In Confidence

Office of the Minister for Climate Change Cabinet Economic Development Committee

National Adaptation Plan: Scope and Approach

Proposal

- This paper seeks agreement to the scope and approach for delivering the National Adaptation Plan, including lead agencies for developing and implementing action plans.
- I seek your in-principle agreement to the strategic direction out ned in this paper to guide the next phases of the work and support the deli ery of the National Adaptation Plan by August 2022.

Relation to government priorities

- Enabling a just transition to a climate resilient New Zealand is a Government priority. Cabinet Business Committee (with Power to Act) has also "noted the intention to put the climate at the centre of government dec sion-making" [CAB-20-MIN-0503 refers].
- This paper is relevant to the arms of oopera ion in the Labour-Greens Cooperation Agreement, including "achieving the purpose and goals of the Zero Carbon Act"; "protecting our environment and bio iversity"; and "improving child wellbeing and marginalised communities

Executive Summary

- The climate is cha ging, and it is already affecting our people and communities. We are observing gradual changes such as sea-level rise and an increase in average temperatures, and more frequent extreme weather events such as heatwaves, coas all fooding, heavy rainfall events, and increasing periods of drought.
- Adapt tion is the process of continual adjustment to the actual and expected impacts of limate change, while mitigation is about reducing greenhouse gas emissions to prevent further warming. Every sector, community and part of our environment will continue be impacted by climate change. All will need to adapt and build resilience, while reducing emissions.
- Developing a National Adaptation Plan (the Plan) is required under section 5ZS of the Climate Change Response Act (the Act). The Plan must set out the Government's response to the National Climate Change Risk Assessment (the Risk Assessment). The Plan must respond to the Risk Assessment's most significant risks, but there is considerable discretion on whether and how to address the other priority risks.

- The risks highlighted by the Risk Assessment are broad and wide-ranging. They include risks to potable water, indigenous species, community well-being, financial systems, health, infrastructure, and our institutional arrangements.
- 9 Developing the Plan is one of my key priorities this year, alongside delivering the Emissions Reduction Plan which will set sector-specific policies to reduce emissions.
- I propose to take an all-of-government approach to developing the Plan. To do this, I am seeking your in-principle agreement to the proposed strategic direction (see **Appendix 1**). Your agreement will allow for the refinement of these ideas through engagement and public consultation.
- In accordance with the all-of-government approach, I seek your agreem nt to task specific agencies with leading the development of outcome-focused action plans. These agencies have the right skills, expertise and levers to lead these action plans, with input from relevant contributing agencies.
- The development of the Plan will proceed in parallel with other initiatives on adaptation already underway across government, including the progression of the Climate Adaptation Act as part of reforms to the resource man gement system.
- I propose to report back to Cabinet in late 2021 to p esent the draft Plan and seek agreement to publicly consult in early 2022. The final Plan must be published no later than August 2022.

Background

The Government is committed to achie ing a climate-resilient New Zealand

- On 2 December 2020, the Cabinet Busines Committee (with Power to Act) [CBC-20-MIN-0097 refers], "authorised the Prime Minister and the Minister of Climate Change to declare a climate change emergency in New Zealand." It also "agreed that climate change be regarded as having a level of equivalence to a civil defence emergency in that it demands a sufficiently ambitious, urgent, and coordinated response across government to meet the scale and complexity of the challenge."
- On 16 December 2020, Cabinet Business Committee (with Power to Act) noted that the Minister of Clima. Change will report back "in March 2021 to seek agreement on the scope and approach of the Plan, including lead agencies for developing and implementing action plans" [CBC-20-MIN-0126].

New Zealan must proactively adapt to the impacts of climate change

- Climate change is one of our greatest challenges. We know that a certain amount of climate change is inevitable, due to historic and ongoing emissions. New Zealand's communities, assets, infrastructure and taonga are increasingly exposed to the risks and impacts of natural hazards and climate change. We know these risks will increase as our climate continues to change. We also know that impacts of climate change will be unequally distributed across New Zealand, are likely to exacerbate existing inequities, and are likely to disproportionately impact vulnerable groups, such as iwi/Māori and Pacific peoples.
- On 4 October 2016, New Zealand ratified the Paris Agreement (the Agreement). Under the Agreement, we are required to engage in adaptation planning processes and to implement actions. As a signatory, we are also asked to share our plans for

- adaptation. Although this is not mandatory, we already do this within our national communications under our United Nations Framework Convention on Climate Change reporting.
- In 2019, we expanded the purpose of the Act to include adaptation. The amendments established a framework for ongoing risk assessments, national adaptation plans and the monitoring and reporting on the effectiveness and implementation of the plans.
- In August 2020, we released New Zealand's first Risk Assessment. This was the first time we had a comprehensive view of the priority risks New Zealand faces from climate change. The Risk Assessment identified 43 priority risks across five domains natural environment, human, governance, economy, built environment (efer **Appendix 2**).
- The Plan must set out the approach to managing these risks over time, including the Government's objectives for adapting to the effects of climate change, and its strategies, policies, and proposals for meeting those objectives. The Act also requires the inclusion of timeframes for implementation, and ndic tors to enable the Climate Change Commission to report on the Plan's implementation and effectiveness every two years. The first Plan must be published no later than August 2022 and will continue to be implemented for approximately ix years (2022-2028), or until it is updated.
- 21 The Plan will complement the Emissions Redu on Pl Together these two documents will articulate clear and stable policies to drive the changes needed to achieve a climate-resilient and low-emissions New Zealand.

