

# Aotearoa New Zealand's first emissions reduction plan: Table of actions

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#### **List of Agencies**

DIA Department of Internal Affairs

DOC Department of Conservation

EA Electricity Authority

EECA Energy Efficiency and Conservation Authority

HUD Ministry of Housing and Urban Development

IRD Inland Revenue Department

Kāinga Ora – Homes and Communities

MBIE Ministry of Business, Innovation and Employment

MFAT Ministry of Foreign Affairs and Trade

MfE Ministry for the Environment

MOE Ministry of Education

MOH Ministry of Health

MOT Ministry of Transport

MSD Ministry of Social Development

MPI Ministry for Primary Industries

Te Arawhiti The Office for Māori Crown Relations – Te Arawhiti

Te Waihanga Te Waihanga (New Zealand Infrastructure Commission)

TPK Te Puni Kōkiri

Transpower New Zealand

TSY Treasury

Waka Kotahi Waka Kotahi New Zealand Transport Agency

# **Empowering Māori (Chapter 2)**

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
2.1 Establish a platform for	Initial interim Ministerial advisory committee.	2022–ongoing	MfE	Māori, government agencies
Māori climate action.	Consolidate an enduring platform for Māori representation and recognition of Māori rights and interests in the climate response.			
2.2 Embed partnership and representation.	Mechanisms to ensure diverse Māori input into climate policy and climate action.	2022–ongoing	MfE	Māori, government agencies
2.3 Support development of a Māori climate strategy.	<ul> <li>A Māori climate strategy and action plan that prioritises mātauranga Māori, adaptation and mitigation aspirations, addressing barriers for the Māori economy, and local iwi and hapū objectives.</li> </ul>	2022–24	MfE	Māori, government agencies, local government, private sector
	Investigate options for creating a climate planning and education toolbox.			
2.4 Activate kaupapa Māori, tangata Māori solutions.	Dedicated funding aimed at increasing the impact of Māori climate action and knowledge, raising community capacity and capability, and developing Māori data.	2022–ongoing	MfE	Māori, government agencies

# **Equitable transition (Chapter 3)**

Actions f	for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Objective	e 1: Seize the opportunitie	es of the transition			
yo	quip all children and oung people for the ransition.	<ul> <li>A range of initiatives in the early-learning and schooling system to equip all children and young people to contribute positively to the transition. This includes:         <ul> <li>changes to the national curriculum and National Certificates of Achievement (NCEA)</li> <li>the provision of teaching and learning resources that help kaiako/teachers connect learning purposefully to climate change contexts, local action and the shifts needed for an equitable transition and a low-emission society</li> <li>targeted resources to reduce school emissions.</li> </ul> </li> </ul>	Ongoing  Curriculum and NCEA changes phased through to full implementation by 2026.	MOE	Early learning services, schools and kura, communities, Māori, business and industry
re. te	reate an accessible esponsive and flexible ertiary education and raining system.	<ul> <li>Vocational education and training programmes deliver the skills industry needs by incorporating skill standards set by industry-led Workforce Development Councils.</li> <li>Te Pūkenga operates as a single vocational education institution responsible for workplace and provider-based learning, with a focus on meeting the needs of regions, learners and communities.</li> <li>Regional Skills Leadership Groups enable better planning for regional labour markets and ensure that our workforce, education and immigration systems are working together to meet skills and labour market needs.</li> <li>Centres of Vocational Excellence enhance education system responsiveness, bringing together industry stakeholders, Workforce Development Councils, Te Pūkenga, Regional Skills Leadership Groups and leading researchers to share and collaborate on high-quality curriculum and programme design.</li> </ul>	Ongoing	MOE	Education providers, Māori, business and industry

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Objective 2: Support proactive tra	ansition planning			
3.2.1 Develop an equitable transition strategy.	A strategy that delivers a well-signalled and inclusive transition that maximises opportunities and minimises disruption and inequities.	2022–24	MBIE/MSD	Interest groups from across Aotearoa
3.2.2 Support regions and industries to manage the transition.	<ul> <li>Use the Regional Strategic Partnership Fund to support the development of more productive, resilient, sustainable, inclusive and Māori-enabling regional economies.</li> <li>Improve community wellbeing and regional partnerships through the Regional System Leadership framework.</li> </ul>	First emissions budget and ongoing	MBIE/MSD	Regions, local government, Māori, businesses, industry, unions, workers
	<ul> <li>Progress Industry Transformation Plans to transform industries to an agreed future state, including improved environmental outcomes.</li> </ul>			
3.2.3 Implement the Just Transition Partnerships Programme.	Implement Just Transition Partnerships in Taranaki, Southland and other regions facing transition challenges with tailored levels of support.  Publish suideness to support regional partners to develop their partnersh	First emissions budget and ongoing	MBIE	Regions, local government, Māori, businesses, industry, unions, workers
	<ul> <li>Publish guidance to support regional partners to develop their own just transition plans.</li> </ul>			
Objective 3: An affordable and in	clusive transition to support all New Zealanders			
3.3.1 Develop an income insurance scheme.	A New Zealand Income Insurance Scheme (subject to public consultation) to better protect workers if they lose their job through no fault of their own.	Consultation on the proposed design of the scheme: 2022	Government, BusinessNZ, New Zealand Council of Trade Unions	Business, workers
3.3.2 Improve welfare system income adequacy.	<ul> <li>Ensure that people have an adequate income and standard of living.</li> <li>Initiatives to support this include monitoring levels of support through initiatives such as main benefits, Working for Families tax credits and the Winter Energy Payment.</li> </ul>	First emissions budget and ongoing	MSD	Interest groups from across Aotearoa

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships	
3.3.3 Strengthen employ support services.	<ul> <li>Strengthened proactive employment-support service tailored to respond to different needs and priorities, to enable New Zealanders to prepare for, find and retain suitable employment. This includes a review of the mix of active labour market programmes required to support those who are at risk of displacement, or becoming unemployed, through the transition to a low emissions economy.</li> </ul>	First emissions budget and ongoing	MSD/MBIE/MOE	Workers, Māori, beneficiaries, BusinessNZ, New Zealand Council of Trade Unions, impacted regions, jobseekers	
Objective 4: Build the evidence base and tools to monitor and assess impacts					
3.4 Build the evidence and monitor and a impacts.	annually batter malian decima to annid an mitimate manetine increase of	First emissions budget and ongoing	MBIE/MSD/MfE	Interest groups from across Aotearoa	
Objective 5: Informed p	lic participation				
3.5.1 Inform low-emission choices through a Information Centre	provides a trusted source of information to promote and socialise the	2023	MfE	Māori, households, businesses, community groups	
3.5.2 Enable inclusive ar participatory clima responses.	<ul> <li>Investigation into ways of increasing public participation in climate policy and prioritising actions.</li> </ul>	2023	MfE	All New Zealanders	
3.5.3 Support localised a community-based solutions.	Options investigated to support communities and Māori to champion local actions and share ideas that encourage adoption of lowemissions behaviours.	2023	MfE	Māori, local government, community groups	

