offset	A measurable conservation outcome that results from actions designed to compensate for significant, residual biodiversity loss from development projects. In Aotearoa New Zealand, requiring a biodiversity offset is a resource management tool. It is available only in limited circumstances to provide redress for impacts on indigenous biodiversity that cannot be avoided, arising from the subdivision, use or development of land.
Catchment	Area of land in which rainfall drains towards a common watercourse, stream, river, lake or estuary.
Climate change	Changes in global or regional climate patterns that are evident over an extended period (typically decades or longer). May be due to natural factors or human activities.
Conservation	The preservation and protection of natural and historic resources for the purpose of maintaining their intrinsic values, providing for their appreciation and recreational enjoyment by the public, and safeguarding the options of future generations (Conservation Act 1987).
Ecological corridor	An area of habitat connecting wildlife populations that have been separated by human activities or structures.
Ecological integrity	The full potential of indigenous biotic and abiotic features and natural processes, functioning in sustainable communities, habitats and landscapes.
Ecosystem	A community of plants, animals and micro-organisms in a particular place or area, interacting with the non-living components of their environment (eg, air, water and mineral soil).

Endemic species	Indigenous species that breed only within a specified region or locality and are unique to that area. Aotearoa New Zealand's endemic species include birds that breed only in this country, but may disperse to other countries in the non-breeding season or as sub-adults.
Erosion	The wearing away of land by the actions of water, wind or ice.
Habitat	A combination of environmental factors that provide the food, water, cover and space that a living thing needs to survive and reproduce.
Indigenous biodiversity	The diversity (or range) of indigenous species. This includes diversity within and between species.
Indigenous species	Species that occur naturally in an area.
Invasive introduced species	Non-indigenous species whose introduction or spread threatens biodiversity, food security, or human health and wellbeing.
Maintain (species, habitats, ecosystems)	Prevent a reduction in the: a) size of populations of indigenous species b) occupancy of indigenous species across their natural range c) properties and functions of ecosystems and habitats d) full range and extent of ecosystems and habitats e) connectivity between and buffering around ecosystems f) resilience and adaptability of ecosystems. Maintaining indigenous biodiversity may also require restoring or enhancing ecosystems and habitats.
Nature	A holistic term that encompasses the living environment (te Taiao), which includes all living organisms and the ecological processes that sustain them. By this definition, people are a significant part of nature. This document uses the term 'biodiversity' to refer to biological diversity and 'nature' for the wider processes, functions and connections in the natural environment, of which biodiversity is a part.
Nature-based solutions	Actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems.
Nature-positive	Activities that lead to nature being restored and regenerated, instead of declining.
Non-indigenous biodiversity or species	Species that have been brought to Aotearoa by humans, whether intentionally or not. A synonym is 'introduced species'.
Predator	An organism that feeds on another living organism (its prey).
Private land	Land in private ownership, that is, land not managed by any public body.

Restore	The active intervention and management of modified or degraded habitats, ecosystems, landforms and landscapes to reinstate indigenous natural character, ecological and physical processes, and cultural and visual qualities.
Species	A group of living organisms consisting of similar individuals capable of freely exchanging genes or interbreeding. In this document, the term 'species' also includes subspecies and varieties.
Threatened species	Species that the New Zealand Threat Classification System lists as facing imminent extinction (or a reduction to just a few small, safe refuges) because of their small total population and/or rapid rate of population decline. This includes four sub-categories: 'Nationally Critical', 'Nationally Endangered', 'Nationally Vulnerable and 'Nationally Increasing'.
Weed	A plant that is considered unwanted or a nuisance. The term is often used to describe native or non-native plants that grow and reproduce aggressively. Ecological weeds can disrupt the integrity of ecosystems by overwhelming indigenous plants and suppressing recruitment of indigenous species.
Wellbeing	The health, happiness and prosperity of an individual or group. In this document, 'wellbeing' applies to material wellbeing (income and wealth, jobs and earnings, and housing), health (health status and work–life balance), security (personal security and environmental quality), social relations (social connection, subjective wellbeing, cultural identity and education), and freedom of choice and action (civic engagement and governance).

Kuputaka/Glossary of te reo terms

Awa	River, stream, creek.
Hapū	Kinship group, clan, tribe, subtribe.
Iwi	Extended kinship group, tribe, nation.
Kaitiaki	Guardian, trustee, minder.
Kaitiakitanga	The obligation to nurture and care for the mauri of a taonga, or the ethic of guardianship or protection.
Kawa	Custom and protocol
Kawenata	A covenant that provides for the protection of indigenous biodiversity on Māori owned land via agreement with a third party (usually Ngā Whenua Rāhui) for one generation (25 years) but renewable by agreement.
Mahi mo te Taiao	Jobs for Nature programme led by the Ministry for the Environment.
Mana	Prestige, authority, control or personal charisma.
Mātauranga Māori	The body of knowledge originating from Māori ancestors. This includes the Māori world view and perspectives, Māori creativity, and cultural practices. Also referred to as Māori knowledge.
Mauri	Life principle, life force or vital essence.
Moana	Sea, ocean, lake.
Rangatiratanga	Chieftainship, the right to exercise authority, sovereignty or self-determination.
Rongoā	Traditional Māori healing system.
Taonga	Treasure, anything prized. Can be applied to anything that is considered of value, including socially or culturally valuable objects, resources, phenomena, ideas and techniques.
Te ao Māori	The Māori world; a Māori perspective or world view.
Te Oranga o te Taiao	An intergenerational ethic that emphasises the importance of the health and wellbeing of te taiao for current and future generations.
Te Taiao	World around us, earth, natural world, environment, nature.
Te Tiriti o Waitangi	The Treaty of Waitangi.
Tikanga	A custom, practice or correct protocol. It refers to the customary system of values and practices that have developed over time and are deeply embedded in the social context.
Tino rangatiratanga	Self-determination, sovereignty, autonomy, self-government.
Wairua	Spirit, soul.
Whakapapa	Genealogy, genealogical table, lineage, descent
Whānau	Extended family, family group.
Whenua Māori	Māori land.

Abbreviations

BCS	Biodiversity credit system
DOC	Department of Conservation
MVR	Measurement, verification and reporting
NZ ETS	New Zealand Emissions Trading Scheme
SNA	Significant Natural Area
VCM	Voluntary carbon market

Appendix 2: Biodiversity credit systems and related schemes

Table 4 sets out related national and international biodiversity credit systems and schemes.

Table 4: Biodiversity credit systems and related schemes

	EKOS – Sustainable Development Units (New Zealand)	Nature Repair Market Bill (Australia)	Biodiversity Net Gain (United Kingdom)	Wallacea Trust (United Kingdom, global)	ClimateTrade (Spain) and Terrasos (Colombia)	Greencollar (Australia)
Go live	July 2022	Still under development (subject to legislation and development statutory rules	November 2023	2021	2022	2022
Regulated	No	Yes	Yes	No	No	No, but may be regulated by the Nature Repair Market legislation
Purpose	Nature-positive scheme	Nature positive scheme (provides for environmental offsets that deliver a net gain)	Largely an offset scheme with nature-positive elements	Nature-positive scheme	Nature-positive scheme	Nature-positive scheme
Approach	• Primarily activities based • Activities over 1 year	• Projects based • subject to various permanence periods based on prescribed methods (minimum periods of 25 or 100 years) • Regulated methodologies for different contexts	• Ecosystem qualities • Sellers can stack 'credits' (eg, with nutrient credits) • Revenue from government credits used for habitat projects • Regulated metric	• Outcome based	• Activity based • Credits issued based on International Union for Conservation of Nature threat category	• Outcome based

	EKOS – Sustainable Development Units (New Zealand)	Nature Repair Market Bill (Australia)	Biodiversity Net Gain (United Kingdom)	Wallacea Trust (United Kingdom, global)	ClimateTrade (Spain) and Terrasos (Colombia)	Greencollar (Australia)
Accountability	• Uses third-party auditors • Credit retirement protocols	• Independent auditing by an accredited greenhouse and energy auditor (based on the Bill)	• Local planning authorities responsible for monitoring delivery (can charge fees) and are encouraged to develop local Biodiversity Net Gain policies • Government will cover new cost pressures on local planning authorities	• Independent verification, approval of metrics, credit issuance and retirement by third-party organisation (eg, Plan Vivo) • Five yearly audits • Credit retirement protocols	• Uses third-party auditors • Credit retirement protocols	• Verified using 'Accounting for Nature' standard
Registration	• Uses specified registry	• National registry	• National registry	• Certified provider maintains a publicly available register	• Uses specified registry	• Publicly available register

10 October 2023
Document: 3207780

Water and Land Use Policy
Ministry for the Environment

Submission on Helping nature and people thrive: Exploring a biodiversity credit system for Aotearoa New Zealand – Discussion document

The Taranaki Regional Council (the Council) is strongly supportive of developing a biodiversity credit system for New Zealand. Our biodiversity is in crisis. Considerable action is required if we are to preserve our unique ecosystems, flora and fauna for the benefit of current and future generations. A biodiversity credit system has the potential to be a crucial tool in restoring our indigenous biodiversity and the community wellbeing it enables.

However, designing an effective and efficient system will be difficult. The discussion document starts to unpick the challenges faced in setting up a system. But the Council notes that system design will be a long process. Along this path, regional councils have considerable expertise to contribute. In particular for determining practical on-the-ground measurement and verification methodologies. Regional councils can also help to identify those ecosystems in a region that are most at risk and in need of support through a credit system.

Appendix One contains the Council's detailed answers to the questions in the discussion document, but there are some key matters not addressed in the document.

A design decision that needs to be considered early is if recipients of credits will be made to pay them back if biodiversity is lost in the future. This would be akin to having to buy back credits under the New Zealand Emissions Trading Scheme if you cut down a forest you have registered. This requirement would help protect biodiversity gains, but would be challenging to implement. Similar protection could be provided for by requiring legal protection for sites as condition for receiving a credit.

Second, the discussion document does not address what groups might be able to receive credits. The document does address land-tenure. Consideration needs to also be given to how community groups could be included. This is especially so if the scheme applies to public land, where such groups are highly active. A credit scheme has the potential to significantly benefit their activities. But including them in the scheme may bring enforcement challenges that need to be considered further.

This submission was endorsed by the Council's Policy and Planning Committee on 10 October 2023.

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Yours faithfully

S J Ruru
Chief Executive

Appendix one: Detailed responses to consultation questions

	Question	Proposed Response
1	Do you support the need for a biodiversity credit system (BCS) for New Zealand? Please give your reasons.	Yes. Greater action is needed to incentivise the protection and restoration of indigenous biodiversity. When combined with the New Zealand Emissions Trading Scheme, a biodiversity credit system has the potential to deliver significant benefits across multiple scales.
2	Below are two options for using biodiversity credits. Which do you agree with? a) Credits should only be used to recognise positive actions to support biodiversity. b) Credits should be used to recognise positive action to support biodiversity, and actions that avoid future decreases in biodiversity. Please answer (a) or (b) and give your reasons.	The Council supports option b if it can be designed so as to not duplicate existing legal requirements for avoiding future decreases under the National Policy Statement for Indigenous Biodiversity. Between supporting additionally on one side, and helping landowners meet existing legal requirements on the other, the balance of effort in a credit system should be on the former. Matters with regard to legal protection are also addressed in question 7 below.
3	Which scope do you prefer for a biodiversity credit system? a) Focus on terrestrial (land) environments. b) Extend from (a) to freshwater and estuaries (eg, wetland, estuarine restoration). c) (Extend from (a) and (b) to coastal marine environments (eg, seagrass restoration). Please answer (a) or (b) or (c) and give your reasons.	The Council supports option c in principle. Biodiversity is in crisis across all ecosystems and substantial action is needed. And the interconnected nature of these ecosystems necessitates a holistic approach. However, the wider design of the system will influence these options. Particularly who can apply for credits. For example, a credit system that was only available for private land would not provide much benefit for the coastal marine environment, but would still be invaluable for wetland restoration.
4	Which scope do you prefer for land-based biodiversity credits? a) Cover all land types, including both public and private land including whenua Māori.	The Council does not have a preferred option, noting further analysis is required. The primary focus of the system should be on incentivising on private land and whenua Māori. And Council does not support the use of a credit system to support central government agencies to support work that

	b) Be limited to certain categories of land, for example, private land (including whenua Māori). Please answer (a) or (b) and give your reasons.	should be funded through the established budget process. However, there could be grounds to support credits on public land where a community group is undertaking the work and receives the credit. Having local government able to apply for credits could also be beneficial in overcoming the significant funding challenges they face.
5	Which approach do you prefer for a biodiversity credit system? a) Based primarily on outcome. b) Based primarily on activities. c) Based primarily on projects. Please answer approach (a) or (b) or (c) and give your reasons	The Council prefers option a if effective and efficient monitoring and verification systems can be produced to accurately measure a percentage change in indigenous biodiversity per hectare. Failing that, option b can provide a suitable alternative. Option c is likely to be too uncertain to provide wide-spread benefit and have too high administrative costs. Consideration should also be given to a hybrid approach of option a and b. Considering the time it takes to demonstrate substantial biodiversity outcomes, an approach that provides for an activity focus in the short-term could be useful to incentivise action.
6	Should there also be a requirement for the project or activity to apply for a specified period to generate credits? Please answer Yes/No and give your reasons.	As long as there is mechanism so that a project or activity has to pay back the credits if the biodiversity benefits either turn out not to have been achieved or are reversed, a specific period is not required. In the absence of such a mechanism, a specified period should be required.
7	Should biodiversity credits be awarded for increasing legal protection of areas of indigenous biodiversity (eg, QEII National Trust Act 1977 covenants, Conservation Act 1987 covenants or Ngā Whenua Rāhui kawenata? Please answer Yes/No and give your reasons.	If there is a mechanism to pay back credits if benefits are reversed, additional legal protections may not be required. Otherwise, awarding credits for legal protection would be useful.
8	Should biodiversity credits be able to be used to offset development impacts as part of resource management processes, provided they meet the requirements of both the BCS system and regulatory requirements?	No. The focus of the credit system should be on additionally, not offsetting or compensation.