Analysis

The Plan is currently scoped to respond to all 43 risks from the Risk Assessment

- At a minimum, the Act requires the Plan to respond to the most significant risks identified in the Risk As esseen. The first Risk Assessment identified 10 most significant risks. The remaining 33 risks can be grouped in two broad categories: those with urgent leed for ore action and those that are research priorities (refer Appendix 2).
- I am seeking your in inciple agreement to include all 43 priority risks in scope for the Plan for now, ubject to further refinement in the action planning phase and public consultation. Not all risks will require new or additional actions. Some risks may be addressed by a research strategy or by initiatives already underway.

The pproach to developing the Plan needs to be all-of-government, outcome-focused and prin ipled

- I propose to take an all-of-government, outcome-focused and principled approach to developing the Plan. This approach is consistent with international best-practice examples of national adaptation plans.²
- Taking an all-of-government approach is essential as the levers to address the wideranging risks identified in the Risk Assessment are held across Ministerial portfolios.

² For example, Scotland's "Climate-Ready Scotland: climate change adaptation programme 2019-2024" takes an outcomes-based approach. Ireland takes an all-of-government, principled approach in their "National

Adaptation Framework" (2018) which is accompanied by local and sectoral adaptation action plans.

¹ These requirements are set out in section 5ZS of the Climate Change Response Act 2002.

For this Plan, I consider it essential to focus on developing and coordinating actions at the central government level to ensure we get the legislative, institutional, and financial systems right to enable and unlock further adaptation action across society.

- An outcome-focused approach provides the opportunity to focus on what we are collectively working to achieve for New Zealanders. Along with strong governance arrangements and sufficient resourcing, this approach will promote collaboration and will encourage agencies to work together across departmental boundaries. These arrangements will increase transparency, shared responsibility and accountability for achieving real-world outcomes.
- The process for adapting to climate change will be iterative and ongoing, which is reflected in several of the Plan's guiding principles.

Agreeing in-principle to the strategic direction now will define the Governmen's goals and guide the development of action plans

- The strategic direction will guide the development of the utcome-ocused action plans or chapters within the Plan. It will help coordinate and a ign existing actions and identify gaps where new actions may be needed to chieve the outcomes and objectives.
- The Plan will set out the actions (policies and proposas) that will be delivered across government including by whom and by when, to achieve the objectives. The Plan will also include indicators that the Climate Change ommission will use to measure the effectiveness of actions.
- I am seeking your in-principle greement to the draft strategic direction now. The specific wording of outcomes, objectives and principles may need to be refined after actions are planned to ensure coherence across the document, and to reflect feedback from engagement and public consultation.
- The draft strategic direction for the Plan (vision, principles, outcomes and objectives) is summarised blow and a ached in **Appendix 1**.
- 32 I propose the voon for a climate resilient Aotearoa New Zealand we aim to create is:
 - Our people, places and systems are resilient, thriving and able to adapt to the effects of unavoid ble climate change in a fair, lowest cost and ordered manner.
- I propose 0 principles to shape the development, prioritisation and implementation of actions ontained within the Plan, including:

<u>Proactive action</u>: Anticipate change and take proactive adaptation action.

<u>Think long-term</u>: Take a long-term, intergenerational perspective that spans political, planning and financial cycles to plan for a changing climate.

<u>Maximise co-benefits</u>: Use adaptation action to achieve complementary goals while avoiding maladaptation.

<u>Equity</u>: Prioritise helping the people, places and infrastructure that are most vulnerable to climate impacts, while building adaptive capacity for all.

<u>Partnership</u>: Adapt together, in partnership with iwi, hapū, Māori, and all New Zealanders – ara whakamua.

Adjust as we go: To enable flexibility in decision making, design actions and decisions to be re-visited and adjusted as circumstances change.

<u>Mainstream adaptation</u>: Embed climate resilience as a core consideration in all decision-making processes.

Make well-informed decisions: Use the best available evidence, including science, data, local knowledge, and mātauranga Māori in decision makin.

<u>Nature-based solutions</u>: Consider using biodiversity and ecosystem services to increase resilience.

<u>Place-based approach</u>: Adapt locally - enable local commenities to prepare for the unique climate risks and opportunities they face, while ensuring the right type of intervention is used at the right stage, scale and lo ation.

- These principles build on those recommended by the Clima e Change Adaptation Technical Working Group in 2018 to guide effective adaptation.
- I propose to also include five cross-cutting objective, that set out our system-wide strategies to achieve the vision. These include (with detail in **Appendix 1**):
 - 35.1 Clarify roles and responsibilities for adaptation.
 - 35.2 Ensure legislation and institutions are fit for a changing climate.
 - 35.3 Provide tools and guidance to enable adaptation action.
 - 35.4 Ensure appropriate unding and financing is available to enable adaptation action.
 - 35.5 Enable access to climate data and information.
- To enable action planning to get underway now, I propose to structure the Plan around five outcomes to improve the resilience and sustainability of our natural environment; homes, buildings and places; infrastructure; communities; and econoly and financial system. Each outcome will have multiple supporting objectives that sit underneath it to articulate the strategies used to achieve the outcome. The specific wording of the outcomes and supporting objectives is included in **Appendix 1**.
- Jhirangi³ has had the opportunity to review and comment on the draft strategic direction. It has suggested using a te ao Māori worldview for framing the Plan. I have directed my officials to investigate this option early in the next phase of work and propose to report back to Cabinet on the findings.

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³ The Ihirangi Rōpū, is a group of climate change and engagement experts that are leading the development of a future process for how Māori and the Crown can work together to deliver an effective Māori focused model for hapū, iwi and Māori communities to build climate change resilience and preparedness. Ihirangi is connected to National Iwi Chairs Forum which represents 80 iwi across Aotearoa.

