



## CLIMATE CHANGE CHIEF EXECUTIVES BOARD

### AGENDA

Date		Last meeting	Current meeting	Next meeting
Main items		<b>29 March 2023</b> <ul style="list-style-type: none"> <li>• <b>Board only discussion:</b> Board purpose and operating mode</li> <li>• Preparation for CRMG on 5 April</li> <li>• Transport mode shift</li> <li>• Adaptation governance – Climate Change</li> <li>• <b>AOB/Noting:</b> ETS and HWEN updates; CCIEB corporate 1-pager</li> </ul>	<b>17 April 2023</b> <ul style="list-style-type: none"> <li>• Board only: Chair's opening comments, context, key actions from CRMG</li> <li>• Legal obligations under the CCRA (Crown Law item) [Legally privileged]</li> <li>• Board strategy session debrief and key actions</li> <li>• ERP2 early strategic framing</li> <li>• Equitable Transitions Strategy update (MBIE &amp; MSD)</li> <li>• Nature-based solutions deep dive (DOC)</li> </ul> <b>Noting papers:</b> Carbon Neutral Government Programme update	<b>17 May 2023</b> <ul style="list-style-type: none"> <li>• Approval for second six-monthly monitoring and reporting design – incorporating NAP</li> <li>• ETS Review update</li> <li>• ERP strategies inter-relationships, sequencing and delivery</li> <li>• Māori engagement across Climate policy response</li> </ul>
Date	Time	Location	Attendees	
17 April 2023	1530-1700 hours	Microsoft Teams (Teams link provided in invite)	<b>Attendees:</b> James Palmer (MfE) (Chair), Audrey Sonerson (MOT), Carolyn Tremain (MBIE), Penny Nelson (DOC), Ray Smith (MPI), Aaron Martin (Crown Law), Vicki Plater (TSY delegate) <b>Attendee invited for item 6:</b> Pip Fox (HUD) <b>Apologies:</b> Caralee McLiesh <b>In support of the meeting:</b> Lisa Daniell, Chris Nees, Rachael Church (CCIEB Unit) <b>Agency attendees:</b> Anne Haira, Janine Smith, Hemi Smiler, Simon Mandal-Johnson (MfE), Mel Porter (MBIE), Simon MacPherson (MSD), Ruth Isaac (DOC)	
#	Time	Agenda item	Recommended actions	
1.	5 mins 1530-1535	Karakia timatatanga, Chair's opening comments, key actions from CRMG Lead: Chair		
1.		Karakia timatatanga Chair's opening comments, context sharing from CEs, and key actions from CRMG		
2.	15 mins 1535-1550	Legal obligations under the CCRA (Crown Law item) [Legally Privileged] Lead: Aaron Martin		
2.		This item builds on discussion at Board's strategy session, and advice being provided to Ministers on implications of emissions budgets	2.1 Note the verbal update provided.	

3.	5 mins 1550-1555	Board strategy session debrief and key actions Lead: IEB Unit	
3.	This item provides an opportunity to align on key actions from Board strategy session <i>Paper 3.1: Board strategy session: key take-aways and next steps</i>		<p><b>3.1 Confirm</b> the key take-aways and actions from Board strategy session that the IEB Unit will take forward, including with inter-agency working groups and DCEs as needed.</p> <p><b>3.2 Note</b> that the IEB Unit will as a next step integrate agreed actions into its work plan, (including further detail and specific timing for delivery) for Board endorsement.</p>
4.	20 mins 1555-1615	S9(2)(f)(iv)	

S9(2)(f)(iv)

5.	20 mins 1615-1635	S9(2)(f)(iv)	
S9(2)(f)(iv)			
6.	20 mins 1635-1655	Nature-based solutions Lead: Penny Nelson & Ruth Isaac (DOC)	
6.1	<p>This item provides an overview on opportunities for integration with ETS Review, HWEN, ERP2, monitoring and reporting (biodiversity impact measures), and adaptation priorities</p> <p><i>Paper 6.1: Deep dive on Nature-based solutions</i></p>		<p><b>4.1 Note</b> existing commitments to NbS and active interest from Ministers, including the Prime Minister, in making practical progress</p> <p><b>4.2 Endorse</b> investigation of immediate opportunities to support:</p> <ul style="list-style-type: none"> <li>• Cyclone recovery – building back better with nature</li> <li>• Wetland restoration in flood prone catchments</li> <li>• Native forest restoration on erosion-prone slopes in cyclone-affected areas</li> <li>• Development of a biodiversity credit system</li> </ul> <p><b>4.3 Agree</b> to develop a work programme to integrate nature-based solutions in key areas of climate policy, including:</p> <ul style="list-style-type: none"> <li>• S9(2)(f)(iv)</li> <li>• Green infrastructure – work with MfE, MOT, HUD and others to improve incentives for NbS in urban environments</li> </ul> <p><b>4.4 Discuss</b> whether to include in the work programme these items where there are a range of views:</p> <ul style="list-style-type: none"> <li>• ETS review – DOC to work with MfE and MPI on improving incentives for sequestration through permanent indigenous forests</li> <li>• Governance – of ERP/NAP chapters or actions that address the role of nature</li> </ul> <p><b>4.5 Agree</b> that DOC and MfE will provide advice on the scope, resources and timeframes to deliver both immediate opportunities and medium-long term work programme.</p>
7.	N/A	Noting papers	
7.1	N/A	Noting paper: Carbon Neutral Government Programme update	
7.1	<p>Carbon Neutral Government Programme update – summary of first year of reporting and update on the programme</p> <p><i>Paper 7.1: Carbon Neutral Government Programme – Report Back on Tranche 1 emissions data</i></p>		<p><b>7.1.1 Note</b> the paper provided.</p>

8.	5 mins 1655-1700	Meeting administration Lead: Chair / Lisa Daniell (CCIEB Unit)
8.1	Minutes of previous meeting, 29 March 2023	<b>8.1 Approve</b> the minutes of the previous meeting
8.2	Actions register, as at 17 April 2023	<b>8.2 Note</b> the actions register
8.3	Forward agenda	<b>8.3 Review</b> the indicative forward agenda

## CLIMATE CHANGE CHIEF EXECUTIVES BOARD

<b>Board-agreed mitigation-focused priorities, and forward scheduling</b>				
<b>Priority area</b>	<b>DCE meeting date for review</b>	<b>Board meeting date</b>	<b>Cabinet paper dates</b>	<b>CRMG dates, if applicable</b>
S9(2)(f)(iv)				
<b>ETS Review</b>	30 March	29 March as AOB/noting item	6 papers between March-May	May (relates to ERP discussion)
<b>He Waka Eke Noa</b>	S9(2)(f)(iv)			
<b>Transport mode shift</b>	TBC	29 March as substantive discussion item	7 papers between March-May	June (relates to ERP discussion)
<b>Energy Strategy</b>	10 May	Proposed 29 June (optimum timing to be confirmed with MBIE)	1 paper in May	July (relates to ERP discussion)



## CLIMATE CHANGE CHIEF EXECUTIVES BOARD

### COVERSHEET: Item 2

<b>To</b>	Climate Change Chief Executives Board			
<b>Meeting date</b>	17 April 2023			
<b>Item lead</b>	James Palmer			
<b>Lead agency</b>	IEB			
<b>Agenda item name</b>	Chair's opening comments, key actions from CRMG			
<b>Verbal update</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<b>Supporting paper</b>	No <input checked="" type="checkbox"/>
<b>Reason for Board's consideration</b>	<ul style="list-style-type: none"> <li>• Opening karakia</li> <li>• Chair's opening comments</li> <li>• Context sharing from Chief Executives</li> <li>• Key actions from CRMG meeting on 11 April 2023</li> </ul>			
<b>Recommendations</b>	<p>For CRMG-related actions:</p> <p><u>Item 1</u>: Note commission to IEB Unit and agency Climate DCEs regarding:</p> <ul style="list-style-type: none"> <li>• improving and updating modelled impacts of current policies</li> <li>• confirming CERF initiatives now funded (and any associated modelled impacts)</li> <li>• any additional options for EB1 abatement (biofuels investment, further GIDI)</li> <li>• S9(2)(f)(iv)</li> </ul> <p><u>Item 2</u>: Note upcoming Cabinet paper package on NPS-IB and biodiversity credits, role of indigenous forestry, biodiversity an S9(2)(f)(iv)</p>			



## CLIMATE CHANGE CHIEF EXECUTIVES BOARD

COVERSHEET: Item 2				
To	Climate Change Chief Executives Board			
Meeting date	17 April 2023			
Item lead	Aaron Martin			
Lead agency	Crown Law			
Agenda item name	Legal obligations under the CCRA			
Verbal update	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Supporting paper	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Reason for Board's consideration	This item builds on the discussion at the Board's strategy session on 5 April 2023, and advice being provided to Ministers on implications of emissions budgets.			
Recommendations	<b>Note</b> upcoming legal advice from Crown Law on meeting emissions budgets to be provided to the Board (then Minister of Climate Change and A-G), and ahead of CRMG discussion on ERP1 on 9 May CRMG			
Comments	Draft legal advice will be provided to the Board by 21 April			



## CLIMATE CHANGE CHIEF EXECUTIVES BOARD

COVERSHEET: Item 3				
To	Climate Change Chief Executives Board			
Meeting date	17 April 2023			
Item lead	James Palmer & Lisa Daniell			
Lead agency	IEB Unit			
Agenda item name	Board strategy session debrief and key actions			
Verbal update	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Supporting paper	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Reason for Board's consideration	This item provides an opportunity to align on key actions from the Board strategy session held on 5 April 2023.			
Recommendations	<ul style="list-style-type: none"> <li>Confirm the key take-aways and actions from Board strategy session that the IEB Unit will take forward, including with inter-agency working and governance groups as needed.</li> <li>Note that the IEB Unit will as a next step integrate agreed actions into its work plan, (including further detail and specific timing for delivery) for Board endorsement.</li> </ul>			
Comments	Note links to agenda item 1 on CRMG actions and item 4 on approach to ERP2.			