# Working with nature (Chapter 4)

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
4.1 Prioritise nature-based solutions.	<ul> <li>Where possible, nature-based solutions are prioritised in policy, planning design and decision-making over solutions that do not enhance nature. This will be for both carbon sequestration and climate change adaptation.</li> </ul>	2022 onwards	DOC/MfE	Māori, non-governmental organisations (NGOs), industry, local government
<ul> <li>4.2 Establish an integrated work programme to deliver climate, biodiversity and wider environmental outcomes. This work programme is focused on: <ol> <li>supporting restoration and protection of indigenous forests</li> <li>improving knowledge about nature-friendly carbon removals</li> <li>supporting native afforestation and restoration through the Carbon Neutral Government Programme (CNGP)</li> <li>investigating incentives for public and private investment in biodiversity.</li> </ol> </li> </ul>	<ul> <li>Better alignment between climate and biodiversity policy.         <ol> <li>Increased levels of native afforestation and restoration. Less reliance on exotic afforestation to meet targets.</li> <li>Evidence base to enable carbon sequestration from non-forestry vegetation, and management interventions such as pest control to be recognised in relevant policy and regulatory settings. Incentives for non-forestry vegetation, and management interventions are built into climate regulatory settings over time.</li> <li>CNGP offsetting in 2025 will include using native vegetation. The level of offsetting from native sequestration will increase over time.</li> <li>Increased levels of restoration, protection and planting of native eco-systems.</li> </ol> </li> </ul>	2022–25 i. 2022–23 onwards ii. 2022–26 iii. 2023–25 iv. 2022 onwards	DOC/MfE	Māori, industry, Crown Research Institutes (CRIs), NGOs, community groups, nurseries, landowners
4.3 Report on biodiversity outcomes.	Biodiversity impacts will be included in emissions reduction plan monitoring and reporting.	2022 onwards	DOC/MfE	CRIs, Māori, landowners

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
4.4 Encourage global efforts to use nature-based solutions.	<ul> <li>Aotearoa advocates for international recognition of well-implemented nature-based solutions as effective mitigation and adaptation measures that provide ecosystem and socio-economic co-benefits and safeguards.</li> <li>Aotearoa fulfills its Glasgow Leaders' Declaration on Forests and Land Use commitment to support global efforts to halt and reverse forest loss and land degradation by 2030, alongside its other international biodiversity and sustainability commitments. This includes ensuring our climate change efforts recognise the critical role of forests and sustainable land use for climate change mitigation and adaptation, biodiversity, indigenous peoples and local communities, and enabling the world to meet its sustainable development goals.</li> </ul>	2022 onwards	MFAT/MPI/DOC/ MfE	TPK, Pacific Regional Environment Programme, Intergovernmental Panel on Climate Change, Intergovernmental Panel on Biodiversity and Ecosystem Services, International Union for Conservation of Nature, United Nations Environment Programme, Convention on Biological Diversity
<ul> <li>4.5 Build an evidence base on blue carbo in Aotearoa. Research projects underway include: <ol> <li>researching coastal wetland sequestration (National Institute of Water and Atmospheric Research)</li> </ol> </li> </ul>	<ul> <li>Investigation of how outcomes from this research can be used to inform policy development and initiatives to protect and restore coastal ecosystems.</li> </ul>	2022 onwards	DOC/MfE	CRIs, private sector, universities, research organisations
<li>researching kelp contribution to carbon sequestration in marine sediments (Blue Carbon Services Limited)</li>				
<ul><li>iii. assessing present and future carbon storage capacity of the Fiordland seabed (University of Otago)</li></ul>				
<ul><li>iv. Sustainable Seas' work on seaweed and blue carbon.</li></ul>				

# **Emissions pricing (Chapter 5)**

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Focus area 1: NZ ETS settings				
5.1 Align New Zealand Emissions Trading Scheme (NZ ETS) settings with emissions budgets.	Annual adjustment of the NZ ETS unit and price-control settings to ensure they reflect Aotearoa New Zealand's climate ambitions and future emissions budgets.	Completed annually The 2023–27 settings will be published by the end of 2022.	MfE	NZ ETS participants, other NZ ETS users, Māori, government agencies and He Pou a Rangi – Climate Change Commission
Focus area 2: Adjust the NZ ETS to drive a	palance of gross and net emissions reductions			
5.2.1 Adjust the NZ ETS to drive a balance of gross and net emissions reductions.	Investigate options for adjusting the NZ ETS to drive an appropriate balance of gross and net emissions reductions.	2022 onwards	MfE	NZ ETS participants (including NZ ETS foresters), other NZ ETS users, Māori, government agencies
5.2.2 Investigate new sources of emissions removals.	Identification of potential changes to the NZ ETS that may be necessary to accommodate new types of emissions removals, to support net emissions reductions (dependent on inclusion in New Zealand's Greenhouse Gas Inventory).	2022 onwards	MfE	NZ ETS participants (including NZ ETS foresters), other NZ ETS users, Māori, government agencies
5.2.3 Assess how the NZ ETS can support indigenous biodiversity.	<ul> <li>Identification of potential changes to the NZ ETS that may be necessary to support indigenous biodiversity goals without compromising the scheme's primary function of delivering a strong and stable price signal to the economy.</li> </ul>	2022 onwards	MfE	NZ ETS participants (including NZ ETS foresters), other NZ ETS users, Māori, government agencies
5.2.4 Assess the role of the NZ ETS in supporting the Nationally Determined Contribution (NDC).	Identification of potential changes to the NZ ETS that may be necessary to reflect the role it will play in contributing to our NDC.	2022 onwards	MfE	NZ ETS participants (including NZ ETS foresters), other NZ ETS users, Māori, government agencies
Focus area 3: Market governance of the N	2 ETS			
5.3 Develop an overarching market governance framework.	A robust market governance framework for the NZ ETS that effectively mitigates market risks.	2022 onwards	MfE	NZ ETS participants, other NZ ETS users (including traders and advisers), Māori, government agencies and authorities

