Stronger emissions pricing

Key messages for delivering this priority area

- The NZ ETS is a key tool as a pricing mechanism to assist New Zealand in meeting its domestic and international climate change goals and targets, ensuring settings are aligned to these targets. There is a role for price in each sector, officials will work with Ministers to understand the desired outcomes, and where there may be tensions between commitments, which are a priority.
- Officials do not expect the current settings to deliver a gradually increasing price. s 9(2)(f)(iv)
- Work is underway examining market governance for the NZ ETS, aiming to strengthen its integrity and efficiency by adding transparency and regulatory oversight. There are options to include analysis of potential enhancements to the NZ ETS market infrastructure, or of further options to increase market monitoring and regulation in a proportionate way.
- There may be opportunities to enhance domestic carbon dioxide removals to count towards our climate targets.

What are the key cross-portfolio issues and risks to manage?

- Changes to NZ ETS settings will have impacts across all sectors that want to access units for emissions, and has interlinkages with biodiversity, climate change resilience and other economic goals.
- The government has some options to manage supply via the annual NZ ETS auction setting decisions and CCRA mechanism to review industrial allocation phase out rates. s 9(2)(f)(iv)
- The NZ ETS has known distributional impacts, managing the impact of a rising emissions price will allow the NZ ETS to continue to operate as intended. There are mechanisms available to address the impacts on low-income households and this links to strategy for an equitable climate transition.

Adapting to climate change impacts

- A stronger reliance on forestry, and increased land changes leads to the risk of future carbon release from natural hazards.

Lowering energy emissions

Key messages for delivering this priority area

- The energy system has no choice but to transform to meet the 2050 target.
- **Increased renewable generation is essential to meeting our targets.** Electrifying what we can is the main game to reduce energy emissions, while responding to challenges of a much more intermittent electricity system. Natural gas is likely to play an ongoing and increasingly critical role for firming / peaking electricity supply, and for some industrial processes.
- Complementary policies to **support demand side uptake** of low emissions technology will be needed along with the measures to support the supply. Other sources like hydrogen will play a role where electrification is not possible.
- Ensuring there are **enabling regulatory frameworks** will be critical for generation and grid development (e.g. planning and consenting, energy efficiency, investment rules)
- Building stable workforce, skills and supply chains will be necessary to deliver the transition
- Emissions pricing will play an important role in reducing energy emissions. The NZ ETS needs to deliver stable prices to unlock greater electrification. **Other policies are needed to support pricing**, which cannot address all the barriers firms and individuals face to reducing emissions.
- The **desired pace of emission reduction** will determine level of/approach to investment, R&D, further regulation or market measures, role of removals.

What are the key cross-portfolio issues and risks to manage?

- Energy system actions are highly connected with actions both within the energy system and across systems, for example, policies to support transport decarbonisation have flow on impacts for the pace and scale of new renewable generation required. Meaning we cannot consider energy actions in isolation.
- The transition needs to balance affordability, security of supply, the pace and scale of decarbonisation and supporting productivity growth.
- How we manage **equity issues** with the transition: Those with capital will be better placed to take advantage of transitioning and avoid higher costs of fossil fuels. This presents challenges particularly for renters, low income households and firms with limited balance sheet capacity to invest in new equipment.
- Managing competition for resources - potential for bio energy and waste to compete for forestry resources?
- Supporting improved energy efficiency through standards for building and construction is an opportunity and example of a non-price measure to drive greater emissions reductions.

Adapting to climate change impacts

- The energy transition is a key opportunity to **improve the resilience** of the electricity system to the impacts of climate change, for example through distributed energy generation and asset upgrades and replacements that are less exposed to climate hazards, and are aligned with localised adaptation solutions.

Lowering agricultural emissions…

Key messages for delivering this priority area

- Under current measures **agriculture emissions are close to meeting the 2030 target** of 10% reduction in biogenic methane from 2017 levels (such that it is within the margin of uncertainty and rely on forestry assumptions)
- The range of tools and measures proposed to assist farmers to reduce emissions each have the potential to add regulatory burden at the farm level – **consideration of an integrated system for measuring and reporting** or aligning with existing systems could lessen the cumulative impact, e.g. aligning with Freshwater Farm Plans, financial disclosures and Scope 3 reporting requirements. Note: this bullet point is factually incorrect and could be misleading as Ministers have committed to measurement, not reporting.
- The objective to **recognise and reward on-farm sequestration** can be achieved using a number of mechanisms where the compliance for farmers to measure and monitor is relative to the sequestration potential (or relative earning potential), e.g. for forms not already captured in the NZ ETS.
- Timing for the **introduction of emissions pricing** has implications for providing the policy certainty for driving investment behaviour, and so when the associated emissions reduction can be realised. Will need to clarify with Ministers the anticipated design and implementation method to deliver the pricing system.
- To realise **a technology-led approach** requires in the near term, the enabling settings to ensure technologies can be developed, and then accessed and incentivised once commercially available (more likely in the 2030s).
- **Biotechnology solutions** are currently limited, so this is a long-term approach – reductions will likely be realised in EB3 or later and it is hard to anticipate the speed of uptake and true feasibility. Biotech also has broader co-benefits and synergies with other environmental and conservation issues. However, there are some strong historical positions and opposition to the use of gene editing within iwi and Māori, within the farming community, and within society that will need to be navigated.