## CLIMATE CHANGE CHIEF EXECUTIVES BOARD

# Board strategy session: key take-aways and next steps






### Objectives

To confirm key take-aways from the Board's strategy session on 5 April 2023, and next steps.

### Key take-aways: what we heard from the Board

- **Stewardship:** There is strong appetite by the Board to play a central stewardship role to drive consistency and stability in climate policy that is durable S9(2)(g)(i)
- S9(2)(g)(i)
- **System thinking:** The Board recognises the need to do the 'systems thinking' that won't happen elsewhere, or that could not happen in a single agency. This includes forecasting and modelling and understanding the interconnections and interdependencies between actions across sectors - e.g., how energy demand could be impacted by future transport policies, and implications for generation and distribution.
- **Prioritisation advice:** The Board sees this as one of its key roles. This includes identifying the key drivers of change, ensuring resources go there, and advising Ministers on these.
- **Strategic advice:** The Board recognises it needs its own strategic advice including a top-down strategy for climate change and the transition to a climate resilient economy S9(2)(f)(iv)
- S9(2)(f)(iv)
- S9(2)(g)(i)
- 
- S9(2)(f)(iv)

## Next steps

1. S9(2)(f)(iv) 
2. 
3. **Develop linkages with the best experts (including international)** to support, challenge, and strengthen the Board's thinking and advice.
4. **Link with the Climate Change Commission:** The Board recognises the need for an established relationship with the S9(2)(g)(i)   
S9(2)(g)(i) **Action:** Initial engagement (April 2023) being planned by IEB Unit on CCC's next draft advice on ERP2.
5. S9(2)(g)(i) 
6. S9(2)(f)(iv) 
7. **Secretariat/IEB Unit:** The Board needs a highly capable secretariat with strong chief advisor/policy expertise. There is a need for continued role clarity of the IEB Unit (secretariat) and agencies, including expectations of each.
8. **Clarity on legal obligations:** Engagement with Crown Law is needed to ensure the Board is clear on its accountabilities under the ZCA.































































































## CLIMATE CHANGE CHIEF EXECUTIVES BOARD

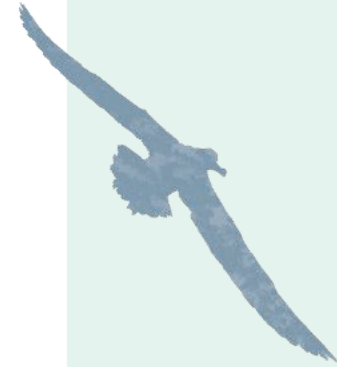
COVERSHEET: Item 6				
To	Climate Change Chief Executives Board			
Meeting date	17 April 2023			
Item Lead	Penny Nelson & Ruth Isaac			
Lead agency	DOC (MfE support)			
Agenda item name	Deep dive: Nature-based solutions			
Verbal update	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Supporting paper	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Reason for Board's consideration	<p>Ministers have expressed interest in making practical progress in existing commitments to nature-based solutions (NbS).</p> <p>The Board agreed (29 September 2022) for DOC and MfE to provide a report-back on NbS, to discuss the scope of this work.</p>			
Key focus areas	<p>The paper provides an overview on immediate opportunities for NbS, medium-long term opportunities for integration with the <b>S9(2)(f)(iv)</b> monitoring and reporting (biodiversity impact measures), and adaptation priorities.</p>			

Recommendations	<ul style="list-style-type: none"> <li>• <b>Endorse</b> investigation of immediate opportunities to support: <ul style="list-style-type: none"> <li>○ Wetland restoration in flood prone catchments</li> <li>○ Native afforestation on erosion-prone slopes in cyclone-affected areas <b>S9(2)(f)(iv)</b></li> <li>○ Development of a biodiversity credit system</li> </ul> </li> <li>• <b>Agree</b> to develop a work programme to integrate NbS in key areas of climate policy, including: <ul style="list-style-type: none"> <li>○ <b>S9(2)(f)(iv)</b></li> <li>○ </li> <li>○ Green infrastructure – working with MfE, MOT, HUD, and others to improve incentives for NbS in urban environments</li> </ul> </li> <li>• <b>Agree</b> to investigate options to improve the governance of the ERP/NAP chapters/work programmes on the role of nature</li> <li>• <b>Agree</b> that DOC [and MfE] will provide advice on the scope, resources, and timeframes to deliver both immediate opportunities and medium-long term work programme.</li> </ul>
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Has the Board previously considered this item, if so, when?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Date	29 September 2022
	The Board requested a report-back on NbS, to discuss the scope of this work.			
Has this item been considered/endorsed by Climate DCEs?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Date	
	A draft version of this paper was circulated to Climate DCEs for comment.			
Will this item be going to CRMG or Cabinet?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Date	
	See note in the Comments section below.			

<b>Relevant Cabinet decisions and dates</b>	<i>See note in the Comments section below.</i>
<b>Comments</b>	Note that there are links between the NbS work programme and the Climate Resilient Landscapes package that Hon Shaw presented at CRMG on 11 April, and the Cabinet paper package anticipated on NPS-IB, Biodiversity credits <span data-bbox="1267 367 1433 412">S9(2)(f)(iv)</span>

# Deep-dive on Nature-based Solutions



Department of  
Conservation  
*Te Papa Atawhai*

New Zealand Government

# Deep-dive objectives

## The purpose of this deep-dive is to:

- Confirm a shared understanding of **Nature-based Solutions (NbS)** and how they can deliver climate and biodiversity (and resilience) benefits.
- Note the PM and Minister of Climate Change are looking for more focus/action on the nexus between **climate change and land use**, and the relevance of natural infrastructure and systems to the Board's top 5 priorities and current debates.
- Summarise the Government's **NbS commitments under the ERP and NAP**; provide an honest assessment of progress and challenges to date, and discuss options for further action.
- Agree on **immediate opportunities** to support delivery of NbS and to what extent this work should be prioritized (given there is lots on for officials and Ministers, and the need to focus).
- Commission further advice on **timeframes and resources** required to deliver this work.

# What are Nature-based solutions?

**Nature-based Solutions use protection and restoration of native ecosystems to deliver effective, long-term climate change adaptation and mitigation**

This can be achieved by:

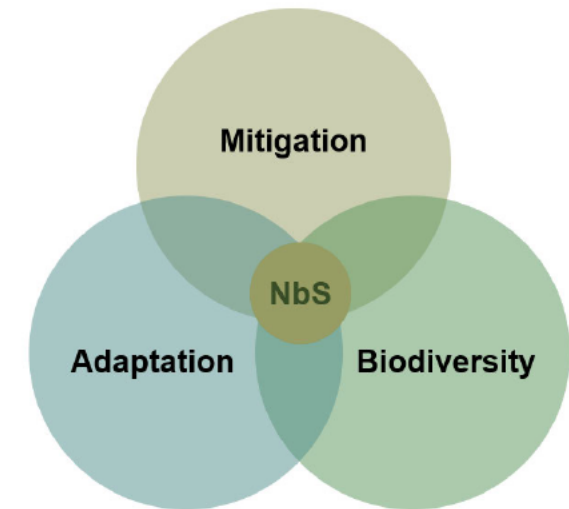
- the protection, restoration or management of natural and semi-natural ecosystems
- the sustainable management of aquatic systems and working lands such as croplands or timberlands
- the creation of green infrastructure and new ecosystems in and around cities, productive land, and other assets .

**Nature-based Solutions deliver multiple benefits, including:**

- sequestration and storage of carbon
- buffering climate impacts, if deployed in the right places
- support for biodiversity
- provision of mental and physical wellbeing benefits
- economic opportunities for local communities

The benefits are **not always equally distributed** across mitigation, adaptation and biodiversity. For example, urban green infrastructure delivers proportionately more adaptation benefits than for sequestration or biodiversity

Nature-based solutions will vary depending on the **problem** they are addressing, and the **context** in which they are used.





# The Government has committed to deliver NbS through several policy actions and objectives

	National adaptation plan	Emissions reduction plan	Aotearoa NZ biodiversity strategy
<b>Objectives</b>	<b>Objective 6.3:</b> Support working with nature to build resilience: Indigenous ecosystems are restored and protected, sites that need buffers against climate risks are identified and communities are supported in understanding nature-based solutions as a choice for adaptation		<b>Objective 13:</b> Biodiversity provides nature-based solutions to climate change and is resilient to its effects.
<b>Actions</b>	<b>Action 8.3 (NAP) and 10.1.5 (ERP)</b> Embed nature-based solutions as part of our response to reducing transport emissions and improving climate adaptation and biodiversity outcomes (MOT)		Nature-based solutions are integrated through council plans, strategies and policies
	<b>Action 5.9 (NAP) and 4.1 (ERP):</b> Prioritise nature-based solutions (DOC/MfE)		MfE has several initiatives underway (NAP, ERP, CNGP, Climate Related Financial Disclosures - CRFD)
	<b>Action 6.3 (NAP) and 4.2 (ERP):</b> Establish an integrated work programme that delivers climate, biodiversity, and wider environmental outcomes (DOC/MfE)		Councils are developing climate change policies, plans and strategies that are integrated into day-to-day operations.
	<b>Action 5.16</b> Identify options to increase the integration of nature-based solutions into urban form (HUD)	<b>Action 4.3</b> Report on biodiversity as part of emissions reduction plan reporting	Implement DoC's climate change adaptation action plan.
	<b>Action 6.1:</b> Implement the Department of Conservation Climate Change Adaptation Action Plan (DOC)	<b>Action 4.4</b> Encourage global efforts to use nature-based solutions (MFAT)	
	<b>Action 6.3</b> Implement Te Mana o te Taiao – ANZBS 2020 (DOC)	<b>Action 4.5</b> Build an evidence base on blue carbon in Aotearoa (DOC/MfE)	