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Focus area 4: The risk of emissions leakage				
5.4.1 Update industrial allocation policy.	An update to industrial allocation policy that is compatible with emissions budgets in the short-term and removes over-allocation.	2022 onwards	MfE	Allocation recipients, government agencies
5.4.2 Investigate long-term options to address emissions leakage.	Assessment of emissions leakage risk in Aotearoa and long- term policy options to address any risks. The cement sector will be investigated initially.	2022 onwards	IRD/TSY	Allocation recipients, industries at risk of emissions leakage (cement sector initially), international trading partners, government agencies
Focus area 5: The voluntary carbon market				
5.5 Develop a voluntary carbon market framework.	Voluntary carbon market framework to drive emissions abatement in addition to what the NZ ETS incentivises.	2022 onwards	MfE	Private and public sector

# Funding and finance (Chapter 6)

Actio	ons for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
6.1	Establish the Climate Emergency Response Fund (CERF) to ensure the climate is prioritised in the Budget process.	The CERF will fund a number of initiatives throughout Budget 2022 and beyond, providing a long-term source of public funding for climate action.	2022 onwards	TSY	Government agencies
6.2	Issue Sovereign Green Bonds.	Money raised from green bonds will be used to support projects that help reach our climate objectives.	2022 onwards	TSY	
6.3	Build on the success of New Zealand Green Investment Finance (NZGIF).	NZGIF will continue to accelerate and facilitate investment in emissions reduction in Aotearoa.	Ongoing	NZGIF	
6.4	Issue the Crown Responsible Investment Framework to Crown Financial Institutions.	Crown Financial Institutions manage their portfolios to align with net-zero emissions by 2050.	Ongoing	TSY	
6.5	Support high-quality investment decisions.	Government guidance for CBAx has been updated to allow consistent decision making (including use of shadow emissions values).	Ongoing	TSY	Government agencies
6.6	Support investor decisions through world-first climate reporting legislation.	Investors are enabled to make better decisions, reflecting climate risks and opportunities.	Ongoing	MfE/MBIE	External Reporting Board, Financial Markets Authority (FMA), government agencies, financial sector
6.7	Support an integrated financial system.	The FMA has published guidance to support the growing market for integrated financial products.	Ongoing	FMA	
6.8	Support responsible investment through default KiwiSaver provider changes.	KiwiSaver default funds no longer invest in fossil fuel production.	Ongoing	MBIE/TSY	

Actio	ons for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
6.9	Collaborate with the finance sector to accelerate sustainable finance.	Phase two of the open-source guidance is produced by a public- private sector partnership (including the Aotearoa Circle's Centre for Sustainable Finance, private sector banks and MPI to support sustainable agriculture finance initiatives.	Ongoing	MPI	The Aotearoa Circle, the financial industry, Toitū Tahua: Centre for Sustainable Finance, government agencies
6.10	Implement the Carbon Neutral Government Programme (CNGP).	Data on emissions, emissions reduction targets, and reduction plans in place for all CNGP organisations. Government emissions, reduction targets and plans in place for CNGP organisations, emissions reductions across government.	Establishment 2022–25, then ongoing	MfE	Government agencies, suppliers
6.11	Apply the Government Procurement Rules to reduce emissions.	Existing framework, requiring focus on the procurement of low-emissions and low-waste goods, assets, services and works.	Ongoing	MBIE	Government agencies, suppliers

# Planning and infrastructure (Chapter 7)

Actio	ons for delivery	roposed outputs Timeline Lead (support)	Key stakeholders/partnerships
7.1	Improve the resource management system to promote lower emissions and climate resilience.	Embed climate outcomes in new legislation (eg, the Natural and Built Environments Act and Strategic Planning Act).  Assess existing and emerging national direction against the policy intent of the emissions reduction plan.	Māori, government agencies, including Te Waihanga, local government, industry stakeholders
7.2	Support emissions reductions and climate resilience via policy, guidelines, direction and partnerships on housing and urban development.	Implement urban-development and housing policies and work programmes that include climate change objectives.  Introduce urban design guidance to support local authorities to deliver low emissions urban design initiatives.  2022 onwards  Kotahi, Kāinga Ora)	Local government, Māori, government agencies
7.3	Address infrastructure funding and financing challenges.	Policy changes to address infrastructure funding and financing challenges in a way that aligns with emissions reductions and climate resilience objectives (and other objectives).  TSY/MOT/HUD (Te Waihanga, MfE, DIA)	Local government, government agencies
7.4	Improve the evidence base and tools for understanding and assessing urban development and infrastructure emissions.	Improve the evidence base and develop a nationally consistent toolkit to enable quantification of the emissions impact of urban development and infrastructure decisions.  Assess the extent to which existing policy and programmes are aligned with emissions reduction goals.  MfE/HUD (Te Waihanga, MOT, Kāinga Ora, Waka Kotahi)	Local government, infrastructure providers
7.5	Promote innovation in low- emissions, liveable neighbourhoods, through Crown-led urban regeneration projects.	Identify and aim to pilot innovative approaches that deliver low- emissions alternatives to traditional neighbourhood and infrastructure approaches. Kāinga Ora – Homes and Communities may lead this work within an existing project or projects.  Kāinga Ora (HUD, Waka Kotahi, MOT, MfE, Te Waihanga)	Māori, local government, infrastructure providers
7.6	Identify ways to support the private sector to deliver lower emissions development.	Identify ways to support the private sector to deliver urban development that has a low emissions profile.  MfE/HUD	Local government, private sector partners, including not-for-profit, community and iwi/Māori housing providers
7.7	Integrate climate mitigation into government decisions on infrastructure.	Review central government frameworks, guidelines and tools, to factor climate outcomes into decision-making on infrastructure investment.  2022–23  TSY (Te Waihanga, MOT, Waka Kotahi, HUD, MfE)	Local government, government agencies, industry stakeholders