9	Do you think a biodiversity credit system will attract investment to support indigenous biodiversity in New Zealand? Please give your reasons.	If designed appropriately, yes.
10	What do you consider the most important outcomes a New Zealand biodiversity credit system should aim for?	The Council supports the outcome hierarchy as outlined in figure 4 on page 30. The principle outcome needs to be to increase the extent and condition of indigenous ecosystems, especially those that are rare or threatened.
11	What are the main activities or outcomes that a biodiversity credit system for New Zealand should support?	The outcomes are addressed in the previous question. Relevant activities that could be included are fencing, animal pest control, plant pest control and restoration planting. Consideration should be given to related communication and education activities being included as well.
12	Of the following principles, which do you consider should be the top four to underpin a New Zealand biodiversity credit system? Principle 1 – Permanent or long-term (eg, 25-year) impact Principle 2 – Transparent and verifiable claims Principle 3 – Robust, with measures to prevent abuse of the system Principle 4 – Reward nature-positive additional activities Principle 5 – Complement domestic and international action Principle 6 – No double-counting, and clear rules about the claims that investors can make Principle 7 – Maximise positive impact on biodiversity	Maximise positive impact on biodiversity Robust, with measures to prevent abuse of the system Transparent and verifiable claims Permanent or long-term impact

13	Have we missed any other important principles? Please list and provide your reasons.	Giving effect to Te Tiriti o Waitangi.
14	What assurance would you need to participate in a market, either as a landholder looking after biodiversity or as a potential purchaser of a biodiversity credit?	That the credit is verifiable, traceable, robust, long-lasting, and cost effective. That there is a robust system for what happens if outcomes are not achieved or biodiversity gains that have received credits are reversed is also important.
15	What do you see as the benefits and risks for a biodiversity credit market not being regulated at all?	The principle risk of not having regulation is that the assurances set out in the answer to the above question are not met. This would undermine the ability of the system to deliver on improving indigenous biodiversity. The potential benefits of no regulation is a system with lower administrative costs that is easier for people to participate in.
16	A biodiversity credit system has six necessary components (see figure 5). These are: project provision, quantification of activities or outcomes, monitoring measurement and reporting, verification of claims, operation of the market and registry, investing in credits. To have the most impact in attracting people to the market, which component(s) should the Government be involved in? Please give your reasons.	The Council generally supports government taking an administrative role, so focusing on quantification, monitoring, verification and operation. But the scale of that involvement could vary significantly. For example there may be a role for some sort of certifier-auditor scheme to take much of the quantification, monitoring and verification burden. Government investing in credits could also be a useful tool for meeting key biodiversity targets.
17	In which areas of a biodiversity credit system would government involvement be most likely to stifle a market?	Involvement in project provision has the highest risk of stifling the market. Government involvement in any of the other components also needs to be developed appropriately to minimise administrative costs.
18	Should the Government play a role in focusing market investment towards particular activities and outcomes and if so why? For example, highlighting geographic areas, ecosystems, species most at threat and in need of protection, significant natural areas, certain categories of land.	Yes. Some biodiversity areas (e.g. wetlands or coastal turf communities) are acutely threatened and the system needs to provide additional incentives in these areas.
19	On a scale of 1, not relevant, to 5, being critical, should a New Zealand biodiversity credit system seek to align with	3. What matters is a system that works for New Zealand and New Zealand biodiversity. However, alignment with international systems and

	international systems and frameworks? Please give your reasons	frameworks is useful to incentivise foreign investment in NZ biodiversity credits and to guide the development of the system.
20	Should the Government work with private sector providers to pilot biodiversity credit system(s) in different regions, to test the concept? If you support this work, which regions and providers do you suggest?	Yes. The Taranaki Regional Council would welcome the opportunity to test the concept in the region through our long-running Key Native Ecosystems project or our regional biodiversity hub Wild for Taranaki.
21	What is your preference for how a biodiversity credit system should work alongside the New Zealand Emissions Trading Scheme or voluntary carbon markets? a) Little/no interaction: biodiversity credit system focuses purely on biodiversity, and carbon storage benefits are a bonus. b) Some interaction: biodiversity credits should be recognised alongside carbon benefits on the same land, via both systems, where appropriate. c) High interaction: rigid biodiversity 'standards' are set for nature-generated carbon credits and built into carbon markets, so that investors can have confidence in 'biodiversity positive' carbon credits. Please answer (a) or (b) or (c) and give your reasons.	Council prefers option b. Both systems should stand-alone to avoid overly complicating each. But it is important that they should be able to be recognised alongside each other. This is essential if the cost barriers to indigenous reforestation compared to exotic are to be overcome. While each system should stand-alone, there is still potential to align application and administrative processes between the two.
22	Should a biodiversity credit system complement the resource management system? (Yes/No)	The two should complement each other where possible. This is particularly so for using regional processes under the RMA, such as regional biodiversity strategies, to guide the application of credits in a region towards priority ecosystems.
23	Should a biodiversity credit system support land-use reform? (es/No)	By making indigenous reforestation more cost effective, a credit system will always support land-use reform to a certain extent.

Date 10 October 2023

Subject: **Consultation on Advancing New Zealand's Energy Transition**

Approved by: A D McLay, Director - Resource Management

S J Ruru, Chief Executive

Document: 3208239

Purpose

1. To inform the Taranaki Regional Council (the Council) of a package of energy related consultation documents currently open for submission.
2. To seek endorsement of the Taranaki Regional Council's (the Council) submission on the *Regional Hydrogen Transition draft technical design paper* – a document separate from the above package.

Executive summary

3. The New Zealand Government (the Government) has released a substantial package of consultation documents on the future of the country's energy sector. They all relate to the substantial levels of change needed in the transition to a zero carbon economy. Three of the documents are of particular importance to Taranaki. These relate to developing a permitting regime for offshore renewable energy, how to transition off natural gas safely, and a roadmap for hydrogen development.
4. Due to the unique relevance of these documents to Taranaki, officials from the four councils are preparing a joint regional submission. This would be approved by the Mayoral Forum, and a copy would be returned to the Policy and Planning Committee for noting at the meeting on 21 November 2023.
5. Separate to the above package was a consultation on the *Regional Hydrogen Transition draft technical design paper*. A draft submission was circulated to the Policy and Planning Committee out of session for comment. Changes were made upon receiving comments and the submission lodged. This paper seeks formal endorsement of that submission.

Recommendations

That the Taranaki Regional Council:

a) receives the memorandum Consultation on advancing New Zealand's energy transition

b) endorses the submission in Attachment One on the *Regional Hydrogen Transition draft technical design paper*

c) notes a joint regional submission on the full package of consultation documents for approval by Mayoral Forum is being prepared

d) notes the areas for consideration in drafting this submission set out in this memo

e) determines that this decision be recognised as not significant in terms of section 76 of the *Local Government Act 2002*

f) determines that it has complied with the decision-making provisions of the *Local Government Act 2002* to the extent necessary in relation to this decision; and in accordance with section 79 of the Act, determines that it does not require further information, further assessment of options or further analysis of costs and benefits, or advantages and disadvantages prior to making a decision on this matter.

Background

6. There is a substantial body of work underway to prepare New Zealand's energy sector for the transition to a low carbon economy. Achieving this will require a significant expansion of electricity generation, investing in other low carbon technologies for hard to abate sectors (i.e. where electrification is not an effective option), and managing energy security risks as the country transitions away from fossil fuels. This work is divided into different, but highly interconnected, work streams.

7. The Government has released a package of consultation documents related to these different work streams. Consultation closes on 2 November 2023. A summary of the full packaged is contained in Attachment Three. The three most pertinent documents for the Taranaki Regional Council are the *Gas Transition Plan issues paper*, the *Interim Hydrogen Roadmap*, and the second discussion document on *Developing a Regulatory Framework for Offshore Renewable Energy*.

8. Separate to this package, the Government also consulted on the *Regional Hydrogen Transition draft technical design paper*. Consultation on this document closed on 10 September. Attachment Two contains the full paper.

Gas Transition Plan issues paper

9. The *Gas Transition Plan Issues Paper* seeks feedback on the strategic direction for the gas sector. The gas sector faces opportunities and obstacles in transitioning. These include ensuring that consumers have access to secure and affordable energy, not locking in older and poorly performing assets, and supporting the Government's vision for the energy and industry sector. It is almost certain New Zealand will need a level of reliable gas supply for years to come.

10. The key questions the document asks are:

- When and how should fossil gas use be phased down to help meet New Zealand's emissions reductions objectives, while maintaining security of supply for fossil gas consumers and the energy system?
- What is the appropriate role for renewable gases like biomethane and hydrogen, and technologies like carbon capture and storage, which offer promising ways to reduce emissions through the transition phase?

Interim Hydrogen Roadmap

11. As well as substantial amounts of new renewable electricity, New Zealand will need other forms of green energy where electrification is not possible or economic. Hydrogen is one of the key technologies being considered for playing this role, and many countries are supporting it at significant scale.
12. The *Interim Hydrogen Roadmap* sets out an emerging view on the potential role of hydrogen in New Zealand's energy transition. Providing a roadmap for hydrogen in New Zealand will also help foster certainty for investors and project developers. The Government is seeking feedback on whether stakeholders agree with the strategic context and direction of focus in the roadmap, or whether there are other circumstances Government should consider.
13. The Interim Roadmap suggests that hydrogen has the most potential in decarbonising New Zealand's hard-to-abate applications. This includes chemicals, fertiliser and parts of heavy transport (including aviation and marine). It also highlights that an industry in New Zealand could generate substantial economic activity. There is also significant international interest in New Zealand's potential for providing hydrogen to export markets.
14. The key questions the document asks are:
    - Do you agree that hydrogen has the most potential for New Zealand in decarbonising hard-to-abate applications such as chemicals, fertiliser and heavy transport (including aviation and marine)?
    - Since significant renewable electricity will be needed to develop large-scale hydrogen production, do you agree that government should focus any support on hydrogen for domestic use rather than for export, in the first instance?

Developing a Regulatory Framework for Offshore Renewable Energy

15. Offshore renewable energy – predominantly wind – has significant potential to meet growing electricity demand. This includes the potential production of green hydrogen. Doing this requires regulatory settings for offshore renewable energy generation that encourage investment. Part of this is establishing a process for selecting appropriate developers and projects. It also includes creating opportunities for meaningful iwi participation in the operation of the offshore renewable energy regulatory regime and within the industry.
16. This current discussion document focuses on proposals for the regulation of the construction, operation and decommissioning stages of development. It builds upon consultation in late 2022 on how to regulate the feasibility stage. Council submitted in general support on the first round of consultation.
17. The key questions the document asks are:
    - What should the commercial permitting process look like: structure, criteria, nature of permit?
    - How should this interface with environmental consents?
    - Is there a case for revenue support and opportunities for government to gather revenue?
    - Who should build and own offshore transmission infrastructure?

- How do we ensure developers have the funds and financial capability to decommission properly when the time comes?