What are the key cross-portfolio issues and risks to manage?

- The agriculture sector and forestry sector are strongly interconnected – there is a need to better understand this interaction, as with the interaction between forestry and other emitting sectors.
- There are long timeframes anticipated to get emissions reduction from technology and pricing, other emitting sectors will need to continue higher efforts to meet emissions budgets in the near term (e.g. EB1 and EB2, and likely EB3)
- There are other factors external to climate change that will drive changes in the sector, such as freshwater quality and biodiversity policies, market preferences, shifts in financial and insurance sectors.

Adapting to climate change impacts

- Agriculture sector is adapting to climate impacts such as availability of water and suitability of land, concurrently with reducing emissions. The sector will need support to manage these impacts, which includes a clear supporting framework for sharing risks and costs.

… and biogenic methane from waste

Key messages for delivering this priority area

- Waste and agriculture together produce all of New Zealand's biogenic methane emissions (at 9.1% and 90.9% of biogenic methane respectively)
- While waste is a smaller source, there are more options available to reduce biogenic methane emissions in this sector in the short term
- Technological solutions are available and have been used internationally to achieve abatement. In NZ this could include increased investment in waste-to-energy plant, and emerging technologies such as chemical recycling. There is a need to consider individual solutions as no one size fits all, and importantly not to embed further emissions through fossil fuel use in waste treatment.
- The potential emissions from landfilled waste, and the solutions for diverting waste from landfill is different for each waste stream. As is the method of reducing/avoiding waste and associated emissions.

What are the key cross-portfolio issues and risks to manage?

- There are waste-to-energy opportunities to explore, however the type of plant and feedstock composition are very important to avoid an overall increase in emissions.
- There are choices about the mix of interventions that can be effective at driving down these emissions, including price, technology, regulation – equity and fairness are key considerations in understanding the potential effectiveness of different tools, such as on households, business, and between different operators within the waste sector.

Adapting to climate change impacts

- There is a present risk to landfills in coastal areas due to extreme weather events and ongoing sea-level rise, such as the landfill exposed through ex-cyclone Fehi in 2018 north of Westport, and a flooded river at Fox River in 2019. This risk will continue to increase as sea levels rise and extreme weather events become more frequent.
- It will be important to plan and resource the work needed to identify and manage vulnerable landfills and other contaminated sites.

Lowering transport emissions

Key messages for delivering this priority area

- The transport sector plays an important role in decarbonising New Zealand's economy. It accounts for a high percentage of emissions and there are opportunities for large amounts of decarbonization. However, realising these opportunities comes with costs and trade-offs.
- The Ministry of Transport is developing a framework for decarbonising the transport sector, guided by the international standard 'Avoid, Shift, Improve' model. Key next steps include developing potential policy approaches to deliver on Ministerial priorities and assessing policy approaches against a set of agreed criteria.
- Whilst electrification of the light vehicle fleet is a key element of the overall approach to lowering transport emissions, it will not be sufficient to decarbonise the transport sector. It is important to consider other policies which can compliment electrification, particularly in our largest cities, and provide benefits beyond decarbonisation, including tackling congestion and improving economic prosperity.
- There will likely be a need for significant levels of investment in the transport sector. For large scale infrastructure investments early decisions and laying the groundwork will be beneficial, as there are long lead in times for infrastructure development, and subsequent emissions reduction realisation.

What are the key cross-portfolio issues and risks to manage?

- There are strong interdependencies with the built environment and how we plan and design neighborhoods, as well as the energy and waste workstreams.
- Choices made in the Transport portfolio will have implications for policies in other workstreams. There is a need for integrated decision making that considers the impacts on these sectors, as well as co-benefits and sequencing to achieve the best outcome.
- Transport modes should be considered as part of a multi-modal system, and a comprehensive view of approaches is beneficial. Without this system view is a risk of overreliance on individual policies.
- Local Government will be a key stakeholder, as transport choices are integrated with land use planning, urban development, and regional development strategies.
- International trends will influence some of the choices New Zealand can make, for example if electrification is accelerated then the availability of internal combustion engine cars will decrease, limiting options in the future.