Implementation

An all-of-government approach to developing the Plan means lead agencies will be responsible for coordinating the development of the action plans

- The expertise and levers to address the risks in the Risk Assessment are held across Ministerial portfolios and agencies.
- I propose that a core group of agencies is tasked with leading the development of outcome-focused action plans (Table 1), with continued coordination, quality assurance and oversight from the Ministry for the Environment, and input rom contributing agencies. Although lead agencies will oversee the development of ach action plan, the contributing agencies will also be responsible for developing and then implementing the actions contained within each plan. The cur ent lis of proposed contributing agencies for each action plan is included in **App ndix 3**.
- 40 Lead and contributing agencies have already indicated their commitment to lead and contribute to the development of the Plan. I am seeking your agreement to these arrangements now to ensure this work continues to be resou ced and prioritised over time.
- The Ministry for the Environment will continue to lead the Plan overall. It will lead the development of system-wide actions relating to the cross-c tting objectives, with the involvement of other agencies as necessary.

Table 1: Proposed lead agencies for each action plan

Outcome-focused action I plans	Lead agencies
1: Natural environment	 Ministry for the Environment Minis y fo Prim ry Industries
2: Homes, buildings and places	 Min stry for Business, Innovation and Employment Te Tuāpapa Kura Kāinga - Ministry of Housing and Urban Development
3: Infrastructure	Te Waihanga
4: Communities	Department of Internal AffairsTe Puni Kokiri
5: Economy and financial system	Ministry for Business, Innovation and EmploymentThe Treasury

Ministerial go ern ince and oversight of the Plan

- Governance of the Plan will need to be agreed, and I propose this sit within governance across the wider climate work programme. It is important that adaptation is considered alongside mitigation to ensure co-benefits are maximised, and to avoid maladaptation.
- I intend to return to Cabinet with an oral item to confirm detailed proposals of the role of the Prime Minister's Climate Response Ministerial Group, which is informed by the government's obligations under the Climate Change Response Act 2002 (and includes publishing the National Adaptation Plan).

- Not all Ministers with portfolio responsibilities for the NAP are part of the Climate Response Ministerial Group and that the Group will focus on climate adaptation later in 2021.
- Different governance arrangements may be needed for the implementation of the Plan to enable delivery of a large cross-government programme. I intend to report back to Cabinet with recommendations for these governance arrangements alongside the draft Plan in late 2021.

Timeline for development of the Plan and approach to engagement

- The scope of the Plan is broad, and engagement will need to reflect this. B oad engagement on the Plan is also required to ensure the Act's requirements are met, and that the Plan can be easily and effectively implemented.⁴
- There are four phases for developing the Plan.
 - 47.1 Phase 1: Setting the Strategic Direction developing the draft strategic direction, has been a collaborative effort between agencies across Government with early input from the National Iwi hairs Forum through Ihirangi.
 - 47.2 **Phase 2: Action planning** April to December 2 21. I plan to broaden the scope of engagement in this phase to i clude key stakeholders and communities of interest. Many of the plan's objectives are targeted at the local level and achievement of these will require regional and local councils to be engaged and committed. I am also looking to establish critical friends' group(s)⁵, targeted engagement with experts or key interested parties related to particular objectives or pitential autions. This phase will also include further engagement with iwi/Mā ri
 - 47.3 Phase 3: Public consultation January to March 2022.
 - 47.4 Phase 4: Finalisation of the Pan April to August 2022.
- 48 I propose to see dec sions from Cabinet on the following:
 - 48.1 Lat 2021: ecision to publicly consult on the draft Plan and potential governance options for implementation of the Plan after August 2022.
 - 48. Mi 2022: decision to publish and implement the final Plan.

Many adaptati n actions are already underway across government and will continue in parallel with the development of the Plan

There are a number of initiatives already underway across Government that will help address risks within the Risk Assessment and are relevant to the development of the Plan. These initiatives will continue to be progressed in parallel as they unlock adaptation action in other areas or take time to develop. These include:

⁴ The Climate Change Response Act requires the Minister to undertake public consultation on the draft plan (5ZS(6)) and to take into account a number of important matters in preparing the Plan (5ZS(4)).

⁵ Critical friends group(s) membership has not yet been determined but could include groups such as Local Government New Zealand (LGNZ), Office for Disability Issues (ODI), Environmental Defence Society (EDS), and Insurance Council of New Zealand (ICNZ).

- 49.1 The Government's response to the recommendations of the Resource Management Review Panel, including work underway on a Climate Adaptation Act [CBC-20-MIN00121 refers].
- 49.2 The Community Resilience Work Programme (led by Department of Internal Affairs), which focuses on building community resilience to natural hazards and the effects of climate change. Relevant parts of the work programme will be incorporated into the Plan during the action planning phase.
- The Climate Adaptation Act, and wider resource management reform, responds to one of the most significant governance risks identified by the Risk Assessment that climate change impacts across all domains will be exacerbated because current institutional arrangements are not fit for climate change adaptation. This action is needed now as New Zealand's communities, assets, infrastructure and a nga are increasingly exposed to the risks and impacts of natural hazards and climate change. Development has occurred in areas where there are high levels of risk to life and/or property and there is also increasing pressure for new development in at-risk areas.
- The Strategic Planning Act will provide for require lo ger-term int grated planning while the Climate Adaptation Act will focus on processes for managed retreat. Its provisions will be incorporated into the Plan under the cross-cutting objectives for finance and institutional arrangements. The Plan will bring these legislative reforms and other discrete projects across Government together under a common strategic direction, to ensure all adaptation action is aligned of working towards common goals.
- There is a need to also progress additional work in parallel with the development of the Plan, including developing a web based portal for enabling access to data and information to inform decision-making a loss society. The lack of access to information and evidence is currently major barrier to climate-resilient decisions.
- The Ministry for the Environment is exploring how this information need can be met. Funding to establish and maintain such a portal will be sought in Budget 2022 as part of an integrated package of adaptation implementation policies to deliver on the Plan. This will need to consider how to align with the broader Community Resilience work and the Government's sponse to the Parliamentary Commissioner for the Environment's Report Focusing Aotearoa New Zealand's environmental reporting system.