#### Research, science, innovation and technology (Chapter 8)

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
8.1.1 Establish a portfolio of Climate Innovation Platforms to support and coordinate strategic, effective and innovative initiatives.	Provide the mechanism for Aotearoa New Zealand's investment in climate innovation across the economy. Climate innovation platforms will coordinate action and provide the enabling environment for key challenges and opportunities in our shift to a low-emissions future to be addressed at pace.	Portfolio of platforms are anticipated to be established in first emissions budget and through subsequent emissions budgets.	Cross government	Government agencies, companies, research organisations, Māori, communities
8.1.2 Scale up and further target existing initiatives towards climate change.	Existing policy initiatives to support sectors and communities to mitigate and adapt to climate change will be scaled up to accelerate the transition.	2022 onwards	MBIE	Māori, private sector, Crown Research Institutions (CRIs), universities, research organisations
8.2 Te Ara Paerangi Future Pathways science-system reform programme.	Aotearoa New Zealand's science system reform programme will orientate and enhance the system for the future. This includes setting priorities for the system, including addressing Aotearoa New Zealand's challenges associated with transitioning to a low-emissions economy and society.	Underway	MBIE	Research, science and innovation sector, Māori, other government agencies, private sector, public
8.3 Vision Mātauranga policy.	Supports the science and innovation potential of Māori knowledge, particularly for sustainability programmes.	Ongoing – baselined initiative	MBIE	Māori research community, government agencies
8.4 The Endeavour Fund.	Invests in a wide range of research. Newly introduced signals place emphasis on climate and emissions reduction research.	Ongoing – baselined initiative	MBIE	Research, science and innovation sector
8.5 The Catalyst Fund will continue to support international research collaborations, linking Aotearoa to the international knowledge frontier.	Funds the development of international collaborations which take advantage of international science and innovation for Aotearoa New Zealand's benefit.	Ongoing – baselined initiative	MBIE	Research organisations and companies, both domestic and international

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
8.6 The Innovative Partnerships Programme.	New frontier international research and development that will play a role in the country's future low- emissions economy will have been attracted to Aotearoa.	Ongoing – baselined initiative	MBIE	Government agencies, research organisations, regulators and both domestic and international companies
8.7 Te Pūnaha Hihiko: Vision Mātauranga Capability Fund.	Seeds and grows new research capability and connections between Māori and the research, science and innovation system.	Ongoing – baselined initiative	MBIE	Research institutions and Māori-led organisations
8.8 The Strategic Science Investment Fund (SSIF) will enable the continued strategic investment in Aotearoa New Zealand's science priorities.	The SSIF platform provides an active partnership between the Government and research organisations to deliver Government science priorities.	Ongoing – baselined initiative	MBIE	Research, science and innovation sector, private sector, Māori research community, government agencies,
8.9 Research-industry partnership networks will continue connecting industry to the science system, to help solve sector problems.	Pool knowledge and resources to solve sector problems through connecting the science system to industry.	Ongoing – baselined initiative	MBIE	Callaghan Innovation, companies, research organisations
8.10 The start-up support programme will continue to be enhanced, to provide the support required to foster the development of new start-up businesses.	Fostering innovative start-up companies through the incubator and acceleration programme, including cleantech or green start-ups that address social and environmental challenges.	Ongoing – baselined initiative	MBIE	Callaghan Innovation, companies, research organisations
8.11 The International Science Partnerships Programme.	The creation and strengthening of bi-lateral and multi- lateral relationships enables Aotearoa to both contribute to and benefit from leading research, science and innovation.	Ongoing	MBIE	Research organisations and companies both domestic and international
8.12 The Marsden Fund.	Supports excellence in science, engineering, maths, social sciences and the humanities in Aotearoa by providing grants for investigator-initiated research.	Ongoing – baselined initiative	MBIE	CRIs, universities, independent research organisations
8.13 Continue to support research and development through innovation grants and incentives.	Support Aotearoa businesses to conduct research and development, enabling them to grow and address the challenges they face.	Ongoing – expansion from 2023	МВІЕ	Private sector, Māori incorporations and trusts

# Circular economy and bioeconomy (Chapter 9)

Acti	ons for delivery	Proposed outputs	Timeline	Lead (support)	Key stakeholders/partnerships
9.1	Commence a Circular Economy and Bioeconomy Strategy.	<ul> <li>A Circular Economy and Bioeconomy Strategy, that aligns with the Waste Strategy's vision and principles, has meaningful engagement with Māori and other key stakeholders, and will include the five actions below.</li> <li>9.1.1 Move to a more circular public sector.</li> <li>9.1.2 Innovation, skills and investment.</li> <li>9.1.3 Align regulatory systems and the business environment.</li> <li>9.1.4 Enable Māori to shape and benefit from the transition to a circular economy and thriving bioeconomy.</li> <li>9.1.5 A bioeconomy framework to guide the use of our bioresources and maximise wellbeing.</li> </ul>	2022–25	MBIE	Government agencies, local government, industry, communities, Māori
9.2	Increase data collection and research to measure baselines and indicators.	Aotearoa can learn a lot from other countries. However, Aotearoa also needs to build its own evidence base, to develop circular approaches that will work in its unique context. The Government will:     measure the circularity of our economy, identifying a baseline and a measurement framework with indicators     develop maps that show the flow of resources across systems and sectors     build evidence about impacts through data collection and research.	2022–23	MBIE	Government agencies, research institutes
9.3	Integrate circular practices across government, communities and businesses.	The Government will build on public and private-sector achievements, to unlock the potential of the circular economy. Examples include the Government's procurement policy, which supports a circular economy.	2022–23	MBIE	Government agencies, local government, industry, Māori
9.4	Support businesses moving to circular economy models.	The Government will investigate opportunities to support industry-led and regional programmes that enable businesses to adopt circular economy models.	2022–24	MBIE	Industry and industry groups such as Sustainable Business Network

Acti	ons for delivery	Proposed outputs	Timeline	Lead (support)	Key stakeholders/partnerships
9.5	Investigate a circular economy hub.	The Government will consider partnering with key industry, Māori and local-government stakeholders to launch a circular economy hub, to support deployment of circular practices in Aotearoa.	2022–24	MBIE	Government agencies, local government, industry, communities, Māori
9.6	Accelerate sustainable and secure supply and uptake of bioenergy in Aotearoa.	The Government will set up a work programme that is consistent with the bioeconomy objectives and energy strategy, and takes account of the needs of rural communities. This will consider:  — establishing a baseline for the supply and demand of bioenergy feed stocks	2022–24	MBIE (MPI)	Government agencies, EECA, regional councils, Māori, industry
		<ul> <li>developing a framework to choose the right type of bioenergy supply from our bioresources</li> </ul>			
		<ul> <li>considering the regulatory framework for bioenergy markets</li> <li>helping to match the supply of bioenergy with demand</li> <li>undertaking demonstration projects and private-public partnerships.</li> </ul>			
9.7	Support research and development and accelerate investment in the bioeconomy to commercialise bioeconomy technology and products.	This action will build on existing research and development funding in this area, as well as potentially new initiatives to turn our bioresources into new bio-based products and biomaterials (eg, low-carbon wood products, marine derived pharmaceuticals).	2022–24	MBIE (MPI)	Government agencies, local government, industry, communities, Māori