Regional Hydrogen Transition programme

18. As part of the 2023 budget, Government announced $100 million for the Regional Hydrogen Transition programme. The goal of this programme is to support early consumers of green hydrogen in New Zealand by bridging the price gap between green hydrogen and fossil fuel alternatives. It also has a strong focus on supporting the role hydrogen can play in Southland and Taranaki in supporting a just transition to a zero carbon economy.
19. The Government has now released the *Regional Hydrogen Transition draft technical design paper* for feedback. Key features of the programme are:
    - The Regional Hydrogen Transition will provide rebate payments to eligible domestic consumers of green hydrogen. Rebate recipients will be selected through a competitive process based on a number of criteria, including price and contribution to regional just transitions.
    - Payments will be made over ten years, underpinned by contracts between recipients and the Crown. Recipients will be entitled to a limited rebate sum as determined through the competitive process. The minimum scale of rebate contracts will be NZ$10m and the maximum will be NZ$60m.
    - Recipients will have obligations to consume minimum annual volumes to remain eligible for repayments. Any rebate shortfalls resulting from unused green hydrogen can be reallocated to other participants.
    - Applicants will need to show how their project provides benefit sharing generally across four areas:
        - Just transitions regions: Benefit sharing is to be focused on just transition regions generally (Taranaki and Southland).
        - Iwi and the community: Support iwi and communities to achieve cultural, environmental, social and economic outcomes.
        - Renewable energy generation: Supporting the delivery of national renewable energy targets.
        - Contribution to development of a hydrogen economy.
    - The design document also provides a range of technical detail on how the rebate would operate (e.g. indexing, reporting requirements, etc.).

Issues

20. The decisions in this memo address the issue of how best to support the transition to a carbon zero economy.

Discussion

21. After joint discussions, council officers from the four local authorities are proposing submitting a joint regional submission on the package of discussion documents. The Mayoral Forum would approve a submission, and a copy returned to the Policy and Planning Committee for noting at the meeting on 21 November 2023.

22. Key considerations for the region in preparing this joint submission are:
    - What action is needed from the Government to address the issues identified in the Gas Transitions Plan Issues Paper and how the region wants to be involved in this.
    - The benefits and risks of promoting carbon capture, utilisation and storage technology.
    - The potential role of Government in investing in natural gas production to ensure a just transition.
    - How to manage risks for the regional economy, particularly with regard to transition impacts on Methanex – Methanex uses 40 per cent of the nation's natural gas and underwrites all investment in new supply.
    - The region's vision for the role of hydrogen.
    - The balance between producing hydrogen and hydrogen derivatives (e.g. ammonia or methanol) for domestic use and export.
    - The potential role of Government, including specific actions the region may request of the Government, in incentivising investment in hydrogen and offshore renewable electricity generation.
    - The benefits and risks of having a single consenting authority for all offshore wind applications, regardless of if they were in the territorial sea or the exclusive economic zone.
    - What additional support and guidance is needed to support effective and efficient renewable energy consenting, including of hydrogen projects.
    - What role the Government can play in supporting workforce development in Taranaki.
    - The process for planning and then building out the transmission infrastructure to support industry development in Taranaki.
23. Regarding the Regional Hydrogen Transition Programme, a draft submission was circulated for comment to the Policy and Planning Committee out of session. Based on feedback received, the original draft was amended to emphasise the need to manage the risks of hydrogen and continuing to drive behaviour change to reduce emissions. The submission was lodged on 13 September. Endorsement of the final submission is now sought from the Policy and Planning Committee. The full submission is in Attachment One.

Options

24. The options are:
    (a) Endorse the submission as submitted.
    (b) Endorse the submission subject to officials preparing an amended submission based on committee feedback and submitting this.
    (c) Not endorse the submission and direct officials to request the withdrawal of the submission.
25. With the draft submission having been circulated to committee members out of session for comment, option (a) is recommended. Option (b) is workable but there are no guarantees the additional comments would be accepted. Option (c) is not recommended.

Hydrogen could play a significant role in Taranaki's future economy, and it is important for the Council to be active in related discussions.

Significance

26. This item is assessed as not significant with regards to the Significance and Engagement Policy.

Financial considerations—LTP/Annual Plan

27. This memorandum and the associated recommendations are consistent with the Council's adopted Long-Term Plan and estimates. Any financial information included in this memorandum has been prepared in accordance with generally accepted accounting practice.

Policy considerations

28. This memorandum and the associated recommendations are consistent with the policy documents and positions adopted by this Council under various legislative frameworks including, but not restricted to, the *Local Government Act 2002*, the *Resource Management Act 1991* and the *Local Government Official Information and Meetings Act 1987*.

Iwi considerations

29. This memorandum and the associated recommendations are consistent with the Council's policy for the development of Māori capacity to contribute to decision-making processes (schedule 10 of the *Local Government Act 2002*) as outlined in the adopted long-term plan and/or annual plan. Similarly, iwi involvement in adopted work programmes has been recognised in the preparation of this memorandum.

Community considerations

30. This memorandum and the associated recommendations have considered the views of the community, interested and affected parties and those views have been recognised in the preparation of this memorandum.

Legal considerations

31. This memorandum and the associated recommendations comply with the appropriate statutory requirements imposed upon the Council.

Appendices/Attachments

Document 3206190: Submission on the Regional Hydrogen Transition draft technical design paper

Document 3208263: Regional Hydrogen Transition Draft Technical Design Paper

Document 3208265: Summary Document for Advancing New Zealand's Energy Transition

13 September 2023
Document: 3203583

Just Transitions
Ministry for Business, Employment and Innovation

Submission on the Regional Hydrogen Transition draft technical design paper

The Taranaki Regional Council (the Council) welcomes the Regional Hydrogen Transition initiative and the proposed rebate. For the sake of present and future generations, it is clear that New Zealand must achieve a zero carbon economy. But Taranaki is a region whose prosperity has been considerably built on fossil fuels. Accordingly, a just transition is essential to ensure Taranaki communities continue to prosper. The just transition is also an opportunity to leverage the region's extensive human and natural capital to deliver a low-emissions future. The proposed rebate will help achieve this.

The Council also supports the benefit sharing criteria as outlined in the draft design paper. However, further detail is required on how the benefit areas are weighted and if an applicant must deliver on all four. Considering the focus of the rebate, supporting just transition regions is particularly important.

While it is implied in the renewable energy generation criteria, it is worth making it explicit that the green hydrogen used needs to be produced in New Zealand. This is currently not fully stated in the document. Importing hydrogen will not deliver significant benefits to transition regions – beyond transmission infrastructure.

It is also important that provision is also made to incentivize smaller-scale hydrogen use and development than provided for in the rebate. This could be either through lowering the minimum contract level of the rebate, or through the development of a separate small-scale system. It may be that to incentivize small-scale use and development without excessive compliance and administrative costs, a separate, more flexible scheme is required.

Finally, the Council wishes to emphasize the importance of shaping the development of the wider hydrogen regulation. Hydrogen offers much promise, but carries unique risks that require careful management. And it is important that driving behavior change remains a key aspect of emissions reductions. The Council looks forward to providing comment on the Governments Interim Hydrogen Roadmap regarding these matters.

This content of this submission will be formally considered by the Council's Planning and Policy Committee them on 10 October 2023. Any comments or amendments will be provided after that meeting.

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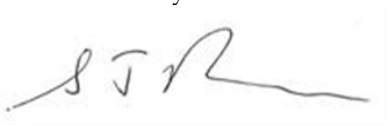
Yours faithfully



S J Ruru
Chief Executive

DRAFT - NOT GOVERNMENT POLICY

REGIONAL HYDROGEN TRANSITION

DRAFT technical design paper

August 2023

DRAFT - NOT GOVERNMENT POLICY

REGIONAL HYDROGEN TRANSITION

DRAFT technical design paper

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INTRODUCTION

Aotearoa New Zealand is kickstarting the adoption of green hydrogen to power the transition to a high wage, low emissions economy. The Government's Regional Hydrogen Transition initiative, announced in Budget 2023, will provide a rebate to early hydrogen adopters which will close the price gap between green hydrogen and fossil fuels.

The rebate will be guaranteed through long-term contracts between the Crown and commercial hydrogen consumers. This $100m investment will support early adopters in hard-to-abate industries to reduce emissions and build industry knowledge, skills, and supply chains.

This initiative will empower firms and regions to realise the opportunities identified in the Government's interim Hydrogen Roadmap, while enabling the transition to a productive low-emission economy inclusive of iwi and communities.

Purpose of this document

This document sets out the goals of the Regional Hydrogen Transition and seeks feedback from industry and interested stakeholders to inform its final programme design. This document describes the proposed design of the programme, the expectations of participants, eligibility requirements and particular elements of the process. There are design questions at the end of each section highlighting issues on which we would like your input.

Following the engagement process officials will finalise the design of the Regional Hydrogen Transition and aim to run a competitive process in Q1 2024 to select rebate recipients.

How to provide feedback

Interested parties are invited to provide comments in the form of written submissions, with particular attention to the focus questions in this document. There is no prescribed format or length for submissions. To assist with review of submissions and ensure key issues are identified, submissions are encouraged to be succinct and no longer than is necessary to communicate key issue and themes.

Submissions should be emailed to: justtransitions@mbie.govt.nz by no later than 10 September 2023.

Interested parties are invited to register interest in the programme at the above email address to receive any updates in relation to the programme.

Confidentiality

We acknowledge that you may share commercially sensitive and confidential information with us as part of providing feedback or input on the design of the Regional Hydrogen Transition. We appreciate your trust, and we want to assure you that we will treat your information in confidence.

We may use some of the information that you share with us in the future, for example, during final policy design. If we do use information gathered to shape the final design of the Regional Hydrogen Transition, we will anonymise it so that it cannot be directly attributed to you.

If at any time during our discussions you believe that something is explicitly commercially confidential, please let us know so that we can ensure that we treat the information appropriately. We will not directly share your confidential information and will only release it if required by law.

In entering discussions with Ministry of Business, Innovation and Employment, you acknowledge that all information shared during these discussions should be treated as confidential unless that information is publicly available.

DRAFT - NOT GOVERNMENT POLICY

OVERVIEW AND PROGRAMME OBJECTIVES

The Regional Hydrogen Transition will provide rebate payments to eligible domestic consumers of green hydrogen. Rebate recipients will be selected through a competitive process based on a number of criteria, including price and contribution to regional just transitions. The program is aimed at early adopters of green hydrogen in commercial and industrial contexts.

The Regional Hydrogen Transition is intended to bridge the gap between green hydrogen and alternative fossil commodities. The rebate will therefore be indexed and will vary over time depending on market costs of the alternative fossil commodity relevant to the eligible hydrogen consumer. This paper outlines the mechanisms for achieving this indexation.

Payments will be made over ten years, underpinned by contracts between recipients and the Crown. Recipients will be entitled to a limited rebate sum as determined through the competitive process. The minimum scale of rebate contracts will be NZ$10m and the maximum will be NZ$60m. Recipients will have obligations to consume minimum annual volumes to remain eligible for repayments. Any rebate shortfalls resulting from unused green hydrogen can be reallocated to other participants.

Participants will need to deliver a range of social and economic benefits to iwi and just transition regions and contribute to the development of a green hydrogen industry in Aotearoa New Zealand. This will include, but is not limited, to the development of skills, knowledge, training, contribution to creation of supply chains, and the development of high value jobs. Rebate recipients will also be expected to demonstrate contribution to the development of renewable energy generation in support of green hydrogen generation. This paper outlines a few ways this can be achieved.

Eligible parties will need to demonstrate technical and commercial viability and ability to manage the complexity and delivery risks associated with the proposed green hydrogen project.

Recipients of the green hydrogen consumption rebate will be eligible to receive payments commencing 01 January 2025. It is proposed that final payments under the scheme will be paid not later than 31 December 2034.

Just Transitions

The Regional Hydrogen Transition arose from the just transition process in Southland. A just transition in New Zealand is a strategy to move a region toward a prosperous low carbon future. It is about a region leading their own transition to ensure that the impacts and opportunities that may arise from the transition are more evenly distributed. It is important projects funded through the programme deliver economic transition outcomes to the just transition regions.

The Just Transition Partnerships team from the Ministry of Business, Innovation and Employment (the Ministry) supports regional partners to understand, plan and navigate their transition in a way that is fair and equitable.

We are currently supporting two regions to undertake significant just transition processes:

- Taranaki, to adapt to the ban on new permits to drill for oil or gas offshore in New Zealand.
- Southland, to adapt to the planned closure of the New Zealand Aluminium Smelter at Tiwai Point.

Partnership is at the core of the Government's approach to just transitions. We have worked with iwi, local government, unions, business and the education, agriculture, and community sectors throughout regional just transition processes. To reflect this approach, we expect Regional Hydrogen Transition participants to partner with communities to deliver on regional goals as set out in significant regional plans, such as the *Taranaki 2050 Roadmap* and Southland's *Beyond 2025* long-term plan. Regional Hydrogen Transition participants can fulfil this requirement by demonstrating how their project aligns with these regional plans. Partnering with communities and iwi by aligning your interests and vision will help build social licence and empower regions to capture the opportunities the transition presents.