## Progress to date deliver on the ERP and NAP actions

- Under actions 6.3 (NAP) and 4.2 (ERP)-  
S9(2)(f)(iv)
- To deliver on actions 5.9 (NAP) and 4.1 (ERP)-
  - Work has started on a biodiversity credits market and a joint work programme is being established to deliver it.
  - The ETS review's scope includes considering the extent to which the ETS should support co-benefits (e.g. improving indigenous biodiversity).
  - The terms of reference for the ETS review include how the scheme can further support indigenous biodiversity.
  - The Voluntary Carbon Market workstream is considering how investment into nature-based solutions can be supported.
- Action 4.3: guidance being prepared by DOC to support agencies on biodiversity impacts reporting for next 6 month reporting on ERP.
- Action 4.4 and 6.3: Global Biodiversity Framework through Kunming-Montreal Agreement (Dec 22) includes NbS actions and will impact NZ targets/actions for nature.
- S9(2)(f)(iv)

# Cyclone Gabrielle has changed the context for the urgency and need to progress NbS

Sensitivity Classification

- There is increasing interest in using NbS in our climate response – both from communities and ministers.
- We have made limited progress getting the settings right to deliver NbS
- The full human, economic and environmental implications of Cyclone Gabrielle will have a long tail. The costs of climate change impacts will grow over time, as similar events become more frequent and powerful.
- We have seen that **significant land use modification** and interventions that do not account for natural processes may have exacerbated the impacts of recent events
- Cyclone response and recovery work, including rebuilding key infrastructure, is underway. There is a real risk that if we do not carefully assess how to incorporate climate and biodiversity resilience into the rebuild and longer-term planning, that we put ourselves in a position of being in **perpetual crisis management**.
- We are also facing a biodiversity crisis. We are losing species and ecosystems faster than ever before. **Natural ecosystems underpin our food and water systems, our primary industries, and our culture**. If we lose them, our very existence is in peril.
- The case for NbS is not always clear. Appropriate analysis and cost-benefit assessment is required so that we **fully understand the trade-offs** between NbS and other options for addressing climate change.
- This means committing to the most promising aspects of NbS, and integrating it into the key workstreams – especially **ERP2, ETS review, and He Waka Eke Noa**

*We must take decisions now and begin a longer-term work programme that bolsters native ecosystems as part of our social and economic fabric.*

Sensitivity Classification

# Solutions and evidence base

There is good evidence for the value of NbS across a range of impacts, with more local research and demonstration needed in some applications

NbS examples (not exhaustive)	Example Methods	Potential Benefits	Strength of evidence base		
			Sequestration benefits	Adaptation benefits	Biodiversity benefits
Permanent native forests	<ul style="list-style-type: none"> <li>- Fencing</li> <li>- Browser control</li> <li>- Weed control</li> </ul>	<ul style="list-style-type: none"> <li>- Carbon sequestration</li> <li>- Soil stabilisation</li> <li>- Flood protection</li> <li>- Drought protection</li> </ul>	Medium-High confidence	Medium confidence	High confidence
Wetlands	<ul style="list-style-type: none"> <li>- Re-planting</li> <li>- Re-wetting</li> <li>- Weeding</li> <li>- Browser control</li> <li>- Managed retreat (of and from)</li> </ul>	<ul style="list-style-type: none"> <li>- Carbon sequestration</li> <li>- Flood protection</li> <li>- Water filtration</li> </ul>	High confidence	Medium confidence	High confidence
Rivers	<ul style="list-style-type: none"> <li>- Restoration (room to move)</li> <li>- Managed retreat (of and from)</li> </ul>	<ul style="list-style-type: none"> <li>- Flood protection</li> </ul>	Low confidence	High confidence	High confidence
Sponge cities	<ul style="list-style-type: none"> <li>- Urban green spaces</li> <li>- Water sensitive urban design</li> <li>- Stream daylighting</li> </ul>	<ul style="list-style-type: none"> <li>- Flood protection</li> <li>- Reduction of urban heat island effect</li> </ul>	Low confidence	High confidence	Medium confidence
Coastal dune systems	<ul style="list-style-type: none"> <li>- Re-planting</li> <li>- Weed control</li> </ul>	<ul style="list-style-type: none"> <li>- Carbon sequestration</li> <li>- Soil stabilisation</li> <li>- Flood protection</li> </ul>	Low confidence	High confidence	High confidence
Mangroves and sea grass	<ul style="list-style-type: none"> <li>- Restoration</li> </ul>	<ul style="list-style-type: none"> <li>- Carbon sequestration</li> <li>- Flood protection</li> <li>- Fish nurseries</li> <li>- Water filtration</li> </ul>	Medium confidence	Medium confidence	High confidence
Marine	<ul style="list-style-type: none"> <li>- Policy protection (marine reserves)</li> </ul>	<ul style="list-style-type: none"> <li>- Fishing recovery</li> </ul>	Low confidence	Medium confidence	High confidence

# Immediate opportunity: Cyclone recovery - building back better with nature

- The government has committed to ‘building back better’ from Cyclones Hale and Gabrielle. This means, among other things, ensuring that infrastructure and communities are resilient to the ongoing impacts of climate change.
- We can build back better using nature-based solutions to:
  - Incorporate green infrastructure in urban areas through planning and building decisions – including rain gardens, floodable parks, and water sensitive urban design
  - Deliver natural flood management options in urban and rural settings, such including riparian planting and dune restoration
  - Make strategic decisions about where to rebuild, and how to use the land that must be retreated from, for example wetland restoration in at risk flood-plains

## Immediate opportunity: wetland restoration

- Drained peatlands emit carbon. Healthy wetlands can become long-term carbon sinks, as well as provide flood protection, water filtration, and biodiversity habitat.
- Rewetting and restoring drained peatlands can reduce greenhouse gas emissions by 24t CO<sub>2</sub>-e per hectare every year.
- Including wetlands (and other non-forest ecosystems) in target accounting is currently done by some comparable jurisdictions and is seen as good practice by the UNFCCC.
- There are significant complexities to including wetlands within the NDC accounting which would need to be worked through carefully across agencies before we can advise Ministers whether to change NDC accounting.
- S9(2)(f)(iv) [redacted] Carbon and biodiversity markets could be leveraged to provide additional funding.
- Next steps:
  - S9(2)(f)(iv) [redacted]
  - Seek Ministerial direction for officials to work on improving estimates of the sequestration potential of non-forest vegetation and how to recognise this sequestration in our NDC target accounting

## Immediate opportunity: native forest restoration and reversion on erosion-prone land

- Native forests can store large amounts of carbon. They also provide a broad range of ecosystems services, including improving soil stability.
- DOC is aware of several immediate options to boost native forest restoration and reversion to support flood resilience and erosion control:
  - Investigate the suitability and availability of DOC land for erosion control and revegetation (estimates currently sit at 55,868ha of land available for planting.)
  - Promote the regeneration of native forests on the estimated 740,000ha of private land suitable for native regeneration.
- Carbon and biodiversity markets could be leveraged to provide additional funding (e.g. NZ ETS, voluntary carbon market, agricultural emissions pricing system).
- Note, the Ministerial inquiry into land-use will soon make recommendations on afforestation on erosion-prone land in Tairāwhiti Gisborne and Wairoa.
- Next steps, continue progress on:
  - ETS review considers the extent to which the ETS should support co-benefits (including indigenous biodiversity) [CAB-22-MIN-0412 refers].
  - Consider Hill Country Erosion Programme for councils and the Gisborne Erosion Control Funding Programme could be better supported/expanded to encourage natives.
  - Direct the Maximising Carbon Storage research programme to deliver ERP Action 14.2.1 - update NZ ETS yield tables to include indigenous species.

# Immediate opportunity: Biodiversity credits system

- A biodiversity credit system has the potential to attract private sector investment to support the protection, maintenance, and restoration of indigenous biodiversity in Aotearoa New Zealand.
- A joint work programme has been set up between DOC and MFE to explore the potential of such a system, and what role the Government might play in it.
- This is an opportunity to create incentives to protect/restore ecosystems on private land outside of those which can store large amounts of carbon (e.g.: wetlands, tussock lands, shrublands).
- Next steps:
  - Minister Shaw took an oral item to ENV on 6 April outlining his intent to progress this work programme. This was endorsed by the committee.
  - The joint project team are working to develop a discussion document for public consultation by the end of June.
  - Following public consultation, a report will be prepared for the incoming Government on recommended next steps.

# What is needed from the CCIEB

## Decisions

- **Note** existing commitments to NbS and active interest from Ministers, including the Prime Minister, in making practical progress
- **Endorse** investigation of immediate opportunities to support:
  - Cyclone recovery – building back better with nature
  - Wetland restoration in flood prone catchments
  - Native forest restoration and reversion on erosion-prone slopes in cyclone-affected areas
  - Development of a biodiversity credit system
- **Agree** to develop a work programme to integrate nature-based solutions in key areas of climate policy, including:
  - S9(2)(f)(iv)
  - Green infrastructure – work with MfE, MOT, HUD and others to improve incentives for NbS in urban environments
- **Discuss** whether to include in the work programme these items where there are a range of views:
  - ETS review – DOC to work with MfE and MPI on improving incentives for sequestration through permanent indigenous forests
  - Governance – of ERP/NAP chapters or actions that address the role of nature
- **Agree** that DOC and MfE will provide advice on the scope, resources and timeframes to deliver both immediate opportunities and medium-long term work programme.



# Appendices

- › What NbS can offer across sectors and international commitments
- › How NbS are relevant to work on the five PM-agreed climate response priorities
- › International NbS example: Room for the River – the Netherlands
- › New Zealand NbS example: Te Hoiere Project

# What NbS can offer NZ

**Nature-based solutions are multi-functional and span across policy areas and sectors, including:**

<b>Transport</b>	Native planting and wetland restoration alongside roadsides support biodiversity, provide resilience to sea level rise and flooding, sequester carbon and can reduce carbon emissions by decreasing the need for emissions intensive materials.
<b>Housing and urban development</b>	Building green infrastructure (e.g. green roofs) and promoting green spaces in urban design, drawing on indigenous solutions, reduces energy use, supports biodiversity and protects from climate impacts such as flooding or heat. <i>The recent flood events in Auckland have sparked conversations of 'sponge cities' – cities that work with nature through features such as green roofs and rain gardens to absorb rainwater.</i>
<b>Agriculture</b>	Using regenerative and agroecological farming practices, riparian planting, native shelterbelts etc to support farm productivity, meeting environmental standards and to protect and restore important ecosystems on farmlands.
<b>Energy</b>	Designing renewable energy infrastructure in a way that is nature friendly and minimises impacts on biodiversity.