Financial Impli ation

There are no financial implications arising from this paper. Contributions from agencies to the development of the Plan are expected to be met from baseline fund ng arrangements. However, the final Plan is likely to need to signal new areas of wo k. The financial implications of specific policies and proposals will be considered as these are developed and progressed through Budget 2022.

Legislative Implications

While this paper has no legislative implications, the final proposals in the Plan may have legislative implications.

Te Tiriti o Waitangi Implications

- I acknowledge the status of iwi and hapū as tangata whenua and that climate change produces disproportionate impacts on Māori communities, businesses and their relationship with the natural environment.
- Upholding Te Tiriti o Waitangi partnership, engaging with iwi, hapū and Māori, and providing greater recognition of te ao Māori, including mātauranga Māori, in our climate change policies is critical.
- Early Iwi/Māori engagement on the draft strategic direction has occurred through engaging Ihirangi. Feedback from both Ihirangi and Te Puni Kōkiri is that the analysi of how risks will impact or be of interest to Māori as identified through the Risk Assessment should be an area for particular focus as this work progresses. Ihir ngi also highlights the importance of a spatial and a 'community up' approach to managing risks from climate change. Actions to address the governance risks were identified as important by Ihirangi and their extensive iwi/hapū and mana wh nua network.
- Ihirangi broadly support the strategic direction and the 'top down' a proach the Plan takes. They have also set out the prospect to explore a indigenous worldview as the lead worldview articulated in the Plan. This could mean framing the lan in a different way than is set out in the strategic direction. As I am seeking in-principle decisions, I propose to explore this further with Ihirangi through he next phase of work and engage with iwi, hapū and Māori more broadly.

Impact Analysis

Regulatory Impact Statement

There are no regulatory proposals in this paper and therefore Cabinet's impact analysis requirements do not apple Impact analysis will still be undertaken on any subsequent proposals to address the National Climate Change Risk Assessment risks that include options o create amend, or repeal primary or secondary legislation.

Climate Implications | Poli y Assessment

This paper does not contain proposals which trigger a need for a Climate Implications of Policy Assessment.

Population Impli ations

- 62 Cli ate change will impact different parts of New Zealand differently.
- The Risk Assessment highlights that climate change is likely to exacerbate existing inequities and create new and additional inequities due to differential distribution of impacts.
- The groups shown in the Table 2 below have a particular sensitivity to the impacts associated with climate change.

Table 2: Summary of how different groups may be disproportionately impacted by climate change

Population	How the impacts of climate change may affect this group
Population	How the impacts of climate change may affect this group
group Māori	The socioeconomic disparities between Māori and non-Māori communities
	produce conditions that increase sensitivity to climate change impacts and risks for Māori society.
	Māori communities are more sensitive to climate impacts on ecological systems
	due to dependence on primary industries for livelihoods, and the impacts of climate change on cultural and spiritual wellbeing, as well as on coastal mahinga
	kai, wahi tapu and urupā, and proximity of housing, marae and infrastructur to processes such as erosion and inundation.
Pacific peoples	Pacific peoples tend to have lower rates of homeownership and du ational outcomes, more crowded households, and poorer health outc mes than the general population (Ministry for Pacific Peoples, 2017. Kapasa – the acific Policy Analysis Tool). These factors likely mean that Pacific peoples will be more vulnerable to climate related risks and have less capacy to adapt. Climate change will also impact on Pacific region nations, with whom Pacific peoples in New Zealand have family and community connections.
Ethnic communities and minorities	Ethnic communities are often geographically and econ mically isolated from jobs, services and institutions. Discrimination also lays a major role in increasing the sensitivity of ethnic minorities. Where minor ies are migrants from non-English-speaking countries, language barriers an eatly increase vulnerability to a disaster.
Women	Following disasters, women and children ar often vulnerable. Evidence indicates
	that lower-income women experience and navigate ongoing job and house displacement, increased domestic iolence and reduced access to education and childcare for children after xtreme events. Unequal participation in labour markets and decision-mak g proce ses compound inequalities. Research also shows that incidences of domestic violence increase following extreme events, such as fires.
Children	Disruptions created y a dis ster can have significant psychological and physical impacts on children.
Youth	Extrem events c n have psycho-social and other impacts on young people. Young people them elves have made clear that climate change is of particular importance of them. As seen in responses to other natural disasters, young people aver ften mobilised and been critical to the recovery, including as essential workers, volunteers and carers for more vulnerable members of the ommunity.
Older people	Oder p ople are likely to suffer health problems and experience a slower recory. They tend to be more reluctant to evacuate their homes in a disaster. Extreme events can lead to a loss of social networks with increased risk of social i olation and dislocation which can have health impacts. Older people are more likely to experience financial issues and if they are no longer earning, will be less likely to recover from financial shocks.
Disa led	Disabled people are represented across all other population groups. All the
people	indicators and impacts applying to other population groups are pertinent. For disabled people, there are other implications which make resettlement due to climate change consequences more difficult. These include (but are not limited to) the suitability of new community locations, supply of accessible housing and higher costs of relocation than might apply to non-disabled people.
Low-income	Low-income groups, who tend to be renting or living in public housing, may have less autonomy to choose where they live and less ability to move elsewhere or
groups	invest in adaptive measures.
Rural communities	Rural communities are particularly vulnerable to climate impacts due to a high reliance on primary sector or single industry employment.