DRAFT - NOT GOVERNMENT POLICY

Program objectives

The initiative will play an important role in:

- Building capability and supply chains to support the green hydrogen sector's growth
- Supporting regional and national energy transitions
- Decarbonising hard-to-abate sectors
- Delivering social and economic benefits to iwi and communities in just transition regions

This initiative will support the implementation of the Governments' Interim Hydrogen Roadmap by catalysing the transition to hydrogen consumption in hard to abate sectors. It will enable the commercially competitive production of green hydrogen in Aotearoa New Zealand, using renewable energy, for domestic consumption.

Benefit sharing

Participants in the Regional Hydrogen Transition initiative will be expected to contribute to industry development and socio-economic benefits. These co-benefits will contribute to the development of supply chain capabilities, opportunities for iwi and communities to participate in the hydrogen economy, and support for the development of renewable energy generation, among others. These benefits may be upstream or result from additional community partnerships formed by participants, rather than from the direct consumption of hydrogen.

The rebate applies at the point of consumption, while many of the benefit sharing requirements below interact with the wider hydrogen value-chain (i.e., electricity generation, hydrogen production). We expect some participants will be involved in both the production and consumption of hydrogen, and able to readily meet the benefit sharing requirements through their own operations. Where participants intend to contract with a third party for the supply of hydrogen, we anticipate the benefit sharing requirements will be delivered in partnership with producers.

These benefit sharing requirements will be evaluated as part of the competitive selection process. The Ministry does not intend to prescribe how participants must meet these requirements; applicants will instead be required to demonstrate how they intend to deliver outcomes or benefits. There are four elements to the Regional Hydrogen Transition benefit sharing model; we encourage parties to demonstrate how their project meets all four. The four elements are:

1. Just transitions regions
2. Iwi and the Community
3. Renewable energy generation
4. Contribution to the development of the hydrogen economy

Applicants will be required to commit to tangible results which can be contractually enforced. An expert advisory panel will determine whether applicants have committed to tangible results. Rebate recipients will be required to monitor and report against delivery of these over the life of the contracts.

We propose that there will be an opportunity halfway through the contractual period to re-examine the benefit sharing option being progressed by the counterparty. Where agreed benefit sharing commitments are not achieving the objectives of the programme, we will work with counterparties to adjust the existing programme or create a new programme.

Just transition regions

Applicants will be expected to focus the delivery of benefit sharing activities to the just transition regions – Taranaki and Southland. These benefit sharing activities will diversify economic activity, create high-wage and low emissions jobs, and strengthen regional resilience. Benefits should be delivered in partnership with iwi and communities in the regions and be guided by iwi and community priorities. These benefits may be across all of the benefit sharing domains discussed below. Noting that hydrogen

consumption may occur across New Zealand, applicants may partner with suppliers to ensure benefits are delivered to just transition regions. Examples may include contracting with new renewable energy generation in the region, sourcing plant manufactured in the regions, undertaking manufacturing activities in the regions, creating high skill and high wage work, partnering with regional skills and training providers to contribute to the development of hydrogen skills and related employment in the regions. Applicants are encouraged to explore and identify opportunities for partnerships before developing proposals and submitting applications.

Iwi and the community

The criteria for delivering social and economic benefits to iwi and the community have been developed in partnership with Māori. Mana whenua have identified the need to protect and derive a living from their rohe and ensure intergenerational benefits as priorities. The Regional Hydrogen Transition will support iwi to achieve these ambitions. The following themes have been identified and should be reflected in applications:

- **Cultural**
  - supporting Māori cultural rights over wahi tapu, to catch mahinga kai, over their marae, and support iwi activities/cultural practice.
- **Environmental**
  - Supporting biodiversity, funding native flora replanting, investment which encourages environmental stewardship, or is environmentally responsible.
- **Social**
  - Funding for housing, medical services, education and training, and support for rangatahi entering the workforce.
- **Economic**
  - Employment and businesses opportunities.

This initiative is an opportunity for participants to develop meaningful and valuable partnerships with iwi, Māori, and the community to the benefit of all partners. Progress toward delivering on these outcomes may be externally monitored and verified, including by iwi and communities.

Renewable energy generation

A key outcome for the Regional Hydrogen Transition is to support the delivery of national renewable energy targets. The initiative will do this directly, through the activities of participants and indirectly by creating a stronger investment environment for new generation.

Counterparties will be expected to demonstrate how their participation in the Regional Hydrogen Transition will contribute to a modern, 100% renewable electricity system.

Examples of actions participants could take to meet this requirement include (but are not limited to):

- Direct development of new renewable generation (including behind the meter generation)
- Participation in demand response markets
- Contracting for new third-party generation

The rebate will only apply to green hydrogen – that is hydrogen produced through electrolysis of water using renewable energy. Participants will need to demonstrate electricity consumed by their hydrogen supplier is derived from renewable sources. We would value your views on how participants can fulfil this requirement.

Where participants intend to contract with a third party for the supply of hydrogen, they will be expected to demonstrate adherence with the above requirements in collaboration with project partners.

Contribution to development of a hydrogen economy

Applications will be assessed on their commitment and ability to contribute to the development and scaling of a green hydrogen sector in Aotearoa New Zealand. Support for the development of a hydrogen

sector may take several forms. Examples may include: contribution to network effects and enabling other consumers to access hydrogen supplies; contributing to the development of skills that will benefit the hydrogen sector more broadly; contributing to industry knowledge through sharing lessons and case studies; development of standards; significantly contributing to the establishment of supply chains, markets, and infrastructure that will benefit other consumers and enable scaling. Ideally, applications will address several aspects which contribute to hydrogen sector development.

Eligibility

Eligible entities will be those engaged directly in the productive consumption of green hydrogen for either chemical synthesis or conversion into energy via a fuel-cell or direct combustion. These firms will be established commercial entities with a demonstrated track record and capabilities for delivering innovative green hydrogen projects as well as iwi and community benefits. Examples of consumers may include trucking companies, chemical producers, airlines or shipping companies. Green hydrogen will need to be consumed domestically in Aotearoa New Zealand. Rebates will not be paid for the export of hydrogen.

Where the green hydrogen is applied to the production of synthetic fuels using hydrogen as an input, the financial support will apply to the consumer of the end product (i.e. the rebate will bridge a portion of the gap between the fossil fuel and synthetic fuel). The eligible entity for the rebate in these instances would be the consumer of the synthetic fuel, rather than the producer of the synthetic fuel.

Participants will be required to demonstrate that the hydrogen consumed is green hydrogen, derived from the consumption of renewable energy as laid out in the ‘Renewable Energy’ section above.

DESIGN OF THE REBATE

Contracts for rebate

The mechanism underpinning the Regional Hydrogen Transition is an indexed Green Hydrogen Consumption Rebate. This rebate will be delivered through contracts between participants and the Crown of up to ten years in duration. Contracts for hydrogen rebates agreed through the Regional Hydrogen Transition will run for up to ten years from Q1 2025 to provide sufficient certainty to enable long-term investments.

Following a competitive selection process, offers for rebate contracts will be made to successful applicants. The contracted volumes offered may be smaller than the volumes nominated by participants in the competitive selection process. Parties will be asked to nominate a preferred and minimum volume as part of their application with final volumes to be determined during contract negotiation.

Payments and timing

Payments will be made to the participant at quarterly intervals. The participant will be required to provide to the Ministry receipts for the purchase of green hydrogen in the payment interval period.

We propose that rebate payments will be made quarterly upon provision of evidence of the purchase and consumption of hydrogen. Rebate payments to counterparties will be determined through the indexation methods discussed below.

Design considerations

Feedback is sought from Industry on the following aspects:

Is the proposed quarterly payment period consistent with industry expectations? What alternative payment periods should be considered?

Is the proposed process of basing payments on invoices administratively workable? Are there alternatives that should be considered?

Indexation

As part of the competitive process, applicants for the hydrogen rebates will nominate the consumer's cost for green hydrogen, and a reference price for an alternative fossil commodity that would normally be used in the commercial activity in place of hydrogen.

The indexed rebate represents the difference between the hydrogen price agreed between the Crown and the participant, and the price of the relevant fossil fuel. The changing value of the rebate can be seen in Figure 1. The terms of the indexed rebate will be agreed through contracts between participants and the Crown. The rebate payment will be calculated using either an open book or time weighted average approach. These approaches are detailed below.

Comparing hydrogen and fossil fuels

The energy content per unit of mass of hydrogen is significantly higher than fossil fuels. The Regional Hydrogen Transition's indexation calculations will reflect the fact hydrogen is not a direct one-to-one replacement for fossil alternatives. The specific conversion factor the initiative will use for diesel and fossil gas will be decided following industry engagement and expert advice, and will be included in final market offer documents.

For more complex applications, such as liquid fuels, participants would be required to nominate conversion factors, which would then be finalised through contract negotiations.

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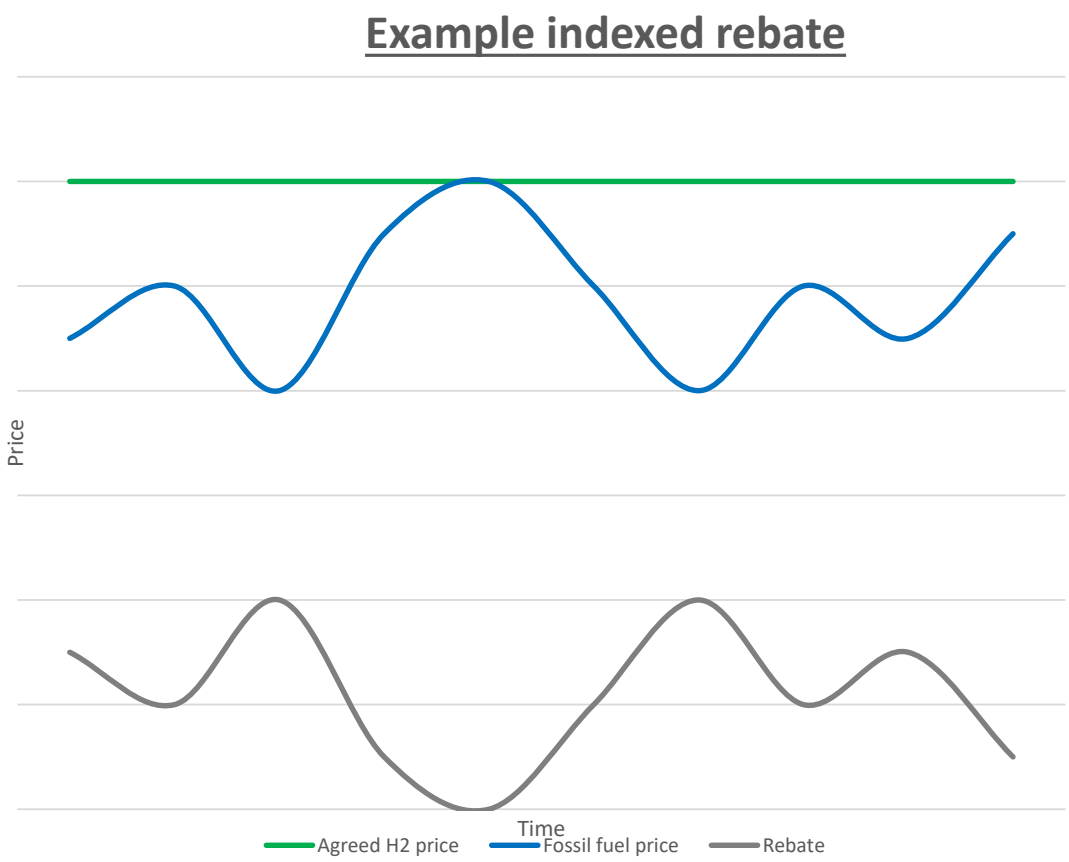

Figure 1 - Example indexed hydrogen consumption rebate

Open book:

- An approach which tracks a counterparty's existing fossil fuel supply contract or hedging product. Payments under this model would be calculated as the difference between the agreed hydrogen strike price and the fossil fuel price in the supply contract or hedge.
- Counterparties would nominate a fossil fuel price to be the basis for this mechanism and be expected to make information required to calculate payments available to the Ministry. This method may be relevant where the rebate recipient manages exposure to fossil fuels as part of their operations. For the purposes of evaluating bids using this method, applicants will need to share their current fossil fuel commodity costs based on their existing contracting or hedging arrangements.