**NbS can support our international commitments, including:**

<b>Paris Agreement (2016)</b>	The importance of protecting, conserving and restoring nature and ecosystems to achieve the Paris Agreement temperature goal was emphasised in 2022.
<b>Sendai Framework for Disaster Risk Reduction (2015)</b>	Guidance to implement NbS was published in 2022.
<b>Sustainable Development Goals (2015)</b>	NbS target major challenges like climate change, disaster risk reduction, food and water security, biodiversity loss and human health, and are critical to sustainable economic development.
<b>Kunming-Montreal Global Biodiversity Framework (2022)</b>	Two targets directly refer to the use of NbS - to increase the climate resilience of biodiversity and to restore, maintain and enhance nature's contributions to people.

# NbS are relevant to work on the five PM-agreed climate response priorities

	ERP 2	ETS Review	He Waka Eke Noa
<b>Scope of Existing workstream</b>	Sets the strategic direction for economy-wide decision-making and impacts	<p>Balance of Gross and Net emissions driven by the ETS</p> <p>Balance of net emissions reductions from exotic vs indigenous forests</p> <p>Scope includes considering the extent to which the ETS should support a range of co-benefits (e.g. improving indigenous biodiversity)</p>	Recognition of scientifically robust on farm sequestration from 2025
<b>Urgency of the issue</b>	High: ERP2 needs to be finalised by the end of 2024.	<p>High: ETS settings are a significant driver of rural land use – especially balance of pastoral and forest land, and types of vegetation planted. Key decisions will be made in 2024/2025.</p> <p>Over 50% NZ's net emissions are covered by surrender obligations.</p>	<p>High: Agricultural emissions are 50% of NZ total gross. Need to provide incentives for meaningful abatement</p> <p>Pricing agricultural emissions by 1 January 2025 is a key action in the ERP.</p>
<b>Maladaptation risks if adaptation and biodiversity not considered</b>	<p>Potentially <b>significant impacts on biodiversity across the plan</b> if nature is not considered.</p> <p>Key risk areas: forestry, land use, and urban planning</p>	<p>Current ETS design and settings favour:</p> <ul style="list-style-type: none"> <li>- <b>High levels of afforestation</b> – potentially missing opportunities to restore non-forest ecosystems / leading to forest planted in inappropriate places</li> <li>- <b>Exotic monocultures</b> - which may not provide greatest environmental benefits for all NZ.</li> </ul>	<p>Potential for <b>planting of inappropriate species</b> that impact on biodiversity outcomes</p> <p>Significant risk of <b>vegetation clearance and ecosystem loss</b> if incentives are not well-structured</p>
<b>Nature-based solutions can complement and enhance existing priority workstreams.</b>	Where applied strategically, NbS have the potential to support cost-effective, resilient emissions abatement across all sectors.	<ul style="list-style-type: none"> <li>- Long term carbon sequestration in vegetation and soil</li> <li>- More permanent forest cover to support catchment resilience to extreme weather events, other climate risks</li> <li>- More diverse forests are more resilient.</li> </ul>	There is the potential to incentivise on-farm sequestration that supports resilient agricultural systems, positive biodiversity outcomes, and the implementation of the proposed NPSIB.
<b>Examples of NbS that are relevant</b>	<p>Strategic, cost-effective use of natural ecosystems to support climate resilience at the landscape scale, e.g.;</p> <ul style="list-style-type: none"> <li>- Wetlands to support natural flood management</li> <li>- Afforestation along road networks to serve as ecological corridors and mitigate transport emissions.</li> </ul> <p>Green infrastructure to mitigate urban emissions and</p>	<p>Permanent native afforestation – delivering enduring, biodiversity rich carbon sinks</p> <p>A greater variety of ecosystems could contribute to carbon market, e.g. non-forest terrestrial vegetation</p>	<ul style="list-style-type: none"> <li>- Riparian planting, including wetlands</li> <li>- Retention and restoration of indigenous scrubland and forest on farmland</li> </ul>

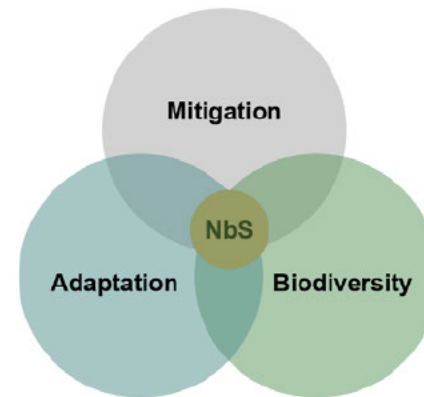
# International NbS example: Room for the River – the Netherlands

Climate change will exacerbate the extent and frequency of river flooding in many areas.

## Solution

Room for the River was designed to manage higher water levels by restoring the river's nature flood plain in the least harmful places. It is an example of moving away from hard infrastructure adaptation measures (e.g. dykes) to nature-based solutions instead.

The programme has allowed more space for wildlife and recreation reserves, promoted housing developments in safer spaces, and better protected heritage villages, sand dunes, and beaches.



## New Zealand Context

RiverLink, is a set of projects for Te Awa Kairangi ki Tai (Lower Hutt), that will draw on many of the same tools used in the Netherlands. RiverLink will protect the ecological health of the river by creating more space for the river. The project has recently been granted resource consent and will be delivered by Waka Kotahi, Greater Wellington, Hutt City Council and mana whenua.

## Opportunity:

- Use nature-based solutions as preferred adaptation strategy (rather than hard infrastructure)

## Options:

- Learn from international partners, while noting contextual differences

## Risks:

- Early planning is needed to implement such a programme. Reactive adaptation is likely to lead to sub-optimal ecological outcomes due to pressure to act quickly

# New Zealand NbS example: Te Hoiere Project

Run under the *Kotahitanga mō te Taiao Alliance*

A **partnership for environmental leadership** across the Top of the South Island

Purpose: Restoration of mauri and wairua of the river and estuary

Participants:

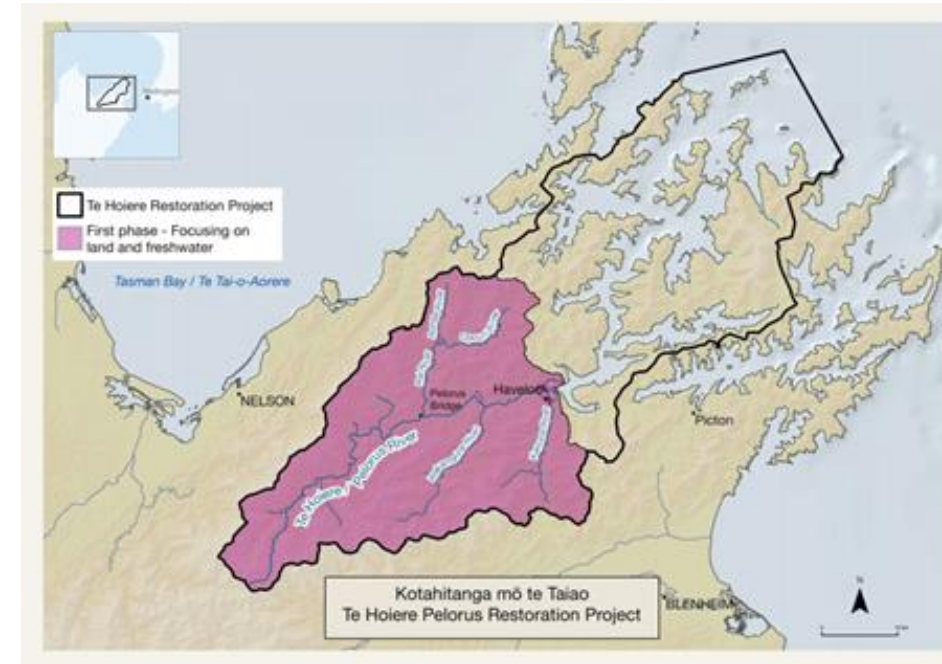
- Local Government
- Central Government (DOC priority and MfE At-Risk catchment)
- Iwi
- Farming and fishing industry

Interventions:

- Riparian fencing & native planting
- Use of dung beetles on pasture

Outcomes:

- Increased water quality, soil stability, and biodiversity
- Reduced runoff and increased fertilization of pastures
- Communities enjoy well-being of the river
- Supports local aquaculture
- Supports increased resilience of SH6





## CLIMATE CHANGE CHIEF EXECUTIVES BOARD

COVERSHEET: Item 7				
To	Climate Change Chief Executives Board			
Meeting date	11 April 2023			
Item lead	Climate Change Directorate			
Lead agency	MfE			
Agenda item name	Carbon Neutral Government Programme update			
Verbal update / noting paper	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Supporting paper	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Reason for Board's consideration	On 20 October 2022, the Board invited the Carbon Neutral Government Programme to report back in the new year on conclusions from the first round of emission reporting by Tranche 1 organisations			
Recommendations	Note the update provided.			
Has the Board previously considered this item, if so, when?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Date	20 October 2022
	<p>At its meeting on 20 October 2022, the Board noted that:</p> <ul style="list-style-type: none"> <li>this item reiterated the importance of the Carbon Neutral Government Programme (CNGP) and the need for Board member agencies to lead by example;</li> <li>Board members should continue to support the CNGP by encouraging their operational DCEs to drive forward their emissions reduction work programme;</li> <li>Board members noted there would be financial implications for agencies if CNGP reduction targets are not met.</li> </ul>			

# Carbon Neutral Government Programme – Report Back on Tranche 1 emissions data

<b>To</b>	Climate Change Chief Executives Board
<b>From</b>	James Palmer, Secretary for the Environment
<b>Appendices:</b>	Appendix 1: Analysis of Tranche 1 2021-22 emissions reporting

## Purpose

1. The purpose of this paper is to provide a report-back on the conclusions of Tranche 1 emissions reporting for 2021/22 under the Carbon Neutral Government Programme (CNGP).