Due to the impacts on the groups in Table 2 above, equity and distributional impacts will need to be considered during the development of the Plan.

Human Rights

The proposals in this paper do not have any immediate human rights implications.

Consultation

- The agencies who have collaborated in the development of the strategic direction f the Plan include: Department of Internal Affairs, Department of Conservation Earthquake Commission, Financial Markets Authority, Heritage New Zea and Pouhere Taonga, Te Tūapapa Kura Kāinga Ministry of Housing and Urban Development, Kāinga Ora Homes and Communities, Land Information New Zealand, Ministry of Business, Innovation and Employment, Ministry or Culture and Heritage, Ministry of Education, Ministry of Health, Ministry of Transport, Ministry for Primary Industries, Ministry for Pacific Peoples, Ministry of Social Development, National Emergency Management Agency, New Zealand Defence Force, New Zealand Transport Agency, The Office for Disability Is ues OD), Office for Seniors (OFS), Te Waihanga- Infrastructure Commission, Te Pun Kōk ri Treasury, Tourism New Zealand, Reserve Bank of New Zealand.
- The following agencies have been consulted on this p per: Department of Internal 68 Affairs, Department of Conservation, Earthquak Commission, Financial Markets Authority, Heritage New Zealand Pouhere Taond Te Tūapapa Kura Kāinga -Ministry of Housing and Urban Development, Kaing Ora - Homes and Communities. Land Information New Zealand, Ministry o Business, Innovation and Employment, Ministry for Culture and Heritage, Ministry of Education, Ministry of Health, Ministry of Transport, Ministry for Primary Industries, Ministry for Pacific Peoples, Ministry of Social Development, National Emergency Management Agency, New Zealand Defence Force New Zealand Transport Agency, The Office for Disability Issues (ODI), Office for Seniors (OFS), Te Waihanga - Infrastructure Commission, Te Puni Kōki i, the Treasury, Tourism New Zealand, Reserve Bank of New Zealand, Department of the Prime Minister and Cabinet, Fire and Emergency New Zealand Inland Reven e, Ministry of Justice, Ministry of Foreign Affairs and Trade, Ministry f Defence, Office of the Auditor-General, Public Service Commission, Stats NZ Te Arawhiti, Ministry for Women.

Communications

This paper does not include any new policy proposals and does not require gover ment advertising or publicity at this stage.

Proactive Release

I propose to proactively release this paper, subject to redactions as appropriate under the Official Information Act 1982.

Recommendations

The Minister for Climate Change recommends that the Committee:

Note that on 16 December 2020, Cabinet Business Committee (with Power to Act) noted that the Minister of Climate Change will report back in March 2021 to seek agreement on the scope and approach of the National Adaptation Plan, including

- lead agencies for developing and implementing action plans [CAB-20-MIN-0536] and this paper constitutes that report back;
- Note that adaptation planning, and the implementation of adaptation actions is a requirement of New Zealand, as a Party to the Paris Agreement, under its Article 7;
- Note the Government has a statutory obligation under the Climate Change Response Act 2002 to publish the National Adaptation Plan by August 2022;

Scope of the National Adaptation Plan

- 4 **Note** that the National Climate Change Risk Assessment, published in August 2020, defines 43 risks, 10 of which are classified as most significant and that there is a statutory obligation for the National Adaptation Plan to respond to (at least the most significant risks;
- Agree in-principle to the 43 risks from the National Climate Change Risk Assessment being in scope for the development of the National Adaptation Pla, subject to further refinement in the action planning phase and after public consultation
- Agree in-principle with the strategic direction of the National Adaptation Plan attached in Appendix 1, subject to further refinement as a result of engagement and consultation;

Approach to developing the National Adaptation Plan

- Note that the expertise and levers to address the risks in the Risk Assessment are held across Ministerial portfolios and gences;
- Agree that lead agencies will lead the development of outcomes-focused action plans, as outlined in paragra in 41 (Table 1);
- 9 **Note** that the developmen and implementation of action plans will require the involvement of many agencies, as outlined in Appendix 3;
- Invite the Minis er of Climate Change to report back to Cabinet for approval of the draft National Ada tation Plan prior to public consultation;
- Note I intend to re urn to Cabinet with an oral item to confirm detailed proposals of the role of the Prime Minister's Climate Response Ministerial Group, which is info med by the government's obligations under the Climate Change Response Act 2002 (and includes publishing the National Adaptation Plan):
- Note that agreeing in-principle to the strategic direction now also provides the opportunity to explore an indigenous worldview as the lead worldview for developing the Plan:
- Note that some of the actions that will be included within the National Adaptation Plan will be funded through existing appropriations, however others may require additional funding to implement;
- Agree to proactively release this paper, subject to redactions as appropriate under the Official Information Act 1982.