Time weighted average price:

- *For hydrogen applications which displace diesel*: Using a time weighted average of the diesel discounted retail price (as described at: https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-statistics-and-modelling/energy-statistics/weekly-fuel-price-monitoring/). This method will break the year into 13 week blocks, and calculate the reference price for a given block on the preceding block's data. For example, if the average diesel discounted retail price for the first 13 weeks of a calendar year is 200c/l, this will be the reference price used to calculate the value of the rebate for this period. Participants will be required to maintain records demonstrating the period over which hydrogen was purchased.

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- *For hydrogen applications which displace a non-diesel fossil fuel/derivative*: Using the time weighted average approach above with an alternative data source agreed by the Ministry.

In the event the effective fossil fuel price, calculated using any of the methods above, rises above the hydrogen strike price, counterparties will not be required to reimburse the Crown. There will be no rebate paid in this event.

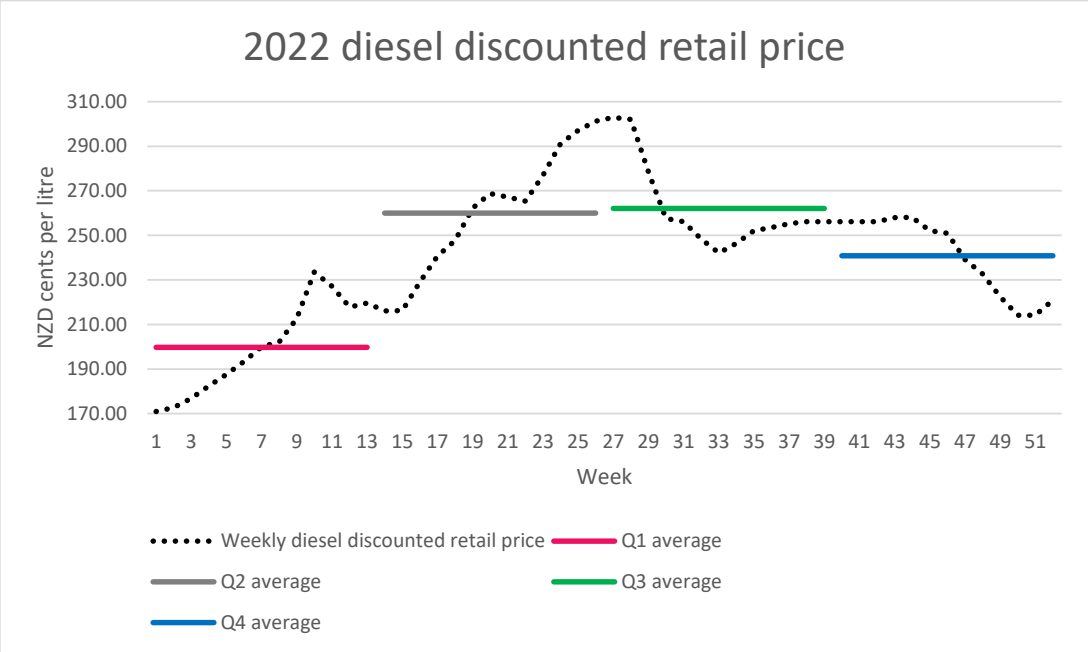

Figure 2 - Calculating reference prices using the time weighted average method

Design considerations

Feedback is sought from Industry on the following aspects:

Given differences in energy content, what conversion factors should the Ministry use to fairly compare hydrogen and fossil alternatives in indexing calculations?

Are the proposed methods for evaluating bids and calculating reference price acceptable? What alternative methods should be considered?

Minimum and maximum scale

We propose that there be a maximum rebate value for which applicants can become eligible. This limit is to ensure rebates can be made available to more than one counterparty to maximise the distribution of community and economic benefits. Similarly, we propose a minimum volume for which projects can be funded. This lower limit is to ensure that quantities funded under the programme are of a commercial scale to support the development of an industry and to achieve administrative efficiency to the Crown. It is proposed that the upper contract limit shall not exceed $6m annually, or $60m over ten years and the lower limit be $1m annually, or $10m over ten years. Once agreed, no adjustments will be made to the contract cap to account for external factors such as inflation.

Individual contracts under the annual maximum value will include a maximum annual payment to limit the cost of the initiative each year. The maximum annual payment will be determined through the application, evaluation and negotiation phases of the project. Provided counterparties have met their minimum payment requirements for a given year, unused allocation can be carried forward.

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To ensure counterparties are delivering on the initiative's goal of increasing consumption of green hydrogen, contracts will include annual minimum payments. The total rebate to which the consumer is entitled under the programme will be reduced by any annual shortfalls against the minimum amount. The minimum payment for each year intended to be covered by the contract will be agreed between the parties at the outset of the contract period. Minimum payments may be lower in earlier years to support production "ramping up".

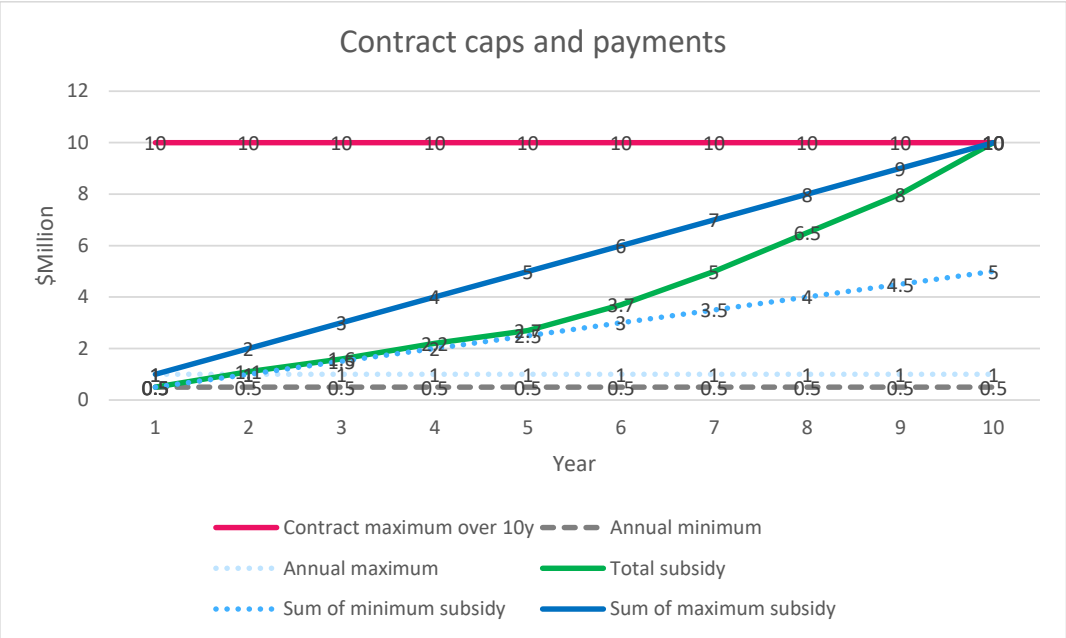

Figure 3 - Example contract structure

Design considerations

Feedback on the appropriateness of these volume settings is sought from industry.

Reporting; penalties for non-compliance

The participant will also be required to retain and maintain records verifying the use of renewable electricity supplied and consumed in the production of green hydrogen, and the delivery of co-benefits. These records may be audited as required throughout the course of the contract.

Where green hydrogen is produced directly by the consumer, alternative arrangements for documentation and verification will be agreed between the rebate recipient and the Crown. These alternative arrangements will align with the programme's overarching design intent of bridging the price gap between green hydrogen and fossil fuels.

We propose that any delays to hydrogen consumption resulting from delayed project delivery will be deducted from the contract term length, to ensure all contracts conclude by Q4 2034. Where delays result from acquiring relevant equipment or consents, counterparties will incur no penalty for falling short of the minimum payment provisions for the first year of the contract. It is proposed that contracts would lapse if consumption has not commenced by Q3 2028, and unused allocation will be distributed in line with the process described below.

For example, a counterparty agrees to a ten-year contract to support a project. If:

- Consumption begins in Q1 2025, the contract will run to the end of Q4 2034.
- Consumption begins in Q2 2026, the contract will run to the end of Q4 2034. No penalty will be incurred for shortfalls of the annual minimum payment.

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- Consumption begins in Q2 2027, the contract will run to the end of Q4 2034. Any shortfall of the annual minimum payment provisions from Q3 2026 onward will incur the relevant penalties.
- Project is not finalised and consumption of green hydrogen does not commence by end of Q2 2028. Contract expires and subsidy allocation redistributed.

Design considerations

Feedback is sought from Industry on the following aspects:

Do you have existing reporting mechanisms in place that could be leveraged for the proposed reporting requirements?

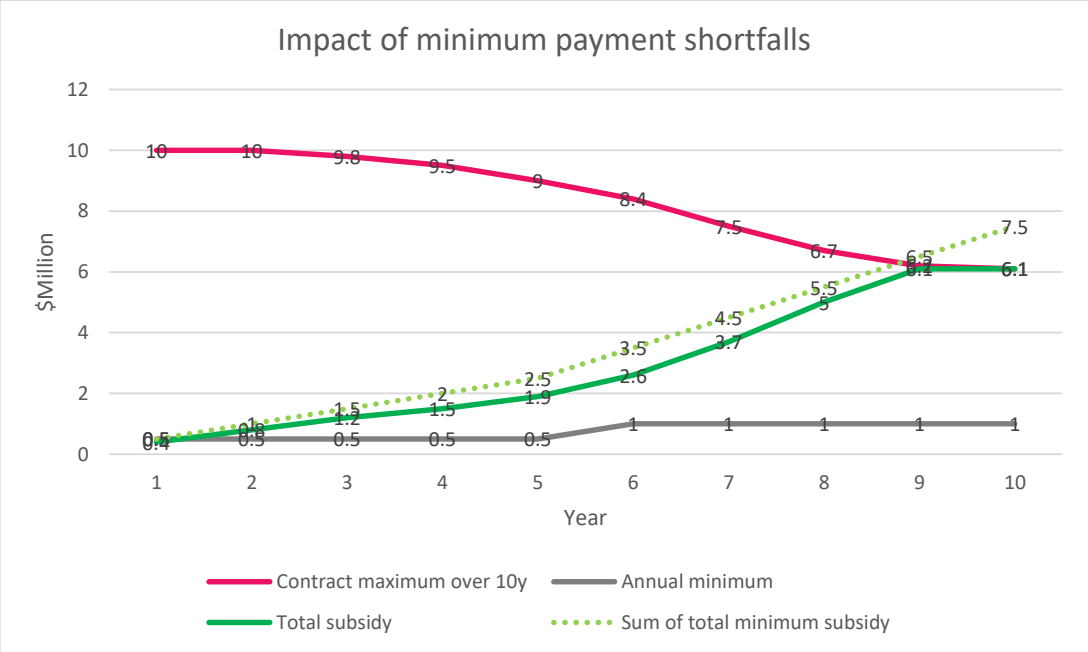
Are there any potential challenges or issues you foresee with the reporting and noncompliance components outlined in the policy?

Reallocation of unused Rebate payments

If counterparties do not meet the annual minimum payment (by failing to consume sufficient green hydrogen), the difference between actual consumption and the cumulative minimum for the relevant year (the sum of minimums from preceding years) will be subtracted from the total contract payment cap. Exceptions will be made for shortfalls in the first year of the contract to allow for unforeseen delays in project delivery.

Year two annual minimum payment ($0.5m) – Year two actual subsidy payment ($0.3m) = Year two minimum payment shortfall ($0.2m)

Total contract payment cap ($10m) – Year two minimum payment shortfall ($0.2m) = New total contract payment cap ($9.8m)



Exceptions to the minimum payment requirements will be made in the following circumstances:

- In the event the reference price rises above the strike price for more than 13 weeks in a contract year.
- If the Ministry exempts the counterparties from the minimum payment requirements – this may be in response to energy market factors, such as a dry year.

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Any rebate payments which have not been claimed in the first five years of the programme will be re-allocated. Ahead of Year six of the programme, the sum of annual minimum payment shortfalls will be offered to any counterparties who have met their minimum annual payments in three of the preceding five years. Priority for reallocation will be based on the counterparty's consumption against the total Y1-5 minimum consumption commitment over the period. Consumers with the least proportionate shortfall against the minimum allocation will be prioritised. Reallocated payments for any given counterparty will be capped at their total Y1-5 minimum payment.

	Y1-5 minimum	Shortfall	Percent	Available	Request	Allocation
Counterparty One	$5.0m	$0.5m	10%	$3.7m	$2.0m	$2.0m
Counterparty Two	$1.0m	$0.2m	20%	$3.7m	$1.5m	$1.0m
Counterparty Three	$8.0m	$2.0m	25%	$3.7m	$1.0m	$0.7m
Counterparty Four	$2.5m	$1.0m	40%	$3.7m	$0.5m	$0.0m

Design considerations

Feedback is sought from Industry on the following:

Is the ten year term appropriate in order to support long-term investments in projects, including supporting infrastructure?