## Recommendations

- a. **Note** the analysis of Tranche 1 reporting from December 2022 in Appendix 1.

Yes/No

- b. **Invite** the CNGP to report back to the Climate Change Chief Executives Board in early 2024 on its analysis of CNGP reporting from December 2023 to focus our approach on supporting the public sector to reduce its emissions.

Yes/No

- c. **Agree** to continue to champion emissions reduction within our agencies and across the public sector.

Yes/No

## Background

2. The Carbon Neutral Government Programme (CNGP) is a long-term work programme that aims to make a number of government organisations carbon neutral from 2025 and help them accelerate their emissions reduction journeys [CAB-20-MIN-0491 refers].
3. Under the programme, Tranche 1 organisations<sup>1</sup> are required to report their annual emissions from 2021/22 onwards, by 1 December each year following the reporting period. Tranche 2 and 3 organisations<sup>2</sup> are required to do the same from 2022/2023 onwards.
4. On 20 October 2022, the CNGP reported to the Climate Change Chief Executives Board to seek commitment from climate leaders to prioritise emissions reduction in their organisations and be champions for emissions reduction across the public sector. The paper invited the CNGP to report back in the new year on the conclusions from December 2022 Tranche 1 reporting.

<sup>1</sup> Tranche 1 organisations are Public Service Departments, Departmental Agencies, and the Executive Branch.

<sup>2</sup> Tranche 2 organisations are Crown Agents and School Boards of Trustees. Tranche 3 organisations are Tertiary Institutions, State Owned Enterprises, the Offices of Parliament, the Legislative Branch, and the Reserve Bank of New Zealand.

## Context

5. In December 2022, all 39 Tranche 1 organisations in the CNGP reported their 2021/22 emissions, reduction targets, and reduction plans to the Ministry for the Environment (MfE). This represents a significant programme milestone and was the first time that 59% of organisations measured their emissions.
6. Overall, 2021/22 emissions for Tranche 1 were 303,000 tCO<sub>2</sub>e, representing a 19% reduction compared to base year emissions. This is significant progress towards 2025 and 2030 reduction targets but also reflects the impacts of COVID-19 restrictions on operational activities. Emissions are likely to increase in 2022/23 before a downwards trajectory is expected in subsequent reporting periods.
7. All Tranche 1 organisations but one set gross emission reduction targets aligned with a 1.5°C reduction pathway and many are well advanced in their reduction initiatives.
8. 71% of emissions were from the three organisations with the largest emission profiles: the New Zealand Defence Force, the Department of Corrections, and the New Zealand Police. Specific challenges for these three organisations include reducing transport fuel emissions and procurement of low emission technologies that meet their specific operational needs.
9. The biggest challenges for most other organisations are controlling the ‘bounce back’ in air travel emissions following COVID-19 restrictions and reducing electricity emissions.
10. On 29 March 2023, CNGP Ministers<sup>3</sup> considered a paper on the analysis of the Tranche 1 reporting data from 2021/22 (Appendix 1).

## Next steps

11. The CNGP secretariat will support organisations to deliver their emissions reduction plans, particularly in key areas such air travel, transport, stationary combustion, and electricity, and to engage with and influence their value chains.
12. Tranche 2 organisations will report their 2022/23 emissions, reduction targets, and reduction plans to MfE by 1 December 2023. Tranche 3 organisations are encouraged to do the same. It is expected that nearly 100 CNGP organisations will report to the CNGP across Tranches 1, 2, and 3 on their 2022/23 emissions by this date.
13. I would like to invite the CNGP to report back to the Climate Change Chief Executives Board in early 2024 on its analysis of CNGP reporting from December 2023, to focus our approach on supporting the public sector to reduce its emissions.
14. I encourage you to continue to champion your organisation’s emissions reduction journey and that of the wider public sector. As public service leaders, we play a large role in shaping our organisational priorities and setting an example for best practice within our agencies, and we are in a unique position to demonstrate climate leadership across broader government.

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<sup>3</sup> Minister Nash (Economic Development), Minister Shaw (Climate Change), Minister Robertson (Finance), Minister Woods (Energy and Resources), and Minister Little (Public Service).



# Appendix 1: Analysis of Tranche 1 2021/22 emissions reporting

## Executive summary

1. In December 2022, all Tranche 1 organisations<sup>1</sup> in the Carbon Neutral Government Programme (CNGP) reported their emissions, reduction targets, and reduction plans to the Ministry for the Environment (MfE). This represents a significant programme milestone and was the first time that 59% of organisations measured their emissions.
2. Overall, 2021/22 emissions for Tranche 1 were 303,000 tCO<sub>2</sub>e, representing a 19% reduction compared to base year emissions. This represents significant progress towards 2025 and 2030 reduction targets but also reflects the impacts of COVID-19 restrictions on operational activities. Emissions are likely to increase in 2022/23 before a downwards trajectory is expected in subsequent reporting periods.
3. All Tranche 1 organisations but one set gross emission reduction targets aligned with a 1.5°C reduction pathway and many are well advanced in their reduction initiatives.
4. 71% of emissions were from the three organisations with the largest emission profiles: the New Zealand Defence Force (NZDF), the Department of Corrections (Corrections), and the New Zealand Police (Police). Specific challenges for these three include reducing transport fuel emissions and procurement of low emission technology that meets their specific operational needs.
5. The biggest challenges for most other organisations are controlling the ‘bounce -back’ in air travel emissions following COVID-19 restrictions and reducing electricity emissions.
6. In 2023, the CNGP is focusing on:
  - a. working with organisations to address system wide emission reduction barriers in key areas
  - b. supporting Tranche 2 and 3 organisations<sup>2</sup> to report for the first time in December 2023 including a number of organisations with large emission profiles
  - c. improving the operational efficiency of the CNGP to support the nearly 100 organisations across the programme to meet their reporting requirements and implement reduction initiatives through guidance, capability building and accountability.
  - d. identifying areas where system levers can support organisations to obtain the data they need and influence reductions in their own emissions and their supply chains.

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<sup>1</sup> Tranche 1 organisations are Public Service Departments, Departmental Agencies, and the Executive Branch.

<sup>2</sup> Tranche 2 organisations are Crown Agents and School Boards of Trustees. Trance 3 organisations are Tertiary Institutions, State Owned Enterprises, the Offices of Parliament, the Legislative Branch, and the Reserve Bank of New Zealand.

7. To date, the State Sector Decarbonisation Fund (SSDF) has provided the primary source of co-funding to support agencies emissions reductions requirements under the CNGP. This funding has bridged the financial gap between capital cost of equipment replacements with low emissions alternatives S9(2)(f)(iv)

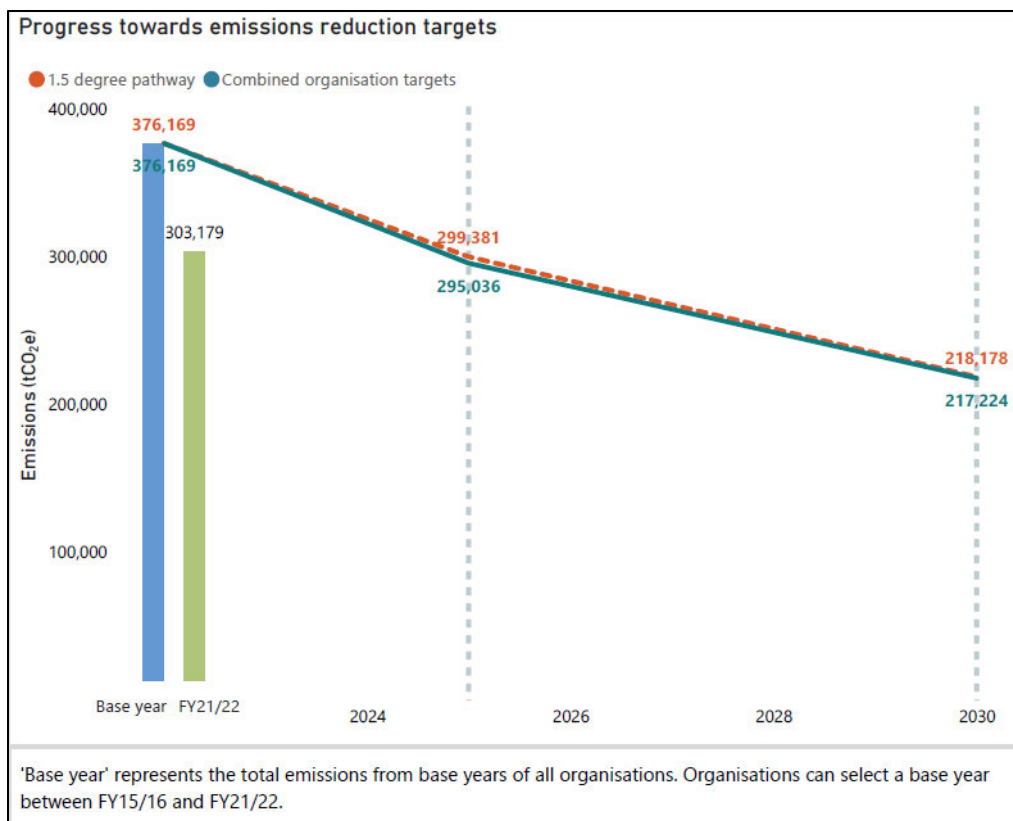
## All Tranche 1 CNGP organisations reported their emissions in December 2022

8. Tranche 1 CNGP organisations were mandated by Cabinet to report their emissions, reduction targets, and reduction initiatives to the Programme Lead by 1 December 2022.
9. Tranche 1 CNGP organisations reported 303,000 tCO<sub>2</sub>e for 2021-22.<sup>3</sup> This is a significant milestone for the CNGP, marking the first year of emissions reporting for the programme. 23 Tranche 1 organisations (59%) were not measuring their emissions prior to the establishment of the CNGP.
10. The emissions of two departmental agencies were incorporated into their host agency reports, resulting in 37 separate reports representing 39 Tranche 1 organisations. All 2021-22 and base year emissions were independently verified.
11. All Tranche 1 organisations, except one, set gross emission reduction targets for 2025 and 2030 that are aligned with a 1.5°C reduction pathway and CNGP reduction target guidance. The Ministry for Pacific Peoples did not set targets aligned to a 1.5°C reduction pathway due to the impact of COVID-19 restrictions on base year air travel emissions (their main emission source) and the importance of re-establishing talanoa (face-to-face engagement) as a culturally significant way of engaging with stakeholders. All Tranche 1 organisations have commenced their emission reduction journey and many organisations are well advanced in identifying and planning reduction initiatives.
12. Overall, Tranche 1 participants reduced their emissions by 73,000 tCO<sub>2</sub>e (19%) from base year. This is the equivalent of taking 27,000 cars off the road for a year<sup>4</sup> and represents significant progress towards 2025 and 2030 reduction targets (Figure 1). It also reflects the impacts of COVID-19 restrictions on operational activities.