Authorised for lodgement

Hon James Shaw

Minister for Climate Change

Appendices

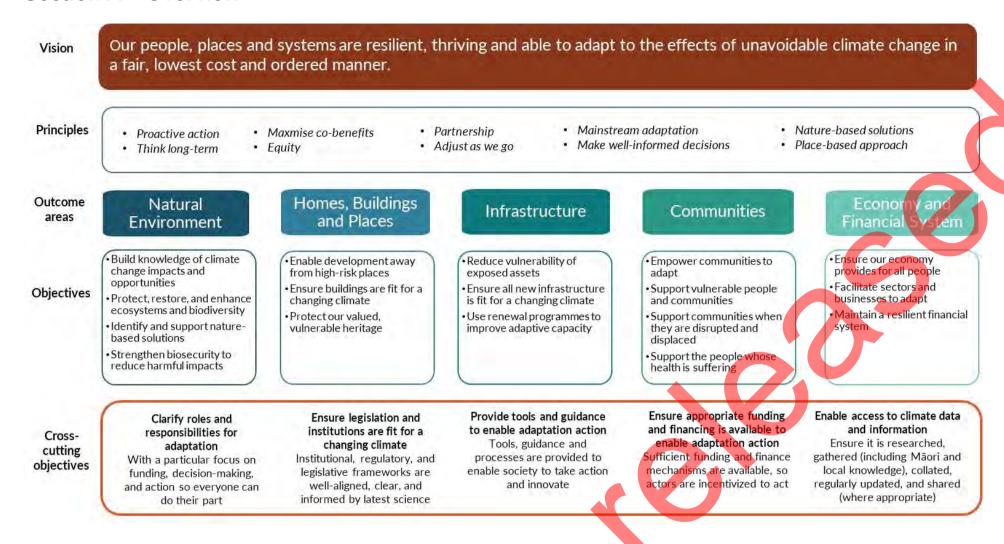
Appendix 1 – Strategic direction for the National Adaptation Plan

Appendix 2 – Summary of risks identified in the National Climate Change Risk Assessment

Appendix 3 – Proposed contributing agencies for each action plan

Appendix 1 – Strategic Direction for the National Adaptation Plan

Section A - Overview



Section B - Cross-cutting objectives

- 1. Clarify roles and responsibilities for adaptation: Carify roles and responsibilities for climate change adaptation, with a particular focus on responsibilities for funding, decision-making and action, so that everyone can do their part.
- 2. Ensure legislation and institutions are fit-for-a-changing-climate: Ensure institutional, regulatory, and legislative frameworks are fit-for-purpose, clear, forward looking, informed by the latest science and well-aligned to promote adaptation in ordar to improve climate resilience.
- 3. Provide tools and guida ce to enable adaptation action: Provide tools, guidance, and processes so that all actors across society can take action and innovate to improve their resilience to climate change.
- **4. Ensure appropriate funding and financing is available to enable adaptation action:** Ensure sufficient funding and fi ancing m chanisms are available, so that actors across society are incentivised to act.
- 5. Enable access to climate data and information: Ensure that data and information about climate change impacts and adaptation, including Māori and local knowledge, is researched, collated, regularly updated, and shared (where ppropriate). Data and information should be publicly accessible and easy for all to understand and analyse, so that everyone can make well-informed decisions.

Section C - Outcomes and Supporting Objectives

OUTCOME 1 – NATURAL ENVIRONMENT

Our diverse ecosystems are resilient to a changing climate and thriving, and the benefits they provide are valued and enhanced.

1.1 BUILD KNOWLEDGE OF CLIMATE CHANGE IMPACTS AND OPPORTUNITIES:

Coordinate and invest in research to improve our understanding of the current and future impacts of climate change on ecosystems, the services they provide, and biosecurity, and to develop informed and effective adaptation measures.

1.2 PROTECT, RESTORE, AND ENHANCE ECOSYSTEMS AND BIODIVERSITY:

Improve the resilience of indigenous biodiversity, ecosystems, and dynamic and natural landscapes in both marine and terrestrial environments. This includes reducing the build-up of other ecosystem stressors and the current and future impacts of climate change.

1.3 IDENTIFY AND SUPPORT NATURE-BASED SOLUTIONS:

Promote the use of natural systems to increase resilience, decrease the vulnerability of people and the environment to climate change, and support the sustainable use of natural resources.

1.4 STRENGTHEN BIOSECURITY TO REDUCE HARMFUL IMPACTS:

Increase the resilience of plants and animals to climate change by controlling invasive pests and diseases. Lower the risk of new pests and diseases that may be able to establish and spread due to climate change.

OUTCOME 2 - BUILDINGS, HOMES AND PLACES

Homes, buildings and places are resilient to a changing climate, so that people and communities can thrive.

2.1 ENABLE DEVELOPMENT AWAY FROM HIGH-RISK PLACES:

We plan for and enable new homes and buildings away from current and projected high-risk locations. Our land supply and infrastructure decision-making is aligned to this goal.

2.2 ENSURE BUILDINGS ARE FIT FOR A CHANGING CLIMATE:

Homes, buildings and places are designed or adapted for a changing climate. Whenever we rebuild, we take the opportunity to design for the future.

2.3 PROTECT OUR VALUED, VULNERABLE HERITAGE:

Cultural heritage places and items are identified and recorded and risks to valued sites are appropriately managed, in consultation with the community.

OUTCOME 3 - INFRASTRUCTURE

Our infrastructure is resilient to a changing climate, so that it protects or enhances the wellbeing of New Zealanders.

3.1 REDUCE VULNERABILITY OF EXPOSED ASSETS:

Understand where infrastructure assets, and the services they provide, are exposed and vulnerable to the impacts of climate change. Prioritise managing risks to assets so that service provision continues.