Are the proposed minimum contract threshold and maximum contract cap values viable to support the development of projects?

Are the eligible uses proposed under the programme appropriate? Are there any other commercial uses of hydrogen which should be considered that are not mentioned?

Are there any types of projects which would support the development of a green hydrogen sector but which would be ineligible under the proposed volume settings?

Does the proposed process for reallocation of unused subsidy present any unforeseen business risks? If so, please explain. Are there other methods that could achieve effective use of Crown resources while providing fairness to industry?

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COMPETITIVE SELECTION PROCESS

Participants in the programme will be selected through a competitive selection process similar to an auction. We expect that the selection process will be conducted in Q1 2024.

Eligible applicants will be evaluated against a range of criteria including cost and non-cost criteria. The non-cost criteria will focus on delivering the benefit sharing programme objectives described above. Evaluation against cost criteria will deliver value for money to the Crown. The selection process will be designed to provide the minimum cost support required to achieve this outcome. Evaluation against cost criteria will be on the basis of the applicant's nomination of a cost of hydrogen and the nominated reference price for fossil fuel alternatives.

The competitive selection process will be undertaken consistent with public sector procurement principles to ensure fairness and probity.

Evaluation

Non-cost criteria relate to the criteria outlined under the Benefit Sharing section above. Applicants will be required to demonstrate delivery against the non-cost criteria.

Applications will also need to demonstrate project readiness and management of delivery risks and demonstrate partnerships with hydrogen suppliers.

Cost criteria will include evaluation against the participants' nominated strike price. Applicants will be required to nominate a per-unit contract strike price for green hydrogen. Applicants will also be required to nominate a volume of green hydrogen to be consumed over the program period (by annual periods) and a total lifetime contract cap sought.

The evaluation process will have input from technical experts, regional representatives, iwi and government. These parties will advise on social, community, and economic benefits and contributions to iwi, regions, and the development of a hydrogen economy.

We propose that the evaluation process consider any previous government investments in the entity in the evaluation of the application. Past funding would not exclude firms from accessing the rebate, but care will be taken to ensure that duplication of funding for the same purpose is minimised.

Exclusions

Applicants will need to demonstrate their project meets the Regional Hydrogen Transition eligibility criteria and is not excluded under the rules of the programme.

Grants are exclusively for the rebate of hydrogen consumed. The programme will not fund:

- Capital
- Existing operating costs
- The use of hydrogen other than green hydrogen

Timing

We anticipate that a competitive selection process will be conducted in Q1 2024. We propose that applications will remain open for a period of eight weeks.

Interested parties should commence preparing for the competitive selection process as early as possible to demonstrate delivery against the various programme objectives.

Design considerations

Feedback is sought on the proposed implementation of the competitive selection process.

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Is the proposed eight week period sufficient for interested parties to prepare and lodge applications? Are the proposed timeframes of conducting the competitive selection process workable?

Are the proposed categories of evaluation criteria appropriate? Are there other aspects of the programme which should be considered in the evaluation criteria in order to achieve the programme objectives?

What lead times are involved in the development and delivery of hydrogen projects? How do the proposed programme timeframes align with these?

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TIMEFRAME

Advancing New Zealand's Energy Transition

AUGUST 2023

MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

Te Kāwanatanga o Aotearoa
New Zealand Government

MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

Ministry of Business, Innovation and Employment (MBIE) Hīkina Whakatutuki – Lifting to make successful

MBIE develops and delivers policy, services, advice and regulation to support economic growth and the prosperity and wellbeing of New Zealanders.

MORE INFORMATION

Information, examples and answers to your questions about the topics covered here can be found on our website: **www.mbie.govt.nz.**

DISCLAIMER

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AUGUST 2023

Introduction

Energy keeps Aotearoa New Zealand running. We use energy for transport, heating, manufacturing, food preparation and in countless other ways.

While our energy system has served us very well, our energy use is also a major source of emissions. In 2021[1], emissions from energy made up 40 per cent of New Zealand's total gross emissions. Cutting emissions from energy is essential to meeting our international climate commitments and reducing the impacts of climate change.

The Government has committed to reaching net zero for long-lived gases by 2050, has set a target that 50 per cent of total energy consumption will come from renewable sources by 2035, and has set an aspirational target to reach 100 per cent renewable electricity by 2030.

To reach the domestic targets, and to contribute to limiting global warming to 1.5°C, we need to look across energy policy settings to ensure they facilitate the transition to a low energy system, while maintaining reliability, affordability, and supporting productivity.

The Government has a wide range of actions already underway to reduce emissions, and to encourage more renewable energy generation. This paper forms one part of a package of documents consulting on the next phase of Aotearoa New Zealand's energy transition. Each document addresses a critical aspect of the energy transition – the emerging roles for hydrogen, measures to enhance the electricity system, phasing down the use of fossil gas, and proposals for regulating a future offshore renewable energy industry.

This paper presents an overview of these energy system discussion documents, identifies cross-cutting issues, and shows how this consultation supports work towards developing an overarching Aotearoa Energy Strategy. The Energy Strategy will chart a path for the energy sector to 2050, promoting our objectives for a highly renewable, reliable, and affordable energy system that supports economic growth and productivity.

Gas Transition Plan issues paper

- Developed by MBIE in conjunction with the Gas Industry Company, the Gas Transition Plan Issues Paper seeks feedback on the strategic direction for the gas sector. The gas sector faces opportunities and obstacles in transitioning. These include ensuring that consumers have access to secure and affordable energy, not locking in older and poorly performing assets, and supporting the Government's vision for the energy and industry sector. It is almost certain New Zealand will need a level of reliable gas supply for years to come. This Gas Transition Plan Issues Paper seeks feedback on the key issues and opportunities facing the gas sector. The Issues Paper also considers the role of other opportunities for lowering emissions, like carbon capture utilisation and storage, and renewable gases like biomethane and hydrogen.

[1] https://environment.govt.nz/publications/new-zealands-greenhouse-gas-inventory-19902021-snapshot/#new-zealands-gross-and-net-emissions

Measures for transition to an expanded and highly renewable electricity system

- This paper looks at how we can ensure electricity is affordable, reliable and resilient while we transition to an expanded and more highly renewable electricity system. The Government has set an aspirational target of 100 per cent renewable electricity by 2030. A key issue for the energy transition is how to manage the phase out of fossil fuels in the electricity system, while responding to substantially increased electricity demand that is occurring through the electrification of other sectors (such as industry and transport). The paper sets out work already underway by government and regulators, and seeks feedback on what else might need to be considered.
- The market measures issues paper is accompanied by a separate paper - *Implementing a ban on new fossil-fuel baseload electricity generation*. This paper provides an opportunity for final feedback on the design and implementation of the emissions reduction plan action to ban new fossil-fuel baseload electricity generation.

Interim Hydrogen Roadmap

- The *Interim Hydrogen Roadmap* (the Interim Roadmap) sets out an emerging view on the potential role of hydrogen in New Zealand's energy transition, to inform where the Government should best place its effort. Providing a roadmap for hydrogen in New Zealand will also help foster certainty for investors and project developers. Feedback is sought on whether stakeholders agree with the strategic context and direction of focus in the roadmap, or whether there are other circumstances Government should consider. The Interim Roadmap suggests that hydrogen has the most potential to play a role in decarbonising New Zealand's hard-to-abate applications such as chemicals, fertiliser and parts of heavy transport (including aviation and marine), and that an industry in New Zealand could generate substantial economic activity. There is also significant international interest in New Zealand's potential for providing hydrogen to export markets.

Developing a Regulatory Framework for Offshore Renewable Energy

- Offshore renewable energy refers to the energy sources and technology used to generate electricity from such sources as offshore wind. New Zealand has world-leading offshore wind generation potential within its Territorial Sea and Exclusive Economic Zone (EEZ), which could contribute to our target of net-zero carbon emissions by 2050. The Government is consulting on a regulatory framework for offshore renewable energy in two phases. Following an initial discussion document on regulating feasibility activities, *Developing a Regulatory Framework for Offshore Renewable Energy* makes regulatory proposals for the construction, operation, and decommissioning stages. A regulatory framework is needed to incentivise developers to invest, and to manage development of the industry.

We will be consulting on the discussion documents until November. During this time, the Ministry of Business, Innovation, and Employment intends to engage with iwi, and to meet with stakeholders across communities and the energy sector.

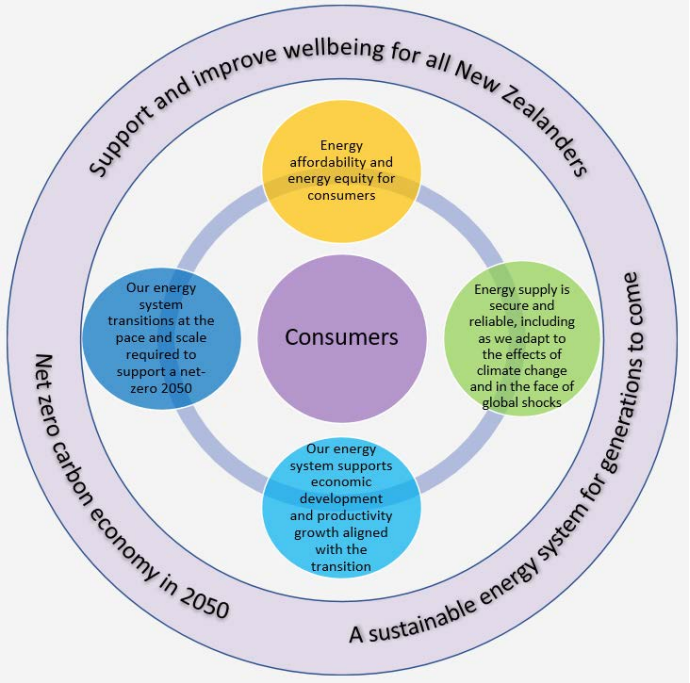
The findings from the consultation will inform near-term policy and contribute to the Energy Strategy. The Government intends to produce an Energy Strategy issues paper for consultation around the end of the year.

Towards an Energy Strategy for New Zealand

Developing an Energy Strategy for New Zealand is an action from *Te hau mārohi ki anamata*, the Government's first emissions reduction plan.

As shown in the diagram below, the Energy Strategy will set the direction for how we transition to net-zero emissions by 2050 – while ensuring:

- energy affordability and energy equity for consumers
- secure, resilient, and reliable energy supply, including as we adapt to the effects of climate change and in the face of global shocks
- an energy system that supports economic development and productivity growth aligned with the transition.



Central to the transition, and the Energy Strategy, is the way our 'energy mix' needs to change. We need to increase the role of renewables significantly, while managing the phase out of fossil fuels.

To reduce emissions, renewables need to increase as a share of our energy use from 28% to 50% by 2035, and to an even higher proportion by 2050. One role of the Energy Strategy is to set a 2050 target for renewable energy and ensure that steps taken now will enable us to get to that target.

We have a range of actions underway to achieve a successful energy transition, and the discussion documents explore further actions. But we need to understand what further steps government,

industrial users, households and communities, and the energy sector itself might need to take to reduce energy emissions. Reducing emissions includes both changing the way we generate energy, but also the volume of energy we consume.

The Energy Strategy will provide this long-term holistic plan for a highly renewable and low-emissions energy sector.

THE ENERGY STRATEGY WILL ADDRESS KEY CHALLENGES AND OPPORTUNITIES

New Zealand's energy system has served us very well. Compared to many other countries, New Zealand's energy sources are highly reliable, renewable, and affordable. Our energy system is among the greenest in the world.[2] The challenge is to increase the share of energy used that is renewable, and increase the supply of energy, while maintaining and improving affordability and reliability.

There are key pathways for New Zealand to transition to the energy system we need.

Direct electrification, such as swapping fossil fuel vehicles for electric ones, will play the major part. While New Zealand already has a high proportion of renewable electricity to enable this electrification process to occur, we need to build substantially more generation and transmission by 2050 to enable the transition. At the same time, we also need to ensure that the electricity system reduces its reliance on burning fossil gas or coal to manage those times when there isn't enough renewable electricity available due to peak demand, or intermittency (such as when the wind is not blowing, or the sun is not shining).

There will also be important roles for other green forms of energy like green hydrogen or biomass to replace fossil energy where direct electrification is not possible or economic (such as in heavy transport or industrial processes). For this wider energy use, New Zealand still has a long way to go in reducing emissions. While there are new technology options either ready for commercial deployment or near to market, producing these green forms of energy also requires some electricity, and as such, will add even more to New Zealand's future renewable electricity needs. The price of these technologies is also still uncompetitive with fossil options, but is falling over time.