# Transport (Chapter 10)

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships			
Focus area 1: Reduce reliance on cars and so	upport people to walk, cycle and use public transport						
Action 10.1.1: Integrate land use planning, u	Action 10.1.1: Integrate land use planning, urban development and transport planning and investments to reduce transport emissions						
Better integrate transport planning and land use planning through the resource management reforms.	<ul> <li>Regional Land Transport Plans (RLTPs) will have regard to Regional Spatial Strategies and Natural and Built Environment Act plans in their development.</li> </ul>	2023	MfE/MOT	Central government agencies, infrastructure agencies and local government			
Develop the evidence base and tools to quantify and assess transport emissions from proposed transport and urban developments.	Assessment tools published.	2023–24	MOT/Waka Kotahi/HUD	HUD, infrastructure agencies and local government			
Assess spatial plans to understand emissions implications and key risks and opportunities for reducing emissions.	Completed assessments of joint spatial plans and implementation plans for all Urban Growth Partnerships, to understand transport emission and funding impacts, and to identify key risks and opportunities for reducing transport emissions.	2022–23	Urban growth partners	Central government agencies, infrastructure agencies and local government			
Incorporate transport emissions impact assessments into transport plans.	RLTPS and amended Resource Management Act 1991 plans incorporate assessments of vehicle kilometres travelled (VKT) by light vehicles, mode share, and transport emissions. These assessments will be required to meet eligibility for transport funding (see funding settings below).	2024	Waka Kotahi/local government	Central government agencies, infrastructure agencies and local government			

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Identify ways to incentivise developments that avoid/reduce the need to travel and encourage travel by public transport, walking and cycling.	Identify transport sector and planning sector incentives and investment rules to incentivise low-emission urban form that avoids/reduces travel and encourages travel by public and active modes.	Ву 2025	MOT/HUD	Local government, infrastructure agencies, development sector, Māori
Require new investments for transport projects to demonstrate how they will contribute to emissions-reduction objectives and set a high threshold for approving new investments for any transport projects if they are inconsistent with emissions-reduction objectives.	Requirements and guidance developed for transport investments, to demonstrate how these contribute to emissions reduction objectives when being considered for transport funding from central government, and a high threshold set to guide investment decisions.	Requirements covering the use of the National Land Transport Fund (NLTF) will be set in 2024–25.  Requirements for other sources of central government funding will be developed from 2022–24 and set by 2025.	мот	TSY, HUD, local government, Kāinga Ora, transport agencies
Action 10.1.2: Support people to walk, cycle	and use public transport			
A: Planning – Design programmes to reduce	total light fleet VKT in our largest cities			
Set sub-national VKT reduction targets for Aotearoa New Zealand's major urban areas (Tiers 1 and $2^1$ ) by the end of 2022.	Sub-national light vehicle VKT targets for Tier 1 and 2 areas are published, following consultation with local government, iwi/Māori and community representatives. These targets will align with the national target of reducing total kilometres travelled by the light fleet by 20 per cent by 2035.	By the end of 2022	МОТ	Local government, transport agencies, Māori
Revise Waka Kotahi's national mode shift plan (Keeping Cities Moving) to ensure nationally led activities align with the pace and scale of VKT reduction and mode shift required in urban areas.	Revised national mode-shift plan published.	2022–23	Waka Kotahi	MOT, local government

<sup>&</sup>lt;sup>1</sup> Tier 1: Auckland, Hamilton, Tauranga, Wellington, Christchurch. Tier 2: Whangārei, Rotorua, New Plymouth, Napier, Hastings, Palmerston North, Nelson Tasman, Queenstown, Dunedin.

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Develop VKT reduction programmes for Aotearoa New Zealand's major urban areas (Tiers 1 and 2) in partnership with local government, Māori and community representatives.	VKT reduction programmes for Tier 1 and 2 areas published. These programmes will identify the combination of activities required to meet subnational VKT reduction targets by 2035, the funding required to deliver them at the scale and pace required, and the critical dependencies to achieve targets.	2023–24	Waka Kotahi/local government	Central government agencies, local government, Māori, community representatives
Action 10.1.2: Support people to walk, cycle	and use public transport			
B: Public transport – Improve the reach, free	quency, and quality of public transport			
Deliver a national public transport strategy.	<ul> <li>Public transport national strategy published that provides a set of principles for planning and funding diverse kinds of public transport, within and between towns and cities, to enable the development of a national public transport network.</li> <li>Alongside the strategy, a business case toolkit will be published that will provide guidance on the specific viability of interregional passenger rail, coach and bus services, and will improve the planning, funding and delivery of these projects.</li> </ul>	Ву 2025	МОТ	Waka Kotahi, local government, public transport operators
Complete a review of the Public Transport Operating Model (PTOM).	<ul> <li>The Government decides on any reforms to the planning, procurement and delivery of public transport services that are necessary to support the Government's objectives for public transport and wider objectives.</li> <li>Following the Government's decisions, implementing any reforms through changes to the policy and legislative framework.</li> </ul>	PTOM review completed mid 2022. Implementation in 2022–23	мот	Waka Kotahi, local government, public transport operators
Deliver major public transport service and infrastructure improvements in Auckland.	Rapid transit, bus and ferry improvements, as outlined in the Auckland Transport Alignment Project (ATAP), are progressed. This includes City	Eastern Busway: 2025 City Rail Link: 2024	ATAP partnership	Central government, local government, Māori, other key partners

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
	<ul> <li>Rail Link, light rail along the City Centre to Māngere corridor, busway extensions to the north and east, rail network upgrades, bus lane programmes and service improvements.</li> <li>Work will also be undertaken with Auckland Council to agree a plan for development of Auckland's rapid transit network for the next 30 years.</li> <li>In addition, an investigation will be completed into what further public transport infrastructure and services improvements are required to significantly increase Auckland's public transport mode share by 2035.</li> </ul>	Northern Busway extension: 2022 Timing for other projects to be discussed with Auckland Council.		
Deliver major public transport service and infrastructure improvements in Wellington.	<ul> <li>Over the next three years, the Government will provide its share of funding to deliver the three-year programme and to progress other programme elements for Let's Get Wellington Moving's (LGWM). The Government will confirm its funding contribution beyond this timeframe following the completion of business cases. This will help to progress the delivery of bus priority measures, a mass-transit system between the railway station, hospital and eastern and/or southern suburbs, improvements to placemaking, walking and cycling facilities, and improvements to access to the Interislander ferries.</li> <li>Planning completed and investment made in Wellington's commuter rail and bus network.</li> </ul>	By 2025	LGWM partnership (Greater Wellington City Council, Wellington City Council and Waka Kotahi)	Central government, local government, Māori, other key partners