<sup>3</sup> This total encompasses Scope 1, Scope 2, and mandatory Scope 3 emissions. An additional 64,124 tCO<sub>2</sub>e of Scope 3 (other material) emissions were reported but were not included within the scope of the relevant organisation's emission reduction targets.

<sup>4</sup> Based on 2.7 tCO<sub>2</sub>e per car per year (source data from Ministry of Transport and Ministry for the Environment)

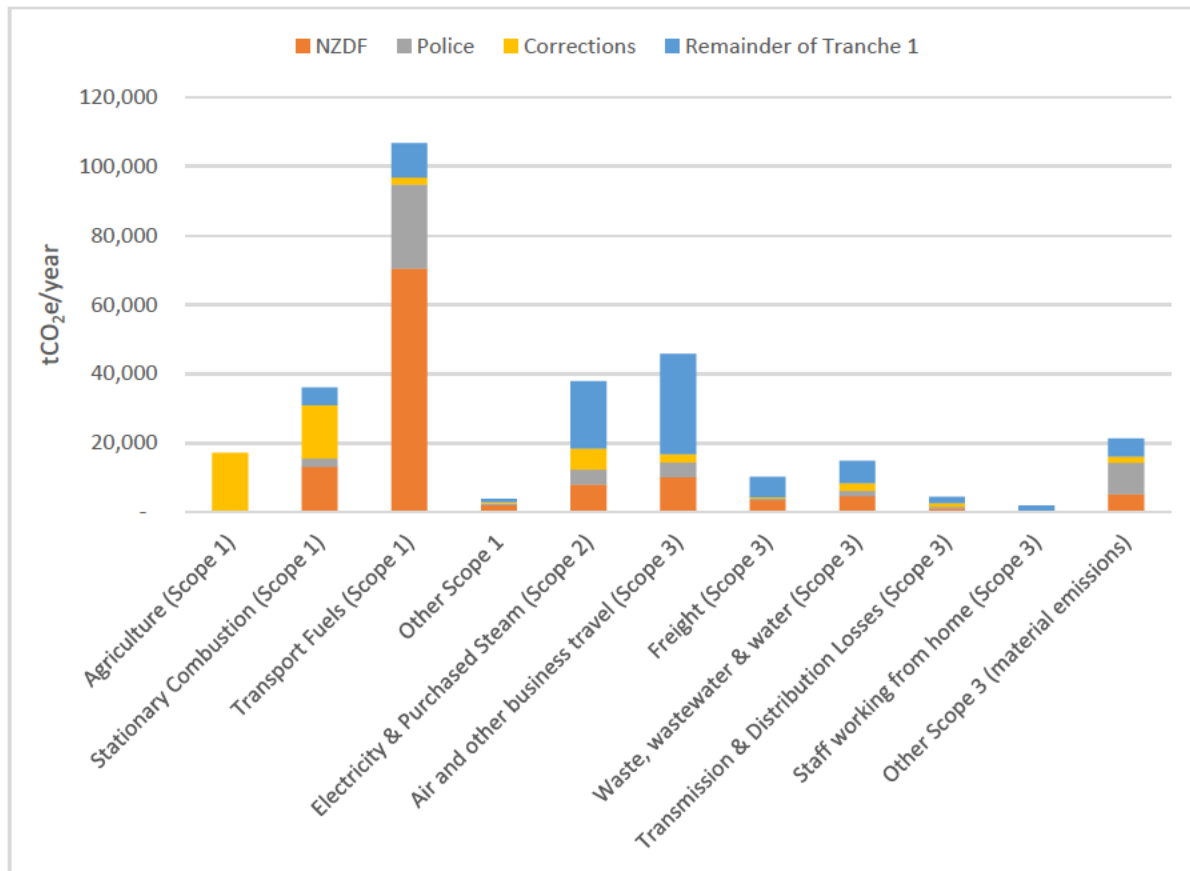
**Figure 1: Overall Tranche 1 emissions, targets and progress**



13. The biggest reductions by percentage have been achieved in international air travel (62%) and domestic air travel (38%). These reductions should be viewed within the context of COVID-19 travel restrictions. It is expected that 2022/23 air travel emissions will somewhat increase due to the lifting of restrictions. Many organisations are proactively working on travel policy to avoid returning to pre-pandemic levels while balancing expectations around face-to-face engagement.
14. Tranche 2 and 3 CNGP organisations are expected to report their annual emissions for the first time by 1 December 2023, for the 2022/23 financial year.

### The top 3 emitting organisations are responsible for most Tranche 1 emissions

15. 71% of Tranche 1 emissions are from three organisations, reflecting their significant operational activities. The organisation with the largest emissions profile is NZDF (39% of Tranche 1 emissions), followed by Corrections (16%) and Police (16%). These three organisations also account for 90% of direct (Scope 1) emissions.
16. The main emission sources for these three organisations collectively are transport fuels (45%), stationary combustion (14%), electricity (9%) and agriculture (8%). These organisations account for 89% of these four emission sources (Figure 2).

**Figure 2: Total emissions reported in 2021-22 – Tranche 1 organisations**


17. NZDF, Corrections, and Police identified some common barriers to implementing emission reduction initiatives, including availability of low emission alternatives and infrastructure, operational, and funding constraints. A key focus for the CNGP secretariat is working with organisations with large emissions profiles to identify system wide levers and support that can be used to address these issues where appropriate.
18. **New Zealand Defence Force:** The majority of NZDF emissions are from the combustion of transport fuels associated with the NZDF's large fleet of ships, aircraft, and heavy vehicles (60%). These emissions have reduced by 23% in 2021/22 compared to NZDF's base year of 2016/17 and overall NZDF emissions have reduced by 20%. These reductions reflect both reduction initiatives underway and temporary capability gaps and constraints on operational activities due to COVID-19 restrictions. The extent to which emissions reductions from the base year can be considered permanent is currently unknown. NZDF has identified a comprehensive range of reduction initiatives but achieving its emission reduction targets will be very challenging. Significant barriers include the nature and location of NZDF operations (e.g., locations around the globe, extreme conditions, where local infrastructure has been damaged or destroyed), limited low emission fuel options appropriate for military operations, the cost of transitioning operational capability to low emissions alternatives where they exist, and supply chain and infrastructure constraints.

19. **Department of Corrections:** The largest emission sources for Corrections are agriculture (35%) and stationary combustion (31%) (fossil fuel boilers for heating and hot water). Corrections provides rehabilitation and training opportunities for post--release employment through agriculture and is the only Tranche 1 organisation reporting agricultural emissions. Corrections agricultural emissions reduced by 3% from its base year of 2020/21. These initial reductions are a product of operational decisions. Further consideration is required to assess the trade-offs for any significant change to agriculture operations and may impact on the ability of Corrections to achieve reduction targets. Corrections has identified a decarbonisation pathway to 2025 that includes transitioning boilers at three pilot sites to low emission alternatives, which will inform larger-scale boiler transitions and lead the way to its 2030 target. Barriers to implementation include funding availability, supply chain challenges, and infrastructure and operational constraints to implementing low emission boiler alternatives.
20. **Police:** The largest source of Police emissions is fuel for road and maritime fleets (48%), which decreased by 10% in 2021/22 from its base year of 2018-19. The drivers for this reduction are constraints on operational activities during COVID-19 restrictions and changes to operational fleet. Police have identified a range of reduction initiatives to reduce emissions from its vehicle fleet and other sources. The speed of transition to a low-emission organisation is dependent on several external constraints such as the availability of low emission vehicles that can fulfil diverse operational requirements, capability, funding models, and supply chain and infrastructure constraints. Police is also a national and international response service, which means that it has a reduced ability to predict and reduce operational emissions. Police is continuing to investigate initiatives to reduce emissions which will determine its ability to meet its targets.

#### **Travel is the highest emission source for most Tranche 1 organisations<sup>5</sup>**

21. Air travel is the highest source of emissions for 23 out of 37 agencies. Air travel and other travel emissions accounted for 15% of total emissions in 2021-22 (6% domestic air travel, 7% international air travel, 2% other travel related emissions). In organisations' base years, travel related emissions accounted for 25% of total emissions.
22. The Ministry of Foreign Affairs and Trade (MFAT) and NZDF are the biggest contributors to travel emissions accounting for 23% and 22% of total travel emissions respectively. Most travel emissions for these two organisations are associated with international air travel.
23. There was a 51% reduction in air travel emissions from organisations' base years to 2021/22. This reduction is largely due to reduced travel during the COVID-19 restrictions, although about half of Tranche 1 organisations' have a base year that overlaps with the pandemic. If air travel was to return to pre-pandemic levels across Tranche 1 organisations, their travel emissions

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<sup>5</sup> Analysis of top emission sources excludes contributions from the Government Communications Security Bureau and the New Zealand Security Intelligence Service due to security restrictions on releasing a breakdown of emission sources for these organisations.

could more than double in from 2021/22 to 2022/23. Some increase in air travel is anticipated managing the projected air travel increase is a priority emission reduction focus area for most organisations. This is particularly challenging for organisations for whom travel is integral to operational activities and for those seeking to re-engage with key stakeholders following pandemic disruption.