Changing the way New Zealand uses energy can also have multiple benefits. By consuming less or shifting the time of use away from peak times – for example through efficiency measures, or using smart charging devices for electric vehicles – we reduce the volume of new generation, transmission, and distribution infrastructure that is required. This will reduce costs, and reduce the environmental impacts that even renewable energy generation projects can cause.

A successful transition will both achieve our emissions reduction goals and lead to cheaper and more reliable energy that supports economic growth and productivity. There are choices and challenges in managing the energy transition, and much to gain. Examples from the fossil gas industry, transport, and the potential use of hydrogen illustrate the context for our energy transition.

- We currently use fossil gas to make electricity at peak times. This ensures that electricity users have power when they need it most, which is usually in winter mornings and evenings. If fossil gas is phased down in an unmanaged way – before suitable renewable alternatives exist – there is a risk that it will simply be replaced by coal at peak times. Coal produces more emissions, could be more expensive for consumers, and could increase our exposure to global

[2] New Zealand has the tenth highest share of renewable energy amongst International Energy Agency (IEA) member countries. *New Zealand 2023, Energy Policy Review*, New Zealand 2023 – Analysis - IEA

shocks. At the same time, fossil gas operators want investment certainty about the nature and timing of the phase down so that they can continue to build and maintain fossil gas plants and fields. Without this certainty, they may not make fossil gas available.

- To take another example, one of the best opportunities for reducing fossil fuel use is the electrification of transport through technologies such as electric vehicles. Broad uptake of electric vehicles will reduce emissions, and reduce energy costs for households. While electric vehicles now make up around 1% of New Zealand's national fleet, uptake is increasing rapidly due to the Government's Clean Car Discount and increased supply and diversity of vehicles available. We need to ensure we can build enough renewable electricity and charging infrastructure fast enough to keep up with new demand, while continuing to address the relatively high upfront costs of electric vehicles.
- The role of hydrogen provides a further example of the need to manage the transition carefully. While hydrogen can support decarbonisation, hydrogen production is itself energy intensive. The more we rely on hydrogen, the more important it is to build dedicated renewable electricity generation. This effect would be especially significant if New Zealand sought to produce sufficient hydrogen for export.

While there are challenges to face, there are also significant opportunities due to New Zealand's abundant renewable energy resources. Already, innovative New Zealand companies are taking this transition forward at pace through the development of new technology, while providing new high value jobs for New Zealanders and increasing our productivity.

The transition provides an opportunity for more of these businesses and new renewable sectors to emerge within the economy. There is increasing involvement of iwi and Māori in new renewables projects, both as investors and within the workforce, and opportunities for this to grow over time. And as we reach 2050, we have the chance to reduce the costs of energy for all New Zealanders and within the economy, which will boost wellbeing and economic growth.

The Energy Strategy, due for release in late 2024, will take a whole of system view of the energy transition out to 2050.

This whole of system view will complement and build on a range of related area of work, including:

- The New Zealand emissions trading scheme
- Demand-side policies in transport, industrial process heat and waste.
- The next Emissions Reduction Plan
- Policy for skills and workforce development
- Infrastructure development policy
- Resource management policy
- Te Mana o Te Taiao, Aotearoa Biodiversity Strategy

NEXT STEPS FOR THE ENERGY STRATEGY

A discussion paper on the Energy Strategy will be released around the end of the year.

Further information on the Strategy, including information on how to get involved, is available here: New Zealand Energy Strategy | Ministry of Business, Innovation & Employment (mbie.govt.nz)

There is already a lot of work underway

There has already been significant work to support the energy transition. Notable initiatives include:

- Regional Hydrogen Transition
- Government Investment in Decarbonising Industry (GIDI) fund
- the Carbon Neutral Government Programme
- the Warmer Kiwi Homes programme
- Clean Car Discount and the development of an electric vehicle charging strategy
- the Community Renewable Energy Fund
- progressing consenting improvements for renewable electricity generation and transmission
- the New Zealand Battery Project
- progressing an Equitable Transitions Strategy

REGIONAL HYDROGEN TRANSITION

The Regional Hydrogen Transition will support early consumers of green hydrogen in New Zealand by bridging the price gap between hydrogen and fossil fuel alternatives. The rebate mechanism to deliver this outcome will be finalised following industry engagement. The goals of the initiative are:

- decarbonising hard-to-abate sectors
- economic diversification
- supporting the wider goals of the just transition

Budget 2023 provides $32.5 million over the first four years of the Regional Hydrogen Transition.

Regional Hydrogen Transition | Ministry of Business, Innovation & Employment (mbie.govt.nz)

GOVERNMENT INVESTMENT IN DECARBONISING INDUSTRY (GIDI) FUND

Industrial energy use accounts for about 25 per cent of our energy emissions and its decarbonisation is a critical component of the Emissions Reduction Plan. The GIDI fund targets these emissions by providing co-funding grants to businesses to decarbonise their use of industrial process heat through fuel switching and energy efficiency improvements. Without Government co-funding, many decarbonisation projects would present too high an upfront cost to a business, with too low a corresponding return to be prioritised or to proceed. Co-funding can also bring forward decarbonisation projects that may have occurred at a later point in time.

Through Budget 2022, GIDI funding increased by $650 million over four years to expand and accelerate what can be achieved in decarbonising our energy system, without de-industrialising it.

The recently announced partnership with New Zealand Steel is New Zealand's largest emissions reduction project to date, with half of the coal being used at Glenbrook steel to be replaced with electricity to recycle scrap steel. The Government is contributing up to $140 million to this project.

About the Government Investment in Decarbonising Industry Fund | EECA

CARBON NEUTRAL GOVERNMENT PROGRAMME

The Carbon Neutral Government Programme (CNGP) has been set up to accelerate the reduction of emissions within the public sector. Launched in December 2020, the programme aims to make a number of organisations within the public sector carbon neutral from 2025. Key initiatives in the CNGP include:

- phasing out coal-fired boilers from the public sector, with a focus on removing the largest and most active by the end of 2025
- optimising the size of agencies' car fleets and purchasing electric vehicles.

The CNGP is supported with funding from the State Sector Decarbonisation Fund.

Carbon Neutral Government Programme | Ministry for the Environment

State sector decarbonisation fund | EECA

WARMER KIWI HOMES

The Government launched the Warmer Kiwi Homes programme in July 2018 and has since completed over 110,000 heating and insulation retrofits for eligible homeowners. Six per cent of New Zealand's energy-related emissions come from households. Improving the energy efficiency of New Zealanders' homes not only reduces emissions, it also plays a vital role in ensuring whānau can enjoy warm, dry and healthy homes – without increased energy costs.

Through Budget 2023, the Government extended Warmer Kiwi Homes. The extended Warmer Kiwi Homes programme will deliver around 26,500 extra insulation and heating retrofits each year. The extended programme will help tens of thousands of New Zealanders lower their power bills and improve their health by repairing and efficiently heating their homes, and providing more energy efficient hot water heating and lighting.

Warmer Kiwi Homes programme | EECA

CLEAN CAR DISCOUNT AND THE DEVELOPMENT OF AN ELECTRIC VEHICLE CHARGING STRATEGY

Electrifying the vehicle fleet is an important step towards a net zero-carbon future. The emissions reduction plan sets out a commitment to increase zero-emission vehicles to 30 per cent of the light vehicle fleet and reduce emissions from freight transport by 35 per cent by 2035. Achieving these targets means there will be 1.5 million more EVs in the fleet by 2035. We need to invest in the appropriate public and private EV charging infrastructure ahead of this growth.

The Government's Clean Car Discount is making low emission vehicles more affordable. The discount consists of rebates and fees based on CO2 emissions for new and used eligible vehicles the first time they are registered in New Zealand. The higher the CO2 emissions, the greater the fee; the lower the emissions, the greater the rebate. Vehicles with moderate emissions will not incur a fee or be eligible for a rebate.

The national EV charging system needs to be underpinned by affordable, reliable, secure and safe electricity supply and infrastructure. The Government recently consulted on a draft electric vehicle charging strategy: *Charging Our Future*. Budget 2023 helps to provide greater certainty to New Zealanders adopting EVs by investing $120 million to expand EV charging infrastructure. This will

expand the growing national network of EV charging hubs across New Zealand, by adding 25 hubs each containing up to 20 chargers.

Electric Vehicle charging strategy: Charging our future | Ministry of Business, Innovation & Employment (mbie.govt.nz)

COMMUNITY RENEWABLE ENERGY FUND

Community-based energy initiatives that also help improve energy affordability, security and resilience, and lead to improved health outcomes.

Building on pilots funded through the Māori and Public Housing Renewable Energy Fund ($28 million in Budget 2020), the Government has committed a further $46 million (in Budget 2022 and 2023) for an expanded programme to support small-scale community renewable energy projects.

This new Community Renewable Energy Fund supports renewable generation to lower energy bills and encourage greater use of heating, leading to warmer and healthier homes. Some projects may also provide a more resilient power supply and enhance energy sovereignty by enabling local communities to generate their own power.

Community Renewable Energy Fund | Ministry of Business, Innovation & Employment (mbie.govt.nz)

PROGRESSING CONSENTING IMPROVEMENTS FOR RENEWABLE ELECTRICITY GENERATION AND TRANSMISSION

Meeting our emissions targets will require a rapid and efficient expansion of renewable electricity such as wind and solar generation. We need to boost renewable electricity generation by 170 per cent by 2050 to support increased electricity demand and to transition away from emissions-intensive fuels.[3] Significant expansion and upgrade of other parts of the electricity network will also be required to enable this renewable electricity to reach customers.

The Government, through MBIE and the Ministry for the Environment, is currently progressing proposed changes to the National Policy Statement for Renewable Electricity Generation and the National Policy Statement for Electricity Transmission under the Resource Management Act.

Consenting improvements for renewable electricity generation and transmission | Ministry of Business, Innovation & Employment (mbie.govt.nz)

NEW ZEALAND BATTERY PROJECT

New Zealand relies heavily on hydro power to generate electricity. When our existing hydro-power catchments don't receive enough rainfall or snowmelt, the level of the storage lakes runs low. We call this lack of rainfall or snowmelt our 'dry year problem'. When this occurs, some form of back-up is needed, and this is currently provided by fossil fuel generation.

As we transition from fossil fuels and increasingly rely on hydro, wind and solar, the dry year problem may expand to become a dry, calm and cloudy problem.

The New Zealand Battery Project is undertaking a significant programme of work to solve the dry year problem without using fossil fuels and support a pathway to 100 per cent renewable electricity

[3] Consenting improvements for renewable electricity generation and transmission | Ministry of Business, Innovation & Employment (mbie.govt.nz)

generation. The name, 'NZ Battery', refers to the manner in which the intended solution may provide stored energy for New Zealand's electricity system, similar to the way a battery stores energy until it's needed.

NZ Battery Project | Ministry of Business, Innovation & Employment (mbie.govt.nz)

EQUITABLE TRANSITIONS STRATEGY

The Government is developing an Equitable Transitions Strategy to help Aotearoa New Zealand tackle climate change challenges and to ensure opportunities in a low emissions future work for everyone. The strategy aims to support people through this period of change, lay the foundations for future decision-making, and uphold Te Tiriti o Waitangi. This will include proposed action areas to guide and support a fair and inclusive with a particular focus on those groups that are disproportionately affected by the transition.