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Deliver major public transport service and infrastructure improvements in Christchurch.	Progress work on the Greater Christchurch Public Transport Futures Project, including:  working to support increased service frequencies and options to accelerate implementation  continuing to work with the Greater Christchurch partnership on development of a possible future mass-rapid-transit system.  Continue to work with the Greater Christchurch partnership to develop a transport plan and investment programme, including opportunities for supporting mode shift through travel-demand management measures.	2024	Greater Christchurch partnership	Central government, local government, Māori, other key partners
Deliver nationally integrated ticketing for public transport.	National integrated ticketing delivered.	ТВС	Waka Kotahi	Local government, public transport operators
Support a major uplift in all urban bus networks nationwide, including by improving bus driver terms and conditions.	Scope of intervention to be determined, however, will commence with improvements to bus driver terms and conditions.	Early consideration starts in 2022	MOT/Waka Kotahi/ local government	Local government, public transport operators
Consider improvements to, and new opportunities for, interregional public transport services.	Investigation completed.	By 2025	MOT initially	Local government, public transport operators
Identify and consider addressing barriers to integrating public transport with active and micro-mobility modes and networks.	Barriers to integrating public and active transport identified.	By 2025	MOT/Waka Kotahi	Local government, public transport, active transport and micro-mobility stakeholders

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships		
Action 10.1.2: Support people to walk, cycle	and use public transport					
C: Walking and cycling – Deliver a step-change in cycling and walking rates						
Substantially improve infrastructure for walking and cycling.	Improved walking and cycling infrastructure implemented across regions.	2022 and ongoing	Waka Kotahi/local government.	Local government		
Support initiatives to increase the uptake of e-bikes.	Scope of intervention to be determined.	Scoping completed in 2022	мот	Waka Kotahi, e-bike providers		
Deliver a national plan to significantly increase the safety and attractiveness of cycling and micro-mobility.	National cycling and micro-mobility plan delivered.	2022–23	Waka Kotahi	MOT, local government, Māori, community groups		
Deliver a national plan to significantly increase the safety and attractiveness of walking.	National walking plan delivered.	2022–23	Waka Kotahi	MOT, local government, Māori, community groups		
Provide support for local government to develop network plans for walking and cycling.	Scope of intervention to be discussed with local government. However, it will include consideration of how to support local government to develop network plans and delivery strategies targeting emissions reduction for short- to medium-length trips. It will also consider how to boost capabilities in designing and delivering cycling/scooting and walking improvements at pace.	Timing to be discussed with local government.	Waka Kotahi	Local government		
Implement Accessible Streets proposals nationwide to support safe walking, cycling/scootering and other active modes.	Accessible Streets package implemented.     Accessible Streets is a collection of rule changes designed to increase the safety and accessibility of our footpaths, shared paths, cycle paths and cycle lanes.	2022–23	MOT/Waka Kotahi	Local government		

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships		
Action 10.1.2: Support people to walk, cycle and use public transport						
D: Reshaping streets – Accelerate widespre	ad street changes to support public transport, active trav	el and placemaking				
Incentivise local government to quickly deliver bike/scooter networks, dedicated bus lanes and walking improvements by reallocating street space (including during street renewals).	<ul> <li>Increased funding available to accelerate street changes that make places better for walking, cycling and public transport.</li> <li>Expectations set for Waka Kotahi to develop an accelerated funding pathway to support rapid delivery of street/road changes that encourage travel by public transport, walking and cycling.</li> <li>Policy and funding settings reviewed to ensure that delivery agencies maximise opportunities to 'build back better' when doing street renewals, make streets safer and better places for people travelling by foot, bike, other wheeled mobility and public transport, and to improve the urban environment.</li> </ul>	By 2025	МОТ	Waka Kotahi, local government		
Consider regulatory changes to make it simpler and quicker to make street changes.	Regulatory changes are considered by the Government. These include:     improving the consultation process for reallocating street space and managing/restricting vehicle movements     removing any unnecessary regulatory barriers that limit the ability of road controlling authorities to make street changes.	2022	MOT/Waka Kotahi	Local government, community groups		
Scale up Waka Kotahi's existing Innovating Streets for People programme to rapidly trial street changes.	Waka Kotahi's Innovating Streets for People programme is extended and expanded.	2022	Waka Kotahi	Local government		

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Action 10.1.2: Support people to walk, cycle	and use public transport			
E: School travel – Make school travel greene	er and healthier			
Set targets for active travel to and from schools and work with councils and schools to implement active transport plans arounds schools.	Targets for active travel to/from schools are published, and work undertaken with councils and schools to implement active transport plans.	By 2025	MOT/Waka Kotahi/MOE	Local government, schools
Improve walking and cycling infrastructure to and along school routes, in schools, and in surrounding neighbourhoods.	Walking and cycling infrastructure improvements made to/along school routes, in schools, and in surrounding neighbourhoods. This includes improvements to key crossing points, traffic calming measures, footpath widening and protected cycleways where possible, and using infrastructure and operation of school grounds to prioritise travel to school by active modes.	By 2025	Waka Kotahi/local government	MOE, local government, schools
Implement the Tackling Unsafe Speeds programme to ensure safer speed limits around schools.	<ul> <li>New Land Transport Rule: Setting of Speeds Limits in place by late May 2022.</li> <li>Safer speed limits, in line with the new rule, in place around 40 per cent of schools under road controlling authorities' responsibility by 30 June 2024 and around all schools by end of 2027.</li> </ul>	2022 2024–27	MOT/Waka Kotahi	Local government, schools, New Zealand Police
Investigate opportunities to improve school bus services.	School Transport Assistance review completed.	2024–25	МОЕ	MOT, Waka Kotahi, local government, schools
Explore dedicated active transport funding and/or education programmes for schools.	Investigation into dedicated active travel fund for schools completed, including considering funding for school bike-leasing schemes and bike-education classes.	By 2025	MOT/Waka Kotahi	MOE, local government