24. The Ministry for Primary Industries (MPI) is one example of an organisation actively seeking to manage increases in travel emissions as services and activities are strategically built back after pandemic restrictions. MPI has a target to reduce emissions from international and domestic travel by at least 30% in 2022-23 compared with their base year. Its first step to achieving this has been the development and roll out of an emission projection tool across MPI. This tool is supporting each business unit and branch to develop a good picture of the emissions involved in business activities such as travel, and to then apply mitigations to plan its engagement approaches and how it is organised to deliver across New Zealand and internationally.

### **Electricity is an important emission source for Tranche 1 organisations**

25. Electricity emissions account for 12% of total reported emissions in 2021-22, representing a 2% increase on base year emissions. Top contributors to electricity emissions include NZDF (21%), MFAT (20%), Corrections (16%), and Police (11%). 98% of MFAT's reported electricity emissions arise outside New Zealand, often in countries with more carbon intensive electricity grids.
26. Electricity use is not separated into specific activities, but most use is associated with the operation of buildings (heating, lighting, and plug loads). Some sources of electricity use are expected to decrease over time (e.g., heating and lighting) as organisations undertake building efficiency measures. We expect that other sources, such as charging electric vehicles, will increase. We anticipate that decarbonisation of the electricity grid will assist organisations to decrease electricity emissions over time despite increased demand in some areas.
27. Inland Revenue (IR) is an example of an organisation actively working to reduce electricity emissions associated with building use. Over the past three years, IR has consolidated from three sites to one in the Wellington CBD, from three sites to two in Auckland, and is currently planning to reduce from three sites to two in Christchurch. They have also surrendered several floors within multi-level buildings. IR is undertaking NABERSNZ assessments on buildings over 2,000 square metres and, as leases for older properties expire, considering opportunities for more modern accommodation which include features such as maximising natural light, lighting control systems, energy efficient air-conditioning, modern insulation, low water use fixtures and appliances, and more convenient stairways to reduce elevator use.

### **Most organisations reduced their emissions compared to their base year**

28. All but two Tranche 1 organisations reduced their gross emissions in 2021/22 compared to their base year. National Emergency Management Agency emissions increased by 21% due to the organisation responding to a number of complex emergencies and contributing to the recovery from these events throughout 2021/22 (e.g., severe weather events in the West Coast and in Tairāwhiti). Ministry of Justice emissions increased by 8% reflecting reduced operations during

their base year of 2020/21 due to the COVID-19 pandemic but a return to near full capacity in the 2021/22 year as an essential service that was minimally affected by 2021 lockdowns.

### Organisations are in early stages of measuring value chain (Scope 3 other material) emissions

29. Value chain emissions (Scope 3 other material) emissions are not a mandatory CNGP reporting source but can be a significant source of emissions for many organisations, for example, emissions from purchased goods and services and embodied emissions. The nature and scope of these emissions varies between organisations, and it will take a significant amount of time for organisations to fully understand, report on, and reduce these emissions. Approximately 60% of Tranche 1 organisations reported some other material Scope 3 emissions in 2022, with approximately half of those emissions associated with staff commuting and half from purchased goods and services.

### The role of the SSDF

30. The \$219.54 million SSDF, administered by EECA has provided the primary source of co-funding to support emissions reductions across the CNGP, bridging the financial gap for organisations to deliver decarbonisation projects.
31. Funding is available to all of Tranches 1 and 2, other Crown Entities, Tertiary Education Institutions, and previously, District Health Boards.<sup>6</sup> State Owned Enterprises are excluded.
32. All of the tagged capital contingency is on track to be allocated by 30 June 2023. We estimate that the combined emissions reduction impact of the funding will be around 945,699 tonnes over ten years<sup>7</sup>. To date, Ministers have approved \$165.178 million in funding, with \$49.972 million pending approval in the SSDF Tranche 14 approval briefing S9(2)(f)(iv) S9(2)(f)(iv)
33. The immediate focus of the SSDF has been to phase out the 43 coal boilers remaining across the state sector, which span 24 sites<sup>8</sup>. This is progressing well, and officials expect only one coal boiler (at NZDF's Burnham site) to remain in use beyond 2025. The S9(2)(f)(iv) remaining in the tagged capital contingency is expected to support replacement of the remaining three coal boilers, across NZDF's Waiouru and Woodbourne campuses with a reasonable co-funding proportion.
34. As the SSDF approaches full allocation, the CNGP secretariat is considering opportunities to continue to support state sector organisations in delivering their emissions reductions plans. This is likely to include expanding support for fleet electrification, which EECA and MBIE expect to provide further advice to Ministers on in the SSDF Tranche 15 approval briefing.

<sup>6</sup> Eligibility for SSDF fleet capital is restricted to agencies that are mandated to comply with the All of Government Vehicles contract.

<sup>7</sup> Many assets have a lifespan of longer than ten years, meaning that the actual emissions reduction impact per dollar of capital investment in alternatives will be long-lasting.

<sup>8</sup> This excludes coal boilers across the state schooling sector, which come under the Ministry of Education-led Coal Boiler Replacement Programme.

### Focus areas for the CNGP in 2023

35. Tranche 1 results provide valuable insights into priority areas for the CNGP in 2023. The number of organisations reporting their emissions will increase significantly in 2023 with Tranche 2 and 3 organisations reporting for the first time. Resulting focus areas for the CNGP secretariat in 2023 will include the following:
- a. Considering opportunities to continue to support CNGP organisations to deliver their emissions reductions plans as funding available through the State Sector Decarbonisation Fund diminishes. Officials will work to identify the most impactful policy approaches to address remaining emissions across the state sector and will provide further advice to Ministers.
  - b. Providing continued support to CNGP organisations to reduce emissions in key areas such air travel, transport, stationary combustion, and electricity, including facilitating engagement to help identify and address system-wide barriers where appropriate. Supporting organisations to pro-actively manage a projected increase in air travel emissions following the easing of COVID-19 restrictions will be a focus of training and resource sharing as this is a priority area for most CNGP organisations.
  - c. Supporting Tranches 2 and 3 to meet 2023 reporting deadlines, including a number of organisations with large emission profiles (e.g., Te Whatu Ora, Waka Kotahi, Kāinga Ora, and schools). This will include supporting agencies to measure and verify their emissions, set targets, and plan reduction initiatives, as well as providing guidance in areas of specific interest to these organisations (e.g., embodied carbon and construction).
  - d. Providing effective support to the nearly 100 CNGP organisations and improve operational efficiency of the programme. This is expected to include procurement of a streamlined reporting and analysis tool, reassessing methods of engagement and support, continuing the training programme, and improving methods for sharing resources and best practice between organisations.
  - e. Providing guidance to support organisations to engage with and influence their wider value chain. This is an area where the programme has significant potential to drive improvements in the wider economy through influence and leadership.





## CLIMATE CHANGE CHIEF EXECUTIVES BOARD

MEETING MINUTES	
<b>Date</b>	Wednesday 29 March 2023
<b>Time</b>	1.00–2.30pm
<b>Location</b>	Online via MS Teams
<b>Attendees</b>	<p><b>Chair:</b> James Palmer (MfE)</p> <p><b>Members:</b> Audrey Sonerson (MOT), Caralee McLiesh (TSY), Carolyn Tremain (MBIE), Penny Nelson (DOC), Julie Colins (MPI delegate), Aaron Martin (CL)</p> <p><b>Attendees for item 1:</b> David Smol</p> <p><b>Attendees for item 5:</b> Dave Gawn (NEMA), Paul James (DIA), Pip Fox (HUD)</p> <p><b>Agency attendees:</b> Anne Haira, Janine Smith, Stephen Goodman (MfE), Bryn Gandy (MOT), Paul Barker (DIA), Vicki Plater (TSY)</p> <p><b>In support:</b> Lisa Daniell, Chris Nees, Rachael Church (Climate Change IEB Unit)</p> <p><b>Apologies:</b> Ray Smith</p>

Item	Actions
<b>Karakia timatanga</b>	
The Chair welcomed everyone to the meeting. The Chair invited David Smol to give an overview of the findings in the Smol and Bestwick report of the Board's self-assessment.	
1. S9(2)(g)(i)	
S9(2)(g)(i)	

S9(2)(g)(i)	
<b>2. Preparation for Climate Response Ministerial Group meeting on 5 April</b> <b>Lead:</b> Lisa Daniell and Chris Nees (Climate IEB Unit)	
<p>The Board discussed the draft paper and proposed additional abatement options to be provided to CRMG, noting that budget decisions will have an impact on some of the options.</p> <p>The Board discussed taking an alternative approach – providing a more practical strawperson of actions now. This is to include recommendations of: reducing the work programme to make it more manageable, being clear about the challenge to achieving emissions budgets and providing trade-off decisions. Key focus areas should include the five priority focus areas identified by the Board – with emphasis on ETS Settings and Review – including longer term and alternative sequestration (indigenous forestry and wetlands), partnerships to deliver abatement from industry.</p>	
<b>2.1 Agreed</b> that a helpful approach for Ministers could be to reduce the work programme by focusing on significant transformational levers that will have an impact on emissions budgets; a strawman is to provided at the next CRMG meeting outlining options and trade-off decisions.	
<b>2.2 Agreed</b> that key focus areas should include the five priority focus areas identified by the Board – with emphasis on ETS Settings and Review – including longer term and alternative sequestration (indigenous forestry and wetlands), partnerships to deliver abatement from industry.	
<b>2.3 Agreed</b> to have the Climate IEB Unit with Climate DCEs prepare and endorse a strawman outlining specific areas for Ministers to focus on that will have an impact on emissions budgets.	Climate IEB Unit and Climate DCEs to prepare and endorse strawman of key focus areas for CRMG
<b>2.4 Noted</b> that the Minister of Conservation should be invited to the upcoming CRMG meeting.	Climate IEB Unit to confirm CRMG attendees with PMO and include the Minister of Conservation. <b>Complete – with Minister of Conservation invited to CRMG on 11 April.</b>