The Equitable Transitions Strategy is co-led by the Ministry of Business, Innovation, & Employment and the Ministry of Social Development. There will be a range of opportunities for interested parties influence the development of the Strategy and to share their views on the policies and measures needed to assist people to manage the impacts and seize the opportunities of the transition.

https://www.mbie.govt.nz/business-and-employment/economic-development/equitable-transitions-strategy/

A package of energy sector discussion documents

We are releasing a package of discussion documents to advance New Zealand's energy transition and inform the Energy Strategy:

- *Gas Transition Plan Issues Paper*
- *Measures for transition to an expanded and highly renewable electricity system*
- *Implementing a ban on new fossil-fuel baseload electricity generation*
- *Interim Hydrogen Roadmap*
- *Developing a Regulatory Framework for Offshore Renewable Energy*

THE CONSULTATION PAPERS SUPPORT THE DEVELOPMENT OF THE ENERGY STRATEGY

Each paper supports a critical aspect of the energy transition and supports the Energy Strategy's four objectives – transition at the necessary pace and scale, affordability and equity, security and reliability, and growth and productivity. This table shows how the suite of projects discussed in this paper supports the two-phase approach to the energy strategy:

Energy Strategy	Phase 1: Exploring what's possible	Discussion paper	Phase 2: Charting the path	Final Energy Strategy
Offshore Renewable Energy	**Mid 2023** 2nd Phase of regulatory regime consultation		**2024** Working on legislation	
Advice on regulatory regime for offshore renewables				
Gas Transition Plan	**2023** GTP consultation	**2023** GTP released		
Answers particular questions regarding role of gas in the broader energy transition				
Hydrogen roadmap	**Mid 2023** Interim Hydrogen Roadmap released			**End 2024** Final hydrogen roadmap released
Outline government priorities and the potential role of hydrogen as part of the broader energy transition				
Electricity Market Measures (EMM)	**Mid 2023** EMM consultation			
Identification of measures to support reliable and affordable electricity supply through the transition				
NZ Battery Project	**Mid 2023** Cabinet report back			**End 2024** Detailed business case
Evaluating renewable technologies to address New Zealand's dry-year electricity problem				
National Policy Statement Renewable Electricity	**April 2023** Consultation released	**2023** NPS changes in force		
Strengthening government direction for consenting renewable electricity infrastructure				

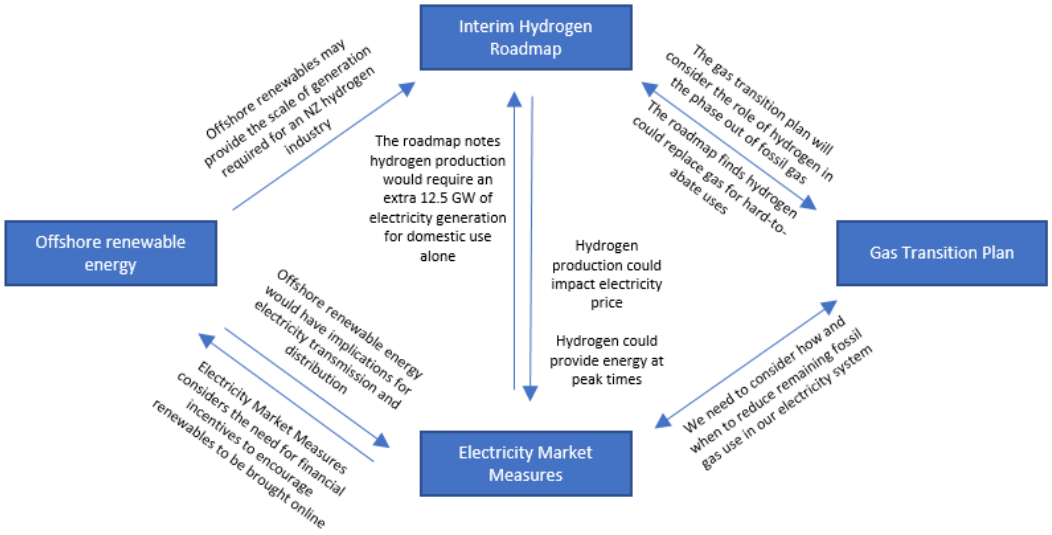
LINKAGES BETWEEN ISSUES IN THE CONSULTATION DOCUMENTS

The issues in the papers are closely interlinked and consider New Zealand's energy transition from different perspectives.

Key examples include the following:

- The *Gas Transition Plan Issues Paper* explores the options for reducing our reliance on fossil gas over time. Fossil gas currently plays a critical role in our energy system. In addition to providing heating for homes, fossil gas is currently essential for many industrial processes, and for reliably generating electricity when other sources are not available. Ensuring reliable electricity supply at all times is a central issue in the *Measures for transition to an expanded and highly renewable electricity system* discussion document.
- *Measures for transition to an expanded and highly renewable electricity system* addresses the capacity of the electricity market to produce enough new renewable electricity generation at pace, and how to ensure the right investment to move this electricity around the country. The development of a hydrogen sector, considered in the *Interim Hydrogen Roadmap*, will be reliant on this capacity becoming available.
- *Developing a Regulatory Framework for Offshore Renewable Energy* consults on proposals for regulating the construction, operation, and decommissioning stages of development. Internationally, offshore renewable energy projects, primarily offshore wind, have typically been supported by some form of revenue support or stabilisation mechanism. Some potential measures include contracts for difference and power purchase agreements. *Measures for transition to an expanded and highly renewable electricity system* considers whether there is a need for additional policies to support the development of new, large-scale renewable generation and, if so, what types of measures could be considered.
- The *Interim Hydrogen Roadmap* sets out an emerging view on the potential role of hydrogen in New Zealand's energy transition, to inform where the Government should best place its effort. Hydrogen production is energy intensive. An offshore renewable energy industry could provide the renewable electricity needed to produce green hydrogen.

The following diagram illustrates the key connections between the discussion documents.



Below, we provide more information on each of the discussion documents.

GAS TRANSITION PLAN ISSUES PAPER

Developed by MBIE in conjunction with the Gas Industry Company, the Gas Transition Plan Issues Paper seeks feedback on the strategic direction for the gas sector. The gas sector faces opportunities and obstacles in transitioning. These include ensuring that consumers have access to secure and affordable energy, not locking in older and poorly performing assets, and supporting the Government's vision for the energy and industry sector. It is almost certain New Zealand will need a level of reliable gas supply for years to come. This Gas Transition Plan Issues Paper seeks feedback on the key issues and opportunities facing the gas sector. The Issues Paper also considers the role of other opportunities for lowering emissions, like carbon capture utilisation and storage, and renewable gases like biomethane and hydrogen.

The fossil gas transition has particular relevance for the Taranaki region.

The key questions this document asks are:

- when and how should fossil gas use be phased down to help meet New Zealand's emissions reductions objectives, while maintaining security of supply for fossil gas consumers and the energy system?
- what is the appropriate role for renewable gases like biomethane and hydrogen, and technologies like carbon capture and storage, which offer promising ways to reduce emissions through the transition phase?

In addition to links to the Electricity Market Measures work, this issues paper also considers the role of green hydrogen as a replacement for fossil gas, and as such has links with the Interim Hydrogen Roadmap. Current large, or otherwise hard-to-abate fossil gas users may decarbonise their processes over time utilising green hydrogen, but this will require sufficient domestic supply to be available. The Interim Hydrogen Roadmap considers hard to abate industries as one of the priority avenues for hydrogen in New Zealand's future energy mix.

Next steps

Submissions on the consultation will inform the development of a final Gas Transition Plan.

MEASURES FOR TRANSITION TO AN EXPANDED AND HIGHLY RENEWABLE ELECTRICITY SYSTEM

Measures for transition to an expanded and highly renewable electricity system looks at how we can ensure electricity is affordable, reliable and resilient while we transition to an expanded and more highly renewable electricity system. The Government has set an aspirational target of 100 per cent renewable electricity by 2030. A key issue for the energy transition is how to manage the phase out of fossil fuels in the electricity system, while responding to substantially increased electricity demand that is occurring through the electrification of other sectors (such as industry and transport). The paper sets out work already underway by government and regulators, and seeks feedback on what else might need to be considered.

The key questions this document asks are:

- how do we ensure sufficient investment in new renewable generation to expand our electricity system for electrification and to replace retiring fossil fuel generation?
- how do we ensure adequate dispatchable generation capacity, storage or demand side response as fossil fuel plants retire and intermittent capacity grows including ensuring sufficient capacity for peaking, calm, cloudy periods, and managing the 'dry year' challenge (ahead of any NZ battery project solution)?
- how do we ensure competitive markets during transition to a more highly renewable electricity system?
- how do we grow and enhance transmission and distribution networks at a sufficient pace to meet our needs for demand growth and new renewable generation in a timely way?
- how do we support smarter use of networks and smarter technologies?

This paper has close links with the *Interim Hydrogen Roadmap* since significant green hydrogen production would require a large amount of additional renewable electricity. There are also links with *Developing a Regulatory Framework for Offshore Renewable Energy*, since offshore renewable energy could supply significant additional renewable electricity.

The market measures issues paper is accompanied by a separate paper - *Implementing a ban on new fossil-fuel baseload electricity generation*. This paper provides an opportunity for final feedback on the design and implementation of the emissions reduction plan action to ban new fossil-fuel baseload electricity generation.

Next steps

Submissions on *Measures for transition to an expanded and highly renewable electricity system* will help to determine next steps for the electricity market measures work. Any specific options to be progressed would be subject to further consultation ahead of implementation.

Following consultation on implementation issues relating to the Emissions Reduction Plan action to ban new baseload fossil fuel electricity generation, the Government will take final policy decisions later in 2023.

INTERIM HYDROGEN ROADMAP

As well as substantial amounts of new renewable electricity, New Zealand will need other forms of green energy where electrification is not possible or economic. Hydrogen is one of the key technologies being considered for playing this role, and many countries are supporting it at significant scale.

The *Interim Hydrogen Roadmap* (the Interim Roadmap) sets out an emerging view on the potential role of hydrogen in New Zealand's energy transition, to inform where the Government should best place its effort. Providing a roadmap for hydrogen in New Zealand will also help foster certainty for investors and project developers. Feedback is sought on whether stakeholders agree with the strategic context and direction of focus in the roadmap, or whether there are other circumstances Government should consider. The Interim Roadmap suggests that hydrogen has the most potential to play a role in decarbonising New Zealand's hard-to-abate applications such as chemicals, fertiliser and parts of heavy transport (including aviation and marine), and that an industry in New Zealand could generate substantial economic activity. There is also significant international interest in New Zealand's potential for providing hydrogen to export markets.

The *Interim Hydrogen Roadmap* also summarises the Government's current hydrogen initiatives, and commits to new actions, including a public-private hydrogen body and a regulatory work programme. This is in addition to funding in Budget 2023 to provide a consumption rebate for hydrogen use and a clean truck discount which will apply to hydrogen vehicles.

The key questions this document asks are:

- do you agree that hydrogen has the most potential for New Zealand in decarbonising hard-to-abate applications such as chemicals, fertiliser and heavy transport (including aviation and marine)?
- since significant renewable electricity will be needed to develop large scale hydrogen production, do you agree that government should focus any support on hydrogen for domestic use rather than for export, in the first instance?

The roadmap has close links with *Measures for transition to an expanded and highly renewable electricity system* and *Developing a Regulatory Framework for Offshore Renewable Energy* papers.

Next steps

Submissions on this consultation will be analysed and taken into account in a final Hydrogen Roadmap. A key consideration for the final Hydrogen Roadmap will be better understanding how hydrogen production interacts with the broader energy system. The final Hydrogen Roadmap is due to be published by the end of 2024, alongside the Energy Strategy.

DEVELOPING A REGULATORY FRAMEWORK FOR OFFSHORE RENEWABLE ENERGY

Many other countries are rapidly enabling offshore renewables to ensure that they can play a key role in the energy transition. If New Zealand wants the option of using offshore renewable energy to meet growing electricity demand or to enable the production of new green forms of energy like hydrogen, we will need regulatory settings for offshore renewable energy generation that encourage investment while allowing the government to select appropriate developers and projects. This includes creating opportunities for meaningful iwi participation in the operation of the offshore renewable energy regulatory regime and within the industry. Offshore renewable energy developers have shown particular interest in the Taranaki, Waikato, and Southland regions.

Developing a Regulatory Framework for Offshore Renewable Energy consults on proposals for regulating the construction, operation, and decommissioning stages of development.

This discussion document complements *Enabling Investment in Offshore Renewable Energy*, which consulted on proposals for regulating offshore renewable energy feasibility activities in December 2022.

The key question this document asks is:

- what should the commercial permitting process look like: structure, criteria, nature of permit?
- how should this interface with environmental consents?
- is there a case for revenue support and opportunities for government to gather revenue?
- who should build and own offshore transmission infrastructure?
- how do we ensure developers have the funds and financial capability to decommission properly when the time comes?

This discussion document is closely linked with *Measures for transition to an expanded and highly renewable electricity system* and the *Interim Hydrogen Roadmap*. The *Interim Roadmap* considers that hydrogen production of any scale in New Zealand will need to be enabled by large amounts of new renewable generation - it cannot be sourced from our existing capacity. Offshore renewables developments may provide the scale of generation required to underpin a New Zealand hydrogen industry, and developers are already considering this. Separately, *Measures for transition to an expanded and highly renewable electricity system* considers the need for additional financial incentives to encourage renewables to be brought online. Offshore renewables developers have argued these incentives will especially be required for the industry to develop here.

Next steps

The Government aims to finalise proposals for the complete offshore renewable energy regime later this year.

Te Kāwanatanga o Aotearoa
New Zealand Government

BRM 9927

AGENDA AUTHORISATION

Agenda for the Policy and Planning Committee meeting held on Tuesday 10 October 2023

Confirmed:

3 Oct, 2023 4:12:52 PM GMT+13

A D McLay

Director Resource Management

Approved:

3 Oct, 2023 4:09:00 PM GMT+13

S J Ruru

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