3.2 ENSURE ALL NEW INFRASTRUCTURE IS FIT FOR A CHANGING CLIMATE:

We consider long-term climate impacts when we make infrastructure design and investment decisions so that the right infrastructure is provided in the right places. Future adaptation options are understood and financed as part of the business case to create adaptive capacity.

3.3 USE RENEWAL PROGRAMMES TO IMPROVE ADAPTIVE CAPACITY:

When we maintain, upgrade, repair or replace existing infrastructure, we consider projections of future climate, and use the asset management cycle to review current resilience, improve adaptive capacity, and plan for how services will be provided into the future.

OUTCOME 4 - COMMUNITIES

Communities have a high level of adaptive capacity and are resilient to a changing climate.

4.1 EMPOWER COMMUNITIES TO ADAPT:

Work in partnership with local government, communities, and iwi/Māori to understand the risks they face and protect the tangible and intangible things they value. Build and disseminate knowledge in a culturally appropriate way to support community engagement and participation in decision-making. Work collaboratively to develop appropriate adaptive responses, including for infrastructure adaptation and managed retreat.

4.2 SUPPORT VULNERABLE PEOPLE AND COMMUNITIES:

Maintain a nationally consistent view of who is and will be most vulnerable to the climate change impacts. Understand where our most vulnerable people are, including what they need and what they value. Target the most vulnerable communities to adapt in a way that is fair, equitable and inclusive, with access to adequate support, knowledge and resourcing.

4.3 SUPPORT COMMUNITIES WHEN THEY ARE DISRUPTED & DISPLACED:

Government supports communities facing climate-related disruption and disasters, so that they can improve their wellbeing and social cohesion through response and recovery.

4.4 SUPPORT THE PEOPLE WHOSE HEALTH IS SUFFERING:

Our healthcare system is ready and responsive to changing demands as a result of climate change to support the physical and mental health of our people.

OUTCOME 5 - ECONOMY AND FINANCIAL SYSTEM

New Zealand's economy and financial system is responsive, adaptable and resilient to a changing climate

5.1 ENSURE OUR ECONOMY PROVIDES FOR ALL PEOPLE:

Understand the economic distributional impacts of climate change. Ensure economic adaptation responses are viable over the long term and support the transition to a more inclusive sustainable economy.

5.2 FACILITATE SECTORS AND BUSINESSES TO ADAPT:

Support sectors and local economies to proactively identify risks and develop and implement adaptation responses. Support business innovation in developing climate adaptation solutions.

5.3 MAINTAIN A RESILIENT FINANCIAL SYSTEM:

Enable participants within the financial system to identify, disclose and manage climate risks (including risks to asset insurability).

Appendix 2 – Summary of risks identified in the National Climate Change Risk Assessment

Natural	Human	Economy	Built	Governance
N1 Risks to coastal ecosystems, including the intertidal zone, estuaries, dunes, coastal lakes and wetlands, due to ongoing sea level rise and extreme weather events.	H1 Risks to social cohesion and community wellbeing from displacement of individuals, families and communities due to climate change impacts.	E1 Risks to governments from economic costs associated with lost productivity, disaster relief expenditure and unfunded contingent liabilities due to extreme events and ongoing, gradual changes.	B1 Risk to potable water supplies (availability and quality) due to changes in rainfall, temperature, drought, extreme weather events and ongoing sea level rise.	G1 Risk of maladaptation across all domains due to the application of practices, processes and tools that do not account for uncertainty and change over long timeframes.
N2 Risks to indigenous ecosystems and species from the enhanced spread, survival and establishment of invasive species due to climate change.	H2 Risks of exacerbating existing inequities and creating new and additional inequities due to differential distribution of climate change impacts.	E2 Risks to the financial system from instability due to extreme weather events and ongoing, gradual changes.	B2 Risks to buildings due to extreme weather events, drought, increased fire weather and ongoing sea level rise.	G2 Risk of exacerbating impacts across all domains because current institutions, legislation, decision-making frameworks, funding mechanisms are not fit for climate change.
N3 Risks to riverine ecosystems and species from alterations in the volume and variability of water flow, increased water temperatures, and more dynamic morphology (erosion and deposition) due to changes in rainfall and temperature.	H3 Risks to physical health from exposure to storm events, heatwaves, vector-borne and zoonotic diseases, water availability and resource quality and accessibility due to changes in temperature, rainfall and extreme weather events.	E3 Risks to land-based primary sector productivity and output due to changes in mean rainfall and temperature, seasonality, weather extremes and changes in the distribution of invasive species.	B3 Risks to landfills and contaminated sites due to extreme weather events and ongoing sea level rise.	G3 Risks to governments and businesses from climate change related litigation, due to inadequate or mistimed climate change adaptation.
N4 Risks to wetland ecosystems and species, particularly in eastern and northern parts of New Zealand, from reduced moisture status due to reduced rainfall.	H4 Risks of conflict, disruption and loss of trust in government from changing patterns in the value of assets and competition for access to scarce resources primarily due to extreme weather events and ongoing sea level rise.	E4 Risks to tourism from changes to landscapes and ecosystems and impacts on lifeline infrastructure, due to extreme weather events and ongoing, gradual changes.	B4 Risk to wastewater and stormwater systems (and levels of service) due to extreme weather events and ongoing sea level rise.	G4 Risk of a breach of Treaty obligations from a failure to engage adequately with and protect current and future generations of Māori from the impacts of climate change.
N5 Risks to migratory and/or coastal and river-bed nesting birds due to reduced ocean productivity, ongoing sea level rise and altered river flows.	H5 Risks to Māori social, cultural, spiritual and economic wellbeing from loss and degradation of lands and waters, as well as cultural assets such as marae, due to ongoing sea level rise, changes in rainfall and drought.	E5 Risks to fisheries from changes in the characteristics, productivity, and spatial distribution of fish stocks due to changes in ocean temperature and acidification.	B5 Risks to ports and associated infrastructure due to extreme weather events and ongoing sea level rise.	G5 Risks of delayed adaptation and maladaptation due to knowledge gaps resulting from under-investment in climate adaptation research and capacity building.
N6 Risks to lake ecosystems due to changes in temperature, lake water residence time, and thermal stratification and mixing.	H6 Risks to Māori social, cultural, spiritual and economic wellbeing from loss of species and biodiversity due to greater climate variability and ongoing sea level rise.	E6 Risks to the insurability of assets due to ongoing sea level rise and extreme weather events.	B6 Risks to linear transport networks due to changes in temperature, extreme weather events and ongoing sea level rise.	G6 Risks to the ability of the emergency management system to respond to an increasing frequency and scale of compounding and cascading climate change impacts in New Zealand and the Pacific region.
N7 Risks to terrestrial, freshwater and marine ecosystems due to increased extreme weather events, drought, and fire weather.	H7 Risks to mental health, identity, autonomy and sense of belonging and wellbeing from trauma due to ongoing sea level rise, extreme weather events and drought.	E7 Risks to businesses and public organisations from supply chain and distribution network disruptions due to extreme weather events and ongoing, gradual changes.	B7 Risk to airports due to changes in temperature, wind, extreme weather events and ongoing sea level rise.	G7 Risk that effective climate change adaptation policy will not be implemented and sustained due to a failure to secure sufficient parliamentary agreement.
N8 Risks to oceanic ecosystem productivity and functioning due to changes in sea surface temperature, ocean mixing, nutrient availability, chemical composition and vertical particle flux.	H8 Risks to Maori and European cultural heritage sites due to ongoing sea level rise, extreme weather events and increasing fire weather.		B8 Risks to electricity infrastructure due to changes in temperature, rainfall, snow, extreme weather events, wind and increased fire weather.	G8 Risk to the ability of democratic institutions to follow due democratic decision-making processes under pressure from an increasing frequency and scale of compounding and cascading climate change impacts.