<b>3. Verbal updates/noting papers</b>	
<b>3.1 ETS Review update</b> Lead: Janine Smith (MfE)	
The Board:	
<b>3.1.1 Noted</b> that that MfE, MPI and MBIE are preparing advice for Ministers on ETS settings leading up to the Budget period, and discussions are underway with Ministers on the sequestration strategy in particular, given concerns expressed by iwi/Maori on this topic.	
<b>3.1.2 Agreed</b> that further clarity is needed on the direction of travel before public consultation commences, particularly around sequestration.	
<b>3.1.3 Noted</b> that a report-back will be provided to the Board prior to papers being submitted to Ministers.	MfE to provide report back to the Board prior to papers being submitted to Ministers.
S9(2)(f)(iv)	
<b>3.3 CCIEB corporate one-pager</b> Lead: Lisa Daniell (CCIEB)	
The Board:	
<b>3.3.1 Noted</b> the CCIEB corporate one-pager.	
<b>3.3.2 Noted</b> that the Board's work programme will be discussed further at the upcoming strategy session.	
<b>4. Deep dive: Transport mode shift and freight and supply chain resilience</b> Lead: Bryn Gandy (MOT)	
Bryn Gandy, Deputy Chief Executive at the Ministry of Transport (MOT), presented this deep dive to the Board. The following key points were noted: <ul style="list-style-type: none"> <li>o The transport portfolio in ERP1 has 83 initiatives; a quarter of these deliver direct abatement. It is unlikely that transport emissions budgets (sub-sector targets) will be achieved with recent announcements relating to the Sustainable Biofuels Obligation.</li> <li>o Extreme weather events are impacting on New Zealand's freight network, which is largely coastal.</li> <li>o The uptake of low emissions vehicles has been high, and similar policies for trucks and buses are being accelerated; work is also underway in the maritime and aviation sectors.</li> <li>o Mode shift is a key priority for the transport sector, which continues to become more carbon intensive. Public transport uptake rates in New Zealand are significantly lower than many</li> </ul>	

<p>other international cities, with public transport and rail networks having been significantly underinvested in, in the past.</p> <ul style="list-style-type: none"> <li>o There is a need for a stronger communications and behaviour change-enabling information being available to support individuals' choices.</li> </ul> <p>The Board:</p>	
<p><b>4.1 Noted</b> the significant challenges to achieving Transport emissions budgets/sub-sector targets as outlined in the presentation provided.</p>	
<p><b>4.2 Noted</b> that work is underway to shift modes of transport to reduce carbon emissions, in a way that works for New Zealanders, including taking different approaches to communications that can enable behaviour shift by individuals, and taking account of differences in city geography, weather, investment in transport networks.</p>	
<p><b>5. Adaptation governance – Climate Adaptation Bill</b>  <b>Lead: Anne Haira (MfE)</b></p>	
<p>S9(2)(f)(iv)</p>	
<p><b>6. Meeting administration</b></p>	
<p>The Board</p>	
<p><b>6.1 Approved</b> the minutes of the previous meeting, dated 22 February 2023.</p>	
<p><b>6.2 Noted</b> the actions register.</p>	
<p><b>6.3 Noted</b> the indicative forward agenda for upcoming Board and CRMG meetings.</p>	
<p><b>7. Closing comments</b></p>	
<p>The Chair thanked everyone for their time and closed the meeting at 2:31pm.</p>	

2023 Actions Register: Climate Change Chief Executives Board

Sensitivity Classification

Action #	Meeting Date	Discussion item	Minutes	Action	Responsible	Status
02-1	22/02/2023	Chair's opening comments -1.1	The Board <b>agreed</b> to set up dedicated climate adaptation Board meetings to manage and enable focus on adaptation issues. This climate adaptation-focused Board (or sub-committee) will have oversight of specific adaptation initiatives, including the Climate Adaptation Act, and will connect with the Spatial Planning Board. Members noted that advisors or inputs from local government and/or iwi/Māori could also be useful additions.	CCIEB Unit to coordinate setting up the Climate Adaptation advisory Board	CCIEB Unit	Underway [joint Board meeting between SPRB and CCCEB held 14/3/23]
02-2	22/02/2023	Chair's opening comments - 1.2	<b>The Board agreed</b> to invite David Smol and Jenn Bestwick to a future Board meeting or its 5 April strategy session, to reflect on the Board's recent PSC self-assessment, Board's purpose and strategic work programme.	CCIEB Unit to invite David Smol and Jenn Bestwick to a strategy session with the Board	CCIEB Unit	Underway - invited to CCCEB meeting on 29/3/23, if available around other their other commitments
02-5	22/02/2023	The Board's Monitoring and Reporting: First 6 monthly ERP Progress report - 3.3	S9(2)(f)(iv)			
02-7	22/02/2023	The Board's Monitoring and Reporting: First 6 monthly ERP Progress report - 3.6	<b>Directed</b> the Climate DCEs group to work with the CCIEB Unit to provide advice to the Board on how the high volume of Cabinet papers intended over the next six months can be rationalised	CCIEB Unit and Climate DCEs to provide this advice to the Board prior to its next meeting	CCIEB Unit	In hand - prioritisation of papers prepared by CCIEB Unit (and endorsed by DCEs) to be confirmed at CCCEB meeting on 29/3/23 ahead of CRMG discussion on 5/4/23
02-10	22/02/2023	Adaptation priorities - 4.4	<b>Agreed in principle</b> to specialist climate adaptation-focused Board meetings being set up to consider implementation of the National Adaptation Plan, and its alignment to the priority areas set out at 4.1 above	CCIEB Unit to establish meetings for Climate adaptation focused Board members	CCIEB Unit	In hand [joint Board meeting between SPRB and CCCEB held 14/3/23]. Future Board meetings and items being scheduled.
03-1	29/03/2023	Preparation for CRMG	<b>The Board agreed</b> to have the Climate IEB Unit with Climate DCEs prepare and endorse a strawman outlining specific areas for Ministers to focus on that will have an impact on emissions budgets	Climate IEB Unit and Climate DCEs to prepare and endorse strawman of key focus areas for CRMG	CCIEB Unit / Climate DCEs	Completed
03-2	29/03/2023	Preparation for CRMG	<b>The Board noted</b> that the Minister of Conservation should be invited to the upcoming CRMG meeting	Climate IEB Unit to confirm CRMG attendees with PMO and include the Minister of Conservation	CCIEB Unit	Completed with Minister of Conservation invited to CRMG on 11 April

Action #	Meeting Date	Discussion item	Minutes	Action	Responsible	Status
03-3	29/03/2023	ETS Review	<b>The Board noted</b> that a report-back will be provided to the Board prior to papers being submitted to Ministers	MfE to provide a report-back to the Board prior to papers being submitted to Ministers	MfE	Open



## CLIMATE CHANGE CHIEF EXECUTIVES BOARD

Indicative Forward Agenda					
Climate Change Chief Executives Board					
17 May, 1030-1200					
Item	Indicative item focus	Purpose of item, and timing, specify decisions needed, and papers	Papers	Critical dates	Lead agency
1.	<b>Approval for 2nd 6 monthly monitoring and reporting design – incorporating NAP</b>	Board's next six-monthly report is due in August to Ministers. This report will include progress report on both NAP and ERP. Seeking approval from the board for the design and commissioning approach to agencies.	<b>2<sup>nd</sup> six monthly report. Draft report template for progress on ERP and NAP</b>	<b>DCE meeting date for review: 27 April</b>  <b>Due to Ministers: End August (full report)</b>	CCIEB (following agency input)
2.	<b>ETS Review update</b>  <b>**Sequestration Strategy paper to come to Board (outlining initial policy ideas) – date TBA</b>			<b>DCE meeting date for review: 30 March (oral update)</b>  <b>Cabinet paper dates: 6 papers between March-May</b>  <b>CRMG dates:</b>	MFE
3.	S9(2)(f)(iv)				MFE
4.	<b>Māori engagement across Climate policy response</b>	Provides an update on upcoming Māori engagement across the Climate policy response and proposes a joined-up approach		<b>DCE meeting date for review: 27 April</b>	MFE

29 June, 1530-1700					
Item	Indicative item focus	Purpose of item, and timing, specify decisions needed, and papers	Papers	Critical dates	Lead agency
1.	<b>Energy Strategy (TBC)</b>	One of Board's top priorities, report back requested by Board following initial discussions in late 2022. With focus on interdependencies and potential areas for early calls.		<b>DCE meeting date for review:</b> 10 May  <b>Cabinet paper dates:</b> 6 papers between March-June	MBIE
2.	<b>Adaptive Management</b>	Board's role includes advice on adaptively managing the ERP (and NAP). This item seeks endorsement of adaptive management approach (Tier 2).		<b>DCE meeting date for review:</b> 7 June (tbc)  Follows initial advice to Board in December 2022 and six-monthly report/SBO changes.	
3.	<b>Carbon removal strategy</b>	Sets out NZ's long-term vision for carbon removals. It is a critical complement to the review of the ETS and the NDC strategy and will set the long-term direction for the forestry sector as well as other forms of removal		<b>Ministerial consultation</b> in June	MFE
4.	S9(2)(f)(iv)				CCIEB (following agency input)



Climate Response Ministerial Group				
<b>9 May, 6.30-7.30pm</b>				
1.	<b>Climate Change Chief Executives Board cross-agency update</b>	CCCEB to provide advice on: <ul style="list-style-type: none"> <li>An overview of the big challenges in delivering on ERP1</li> <li>The difficult challenge of trying to find additional abatement in EB1 and that EB2 is a more likely source/place to achieve it</li> <li>What this means for top priority areas to focus on in ERP1 (the top 5 in the report)</li> <li>S9(2)(f)(iv)</li> </ul>		
	<i>Climate Change Commission draft advice (TBC)</i>			
<b>31 May, 4.00-5.00pm</b>				
	<i>Topic TBC</i>			
	<i>Māori Climate Platform update (TBC)</i>	Progress check-in		MFE
	<i>MoT draft national VKT reduction plan (TBC)</i>	For endorsement		MOT
<b>26 July, 3.30-4.30pm</b>				
	<i>Energy Strategy (TBC)</i>			MBIE
	<i>ERP2 (TBC)</i>			MFE (with CCIEB support if needed)