Adapting to climate change impacts

- The sector is adapting to climate impacts concurrently with reducing emissions, transport infrastructure investment needs to anticipate both natural and human-made risks, and be prepared to recover from disruptive events, while also providing lifeline infrastructure for communities. Adaptation has been considered as a key part of the criteria to assess policy and investment options MoT have developed, and increased resilience is built into some of these options.

Better planning, housing and infrastructure

Key messages for delivering this priority area

- How we plan for what and where we build strongly influences transport, energy and waste behaviour and the associated emissions – highly integrated and interdependent systems.
- This area has long delivery timeframes, and then long-term emissions lock-in given the expected lifespan of large infrastructure assets and urban form.
- Planning to provide for mixed-use, well-connected areas is key to drive alternatives to car-dependant designs and to better integrate green infrastructure / nature-based solutions to reduce emissions of new infrastructure and development – whether brownfield or greenfield development.
- The new government is supportive to encourage building standards to reduce the environmental impact and emissions. Retro-fitting existing housing and buildings as well as a focus on new builds is important to reducing the operating emissions and improving energy efficiency of New Zealand's building stock.
- Access to funding and financing for infrastructure is a critical constraint on local government and development.
- Population concentration and growth in urban areas can deliver better resource efficiency and use of infrastructure. However, there are challenges with negative perceptions of intensification and density in urban areas. High density buildings have higher embodied emissions due to the type of materials used, but lower operational transport and energy emissions – important when considering the lifecycle emissions of buildings and infrastructure.

What are the key cross-portfolio issues and risks to manage?

- There are strong connections with local government and urban form/planning rules, energy, transport, waste (from construction and demolition) sectors.There is a need for integrated planning decisions making which considers all these factors. There is a risk that housing and the built environment will not necessarily be considered part of the climate change portfolio/agenda.
- Emissions in the built environment are measured in the transport and energy/industry sectors - both households energy use and in manufacturing materials, and construction waste. These are managed under different systems and data on emissions impact of different urban forms can be hard to aggregate.
- Many co-benefits come with lowering emissions. For example, increased productivity with well-connected transport and housing; improved mental and physical health with more active transport options.
- Risks to housing supply if policy measures slow development at time when high demand for housing, and it is likely the most vulnerable communities will be impacted.

Adapting to climate change impacts

- There are opportunities to consider how the built environment adapts to climate change, in particular to provide for development with a low emissions profile to be built in low-risk areas.
- However, if low risk areas are situated away from transport links and employment opportunities this has the potential to increase emissions from development.
- It will be important to present options for the 'best decision' for where to build, rather than as a 'trade-off' decision

Climate Change
CHIEF EXECUTIVES BOARD

Item 3

COVERSHEET: Item 3

To	Climate Change Chief Executives Board				
Meeting date	**5 December 2023**				
Agenda item name	**ERP2 progress update**				
Item lead	Simon Mandal-Johnson				
Lead agency	MfE				
Verbal update	**Yes**☐	**No**☒	**Supporting paper**	**Yes**☒	**No**☐
Reason for Board's consideration	This item provides a progress update on the status of ERP2. It identifies emerging issues and proposes a plan to address these, for the Board's agreement.				
Key focus areas	In particular, it focuses on the state of play and challenges to the coherence, adequacy and deliverability of ERP2. For each of these areas, key issues for the Board's focus are summarised on slide 4. It also suggests the role of the Board during the next phase of work (slide 20).				

Recommendations	• **Provide feedback** on the proposed approach for providing new Ministers with strategic advice on ERP2, and the plan for preparing for 2024

Has the Board previously considered this item, if so, when?	**Yes**☒	**No** ☐	**Date**	30 August 2023
	The Board received an update on the ERP2 programme on 30 August 2023. The Board noted the need to explore emergent opportunities that can be leveraged, and agreed that clear advice should be provided to Ministers on options and tradeoffs, to enable informed decision-making.			
Has this item been considered/endorsed by Climate DCEs?	**Yes**☒	**No** ☐	**Date**	28 November 2023
	DCEs received an oral update on this work at their meeting on 28 November. It was noted that the Climate Change Commission's final advice on ERP2 had not yet been provided to the Minister of Climate Change but that this was imminent. MfE undertook to circulate a summary of the final advice to the Board and climate agencies as soon as possible following the release of the Commission's advice.			