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships		
Action 10.1.2: Support people to walk, cycle and use public transport						
F: Equity – Improve access and travel choice	for the transport disadvantaged					
Work with local government to deliver public transport, cycling and walking improvements in low socio-economic areas and for transport disadvantaged groups (including disabled people).	<ul> <li>Public transport improvements delivered in low socio-economic areas (where appropriate, based on population size and distribution). This includes improving personal security at public transport stops and stations.</li> </ul>	By 2025	Waka Kotahi	Local government, Kāinga Ora, MSD, welfare groups		
	Demand-responsive public transport services trialled in low-income areas which are lower density and where traditional public transport services are less viable due to lower patronage.					
	Walking and cycling improvements made in low socio-economic areas, including:					
	<ul> <li>improving the safety, security and connectivity of footpaths and crossings</li> </ul>					
	<ul> <li>improving the quantity, quality and connectivity of cycleways, and providing secure cycling storage (including in social housing developments).</li> </ul>					
Investigate opportunities to improve access for people living in social housing through shared mobility schemes, such as car-share, carpool, and bike/scooter schemes.	Investigation completed.	By 2025	MOT initially	Local government, Kāinga Ora, MSD, welfare groups		
Work with local government to make public transport more affordable, with a particular focus on low-income users.	This could include reducing public transport fares, supporting other forms of targeted public transport fare concessions and investigating how public transport fare pricing structures could be adapted to improve equity and encourage mode-shift.	From 2022	мот	Waka Kotahi, MSD, MOH, local government, public transport operators, community groups		

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships			
	Action 10.1.2: Support people to walk, cycle and use public transport 5: Rural areas – Investigate the potential for public transport, walking and cycling in rural and provincial areas						
Investigate the potential for public transport, shared services, walking and cycling in rural and provincial areas, particularly for the transport disadvantaged.	Investigation completed. This includes investigating the potential for better public transport to and between rural and provincial areas, support for community transport services (eg, not-for-profit local transport solutions), street improvements that make it safer to walk and cycle, and active and shared low-emission school travel options.	By 2025	мот	Waka Kotahi, local government			
Investigate further opportunities to provide on-demand public transport in provincial towns, in light of positive signs from the MyWay trial in Timaru.	Investigation completed.	Ву 2025	Waka Kotahi	Local government, Māori, public transport operators			
Action 10.1.3: Enable congestion charging ar	nd investigate other pricing and demand management too	ols to reduce transport emission	ns				
Consider progressing legislative changes to enable congestion charging.	<ul> <li>In the second half of 2022, the Government will decide whether to progress legislative changes to enable congestion charging in Aotearoa, taking into account how best to align network efficiency objectives with emissions reduction plan targets and objectives.</li> <li>Legislation development will then take two years.</li> </ul>	2022	МОТ	Waka Kotahi and Local government			
Work with Auckland Council on a detailed design of congestion charging for Auckland (contingent on whether the Government decided to enable congestion charging).	Detailed design of congestion charging for Auckland progressed.	Contingent on outcome of decisions made in 2022 (see above)	MOT/Auckland Council	Waka Kotahi, Auckland Transport			

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Investigate ways to mitigate the adverse impacts of congestion charging on low-income individuals and households (contingent on the Government decision to enable congestion charging).	Investigation completed.	Contingent on outcome of decisions made in 2022 (see above)	мот	Central government agencies (eg, MSD), local government, Māori, community groups
Engage with Wellington City Council and Greater Wellington Regional Council in response to their request for congestion charging (contingent on the Government decision to enable congestion charging).	Scope of intervention to be established.	Contingent on outcome of decisions made in 2022 (see above)	мот	Wellington City Council, Greater Wellington Regional Council
Monitor interest in congestion charging from other councils and engage as necessary (contingent on the Government decision to enable congestion charging).	Scope of intervention to be established.	Contingent on outcome of decisions made in 2022 (see above)	МОТ	Local government
Investigate additional pricing tools to reduce transport emissions (including parking pricing, VKT pricing and lowemissions zones).	<ul> <li>Investigation completed into the most effective combination of additional pricing tools to reduce emissions from land transport, including parking pricing, VKT pricing and low emissions zones.</li> <li>Changes to legislative settings will then be considered, to enable the use of additional pricing tools, and an investigation into the equity impact of different tools will be completed.</li> </ul>	By 2024	МОТ	Waka Kotahi, local government
Review the revenue system in response to longer-term changes in the way New Zealanders travel.	Revenue system options developed. This will consider the longer-term changes in the way New Zealanders travel, and the shifting expectations about the purpose and function of the transport system.	2025	мот	Waka Kotahi, local government

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Explore a pilot Mobility as a Service project (MaaS).	Investigation into pilot completed. This will determine the effectiveness of the platform to shape transport outcomes and to encourage mode-shift. MaaS is a term describing the application of the 'as a service' concept to mobility and transport options.	By 2025	мот	Waka Kotahi, local government
Action 10.1.4: Require roadway expansion a	nd investment in new highways to be consistent with tra	nsport targets		
Establish a high threshold for new investments to expand roads, including new highway projects, if the expansion is inconsistent with emissions-related objectives.	Scope of the intervention and how it will be implemented to be confirmed.	Any requirements covering the use of NLTF will be set in 2024–25. Requirements for other sources of central government funding will be developed from 2022–24 and set by 2025.	МОТ	TSY, HUD, local government, Kainga Ora, transport agencies
Action 10.1.5: Embed nature-based solution	s as part of our response to reducing transport emissions	and improving climate adapta	ion and biodiversity outco	omes
Consider the role of nature-based solutions in reducing transport emissions and contributing to other benefits.	Investigation completed into the role that nature-based solutions could play in reducing transport emissions and contributing to other benefits. This will require analysing the transport system's potential to contribute to carbon sequestration, and whether there are any barriers to funding, delivering and maintaining nature-based solutions in the transport system.	By 2025	мот	MfE, DOC, Waka Kotahi, local government
Ensure transport policy and investment settings encourage the use of nature-based solutions, including protecting existing carbon sinks and support for new long-term carbon sequestration opportunities where appropriate.	Scope of intervention and how it will be implemented to be confirmed.	By 2025	мот	MfE, DOC, Waka Kotahi, local government