N10 Risks to carbonate-based, hard-shelled species from ocean acidification due to increased atmospheric concentrations of

N11 Risks to the long-term composition and stability of indigenous forest ecosystems due to changes in temperature, rainfall, wind and drought.

N12 Risks to the diverse range of threatened and endangered species that are dependent on New Zealand's offshore islands for their continued survival.

Key:



The risk has disproportionate impacts on Māori



The risk is of particular significance to Māori

10 most significant risks

Risks that require more research

26 risks where more action is needed

Appendix 3 - Proposed contributing agencies to each action plan¹

Outcome- focused	Lead agencies	Contributing agencies
action plans		
1: Natural	 Ministry for the 	Department of Conservation
environment	Environment	Earthquake Commission
	 Ministry for 	Heritage New Zealand Pouhere Taonga
	Primary	Ministry for Culture and Heritage
	Industries	Ministry for Pacific Peoples
		Ministry of Transport
		New Zealand Transport Agency
		Te Puni Kokiri
2: Homes,	Ministry for	Department of Conservation
buildings and	Business,	Department of Conservation Department of Internal Affairs
places	Innovation and	Earthquake Commission
piacoo	Employment	
	Ministry of	
	Housing and	Kāinga Ora Ministry for Cultura and Haritaga
	Urban	Ministry for Culture and Heritage
	Development	Ministry for Pacific Peoples
	22101041110111	Ministry for Primary Industries
		Ministry for the Environmen
		Ministry of Education
		Ministry of Health
		Ministry of Transport
		New Zealand Transpo t Agency
		Te Puni Kokiri
		Te Waihanga
		The Treasury
3:	 Te Waihanga 	Department of Conser ation
Infrastructure	-	Department of Internal Affairs
		Earthquake Commission
		Kāinga ra
		M istry for B siness, Innovation and Employment
		Minis ry for Pa fic Peoples
		Ministry for Primary Industries
		Mi_stry for the Environment
		M nistry of Education
		Ministry of Leatening Ministry of Health
		Ministry of Housing and Urban Development Ministry of Transport
		Ministry of Transport
		New Zealand Defence Force
		New Zealand Transport Agency
		Te Puni Kokiri
		The Treasury
4:	De artment of	Earthquake Commission
Commun ties	Internal Affairs	Heritage New Zealand Pouhere Taonga
	Te Puni Kokiri	Kāinga Ora
		Land Information New Zealand
		Ministry for Business, Innovation and Employment
		Ministry for Culture and Heritage
		Ministry for Pacific Peoples
		Ministry for Primary Industries
		Ministry of Health
		Ministry of Health Ministry of Housing and Urban Development
▼		
		Ministry of Social Development Ministry of Transport
		Ministry of Transport
		National Emergency Management Agency
		New Zealand Defence Force

¹ This list reflects agencies that that signalled their interest to be involved. Additional agencies can join the project at any time. We will invite the Ministry for Ethnic Communities to participate when it is established in July 2021.

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		•	NZ Climate Health Council
	5: Economy • M	inistry for •	The Treasury Department of Internal Affairs
	and financial B	usiness, •	Earthquake Commission
		novation and • mployment •	Financial Markets Authority New Zealand Ministry for Pacific Peoples
		he Treasury •	Ministry for Primary Industries
		•	Ministry for the Environment Ministry of Housing and Urban Development
		•	Reserve Bank of New Zealand
		•	Te Puni Kokiri Tourism New Zealand
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