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Paper 3.1

ERP2 Update

5 December 2023 Climate Change Chief Executives Board Meeting

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Summary

Introduction

- The purpose of this slide deck is to update you on our plan for cross-agency work in 2024 to prepare for the publication of the second emissions reduction plan (ERP2).
- In your meeting 21 November, you met with the Climate Change Commission to discuss their final advice on policy direction for ERP2. The Minister of Climate Change received this advice on 28 November. A briefing is being prepared for the Minister of Climate Change and will also be shared with the Board.
- The new Government has signalled a significant and complex policy agenda in climate change. ERP2 is a vehicle to advance many of these priorities. It is critical that the cross-government system can provide strategic, integrated, and high-quality policy advice to support Ministers' decision-making through 2024.
- Our planned approach to working with Ministers to progress the ERP2 work programme in 2024 is driven by the need to meet three broad requirements:
    1. **Coherence –** The policies within ERP2 need to align with the Government's priorities and comprise a coherent, whole-of-economy strategy for emissions reduction.
    2. **Adequacy –** The development and content of ERP2 must be adequate to meet requirements of the Climate Change Response Act 2002 (CCRA).
    3. **Deliverability –** The process and timeline for delivering ERP2 must work for Ministers, agencies, and stakeholders.
- The following slides outline how we are working to deliver on each of these requirements, including the context and state of play, challenges we are facing, and our plan for addressing those challenges.
- In addition, slide 20 suggests the **role of this Board** during the next phase of work. The Board has previously agreed to govern certain aspects of ERP2, including the Strategic Framework and 2050 Pathways. Slide 20 sets out how we plan to work with the Board to deliver these.
- Much of our planned approach is provisional and will need to be tested with new Ministers, particularly the Minister for Climate Change who is responsible for publishing the ERP. We have noted this throughout the pack where appropriate.

Key topics for discussion today

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This table summarises the key challenges outlined in this slide deck and our plan to address them.

Challenge	Explanation	Our proposed way through	For discussion
Coherence *(see slides 9-10)*	• We want to support CEs to seek early direction from the new Government on key cross-system policy questions to ensure a coherent, strategically focused final plan. • Early conversations can help the incoming Government set clear, top-down strategic direction for ERP2 and will help officials to focus efforts.	• We suggest CEs invite Ministers to engage in January/February to clarify the strategic objectives they wish to achieve in ERP2 and to identify potential cross-cutting questions and tensions. • We also propose the chair of the Board recommend that the Prime Minister (or another very senior Minister without direct Climate responsibility) convene a CRMG-style ministers group to hold these conversations.	Do you agree with our proposed approach?
Adequacy *(see slide 13)*	• The consultation timeline is largely driven by the statutory deadline: we plan to consult in May. • Ministers have choices about how much policy detail to include for consultation – the level of detail available may vary across policy areas.	• s 9(2)(g)(i)	Do you agree with this approach?
Adequacy *(see slide 14)*	• s 9(2)(g)(i)		Do you agree with this approach?
Adequacy *(see slides 13-14)*	s 9(2)(f)(iv)		
Deliverability *(see slides 17-18)*	s 9(2)(g)(i)		

Summary of recommendations

We recommend that the Climate Change Chief Executives Board:

1. **Agree** there is a need for early strategic conversations with Ministers on ERP2 ahead of sector-specific policy decisions being made.
2. **Note** our proposed plan to support Ministers through a series of strategic conversations in early 2024 (see slide 10).
3. **Note** that the baseline projections that support advice on the overall sufficiency of ERP2 policies will be updated post-consultation.
4. s 9(2)(f)(iv)
5. **Note** agencies will need to balance work to support delivery of 100 day plan commitments whilst developing policy for ERP2
6. **Confirm** comfort with our plan for managing the risks associated with resource and engagement pressures.
7. **Note** that MfE will prepare an operational plan to sequence this work for 2024 and develop standard processes for policy analysis, to be submitted to the Interagency Climate DCEs group by the end of 2023.
8. **Direct** agencies to contribute to sequenced, integrated policy advice on ERP2 in alignment with the process to be coordinated by MfE.
9. **Agree** to the proposed role of the Board in 1) providing feedback and sign-off on key pieces of cross-government, 2) managing any programme-level risks and issues requiring escalation from the Interagency Climate DCEs group, and 3) mobilising political leadership.
10. **Note** that the Board has previously agreed to govern six areas of the plan: Strategic Framework, 2050 Pathways, Equitable Transition, Implementation, Adaptation & Resilience, and Prioritisation.
11. **Agree** that the chair of the Board will provide advice to the Prime Minister on options for Ministerial governance of ERP2 as outlined on slide 20.

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Detailed update