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Focus area 2: Rapidly adopt low-emissions vo	ehicles			
Action 10.2.1: Accelerate the uptake of low-	emission vehicles			
Continue to incentivise the uptake of low- and zero-emissions vehicles through the Clean Vehicle Discount scheme and consider the future of the Road User Charge exemption for light vehicles beyond 2024.	<ul> <li>Clean Vehicle Discount continued.</li> <li>Road User Charge exemption review completed.</li> </ul>	The Clean Vehicle Discount commenced in July 2021. The Road User Charge exemption has been extended until end of March 2024. Timeframe of review TBC	MOT/Waka Kotahi	Motor-vehicle industry
Implement the Clean Vehicle Standard to increase the quantity and variety of lowand zero-emissions vehicles supplied to Aotearoa.	Clean Vehicle Standard implemented.	Legislated targets commence in 2023.	MOT/Waka Kotahi	Motor-vehicle industry
Consider further measures needed – from 2027 – to increase the fuel efficiency of the imported fleet and avoid high-emitting vehicles being dumped onto our market. This will help avoid Aotearoa becoming a dumping ground for high-emitting vehicles.	<ul> <li>Decision made on further vehicle CO<sub>2</sub> targets beyond 2027.</li> </ul>	Late 2022	мот	Waka Kotahi, motor-vehicle industry, electricity and fuels sectors
Set a maximum $CO_2$ limit or penalties for individual light internal combustion engine vehicle imports to tackle the highest emitting vehicles.	<ul> <li>Maximum CO<sub>2</sub> limit set that will operate as a grams-CO<sub>2</sub>-per-kilometre threshold above which vehicles cannot be imported, or very high penalties set for these types of vehicles as part of the Clean Vehicle Discount.</li> </ul>	Government approval in 2022 Limit or penalties in place from 2023	МОТ	Waka Kotahi, motor-vehicle industry
Establish whether the Clean Vehicle Discount can be extended to other vehicle	Review completed.	2022	МОТ	Waka Kotahi, motor-vehicle industry

classes.

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Investigate how the tax system could support clean transport options to ensure low-emissions transport options are not disadvantaged.	Review completed. This includes reviewing:	2022	IRD	MOT, Waka Kotahi
Determine whether legislative barriers preventing the use of some types of light low-emissions vehicles can be reduced without unduly comprising safety objectives.	Review completed.	2024	мот	Waka Kotahi
Action 10.2.2: Make low-emissions vehicles	more accessible for low-income and transport-disadvant	aged New Zealanders		
Support social leasing schemes to make access to cleaner vehicles affordable for low-income households.	Trial of a social leasing scheme established.	Government approval in 2022 Trial in 2023	мот	Waka Kotahi, HUD, Kāinga Ora, MSD
Implement an equity-oriented vehicle scrap-and-replace scheme to make cleaner vehicles and low-emissions alternatives affordable for low-income households.	Trial of equity-oriented scrap-and-replace scheme established.	Government approval in 2022 Trial in 2023	мот	Waka Kotahi, MSD, vehicle and scrappage industries
Investigate whether further targeted support is required to make low-emissions vehicles more accessible and affordable for other disadvantaged groups and communities.	Investigation completed. This includes considering whether additional support is required to support disabled people to purchase suitable electric vehicles (EV) (eg, vehicles that may need to be larger to transport wheelchairs).	By 2025	мот	Waka Kotahi, MSD, MOH, Office for Disability Issues
Action 10.2.3: Support the rollout of EV char	ging infrastructure			
Continue to develop an EV-charging infrastructure work programme to	Cross-agency EV-charging infrastructure work programme will be established covering both public and private charging infrastructure.	2022	мот	MBIE, Waka Kotahi, EECA, EA

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
coordinate policy, investment and engagement with stakeholders.				
Complete a national EV-charging infrastructure strategy to set out the Government's vision and policy objectives (for both the public and private sectors) around EV charging over future emissions budget periods.	Strategy completed.	2022	МОТ	MBIE, Waka Kotahi, EECA, key industry stakeholders (eg, utility companies and charging providers)
Review the Electricity (Safety) Regulations 2010 to cover the safety needs associated with charging EVs.	Evaluation of how the Electricity (Safety)     Regulations can best help enable EV uptake completed.	By 2023	MOT/WorkSafe	MBIE, Waka Kotahi, EECA, EA

#### Focus area 3: Begin work now to decarbonise heavy transport and freight

Action 10.3.1: Support the decarbonisation	Action 10.3.1: Support the decarbonisation of freight					
Develop a national freight and supply chain strategy with industry. This strategy will take a long-term, system wide view of the freight and supply chain. Working with industry, it will identify how to best decarbonise the freight-transport system to be net-zero by 2050, while improving the efficiency and competitiveness of the supply chain.	Strategy completed.	Strategy to be published in mid-2023	МОТ	Local government, freight sector, Te Tiriti o Waitangi partners		
Continue to implement the New Zealand Rail Plan and support coastal shipping.	<ul> <li>Aotearoa New Zealand's rail network restored to a resilient and reliable state.</li> <li>Successful investment through the coastal shipping activity class.</li> </ul>	Continuous, 2021–24	МОТ	KiwiRail, Waka Kotahi, TSY, freight sector, coastal-shipping industry		
Provide funding to support the freight sector to purchase zero- and low-emissions trucks.	More funding and policy introduced to support the freight sector to purchase zero- and low-emissions trucks.	From 2022	MOT/EECA	Waka Kotahi, EECA, freight sector		

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Establish a freight decarbonisation unit to help decarbonise the freight sector through regulation and investment policy.	Unit established.	2022	мот	Waka Kotahi, EECA, freight sector
<ul> <li>Evaluate options to:</li> <li>improve the efficiency of heavy vehicles</li> <li>regulate heavy vehicle imports to reduce emissions</li> <li>support infrastructure development for green fuels and fast charging for heavy vehicles</li> <li>reduce emissions from heavy vehicles operated or procured through government activities.</li> </ul>	Evaluations completed.	Late 2022–early 2023	МОТ	Waka Kotahi, EECA, freight sector
Evaluate options for road user charges (RUC) to support emissions reductions, including whether to extend the heavy-EV exemption from RUC and whether to set RUC rates differently by fuel type/emissions.	Evaluation completed.	Late 2023–mid 2024	мот	Waka Kotahi, EECA, freight sector
Consider the implementation timing of Euro VI standard for heavy vehicles.	Implementation timeframe agreed.	2022	МОТ	Waka Kotahi, EECA, vehicle importers, freight sector
Action 10.3.2: Accelerate the decarbonisation	on of the public transport bus fleet			
Require only zero-emissions public transport buses to be purchased by 2025.  Set a target to decarbonise the public transport bus fleet by 2035, and  support regional councils to achieve these outcomes through additional funding.	<ul> <li>2025 zero-emissions bus mandate established.</li> <li>Target set, including through the Government Policy Statement on Land Transport (GPS-LT).</li> <li>Funding provided to regional councils.</li> </ul>	2025 2022–24 2022	МОТ	Waka Kotahi, relevant local government authorities, public transport operators

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Identify and remove barriers to decarbonisation of the public transport bus fleet through the PTOM review.	Policy decisions on any reforms.	2022–2026	МОТ	Waka Kotahi, relevant local government authorities, public transport operators
Action 10.3.3: Work to decarbonise aviation				
Develop and set specific targets for decarbonising domestic aviation in line with 2050 targets.	Targets developed and set.	By 2023	МОТ	MfE, MBIE, Tourism NZ (TNZ), key industry parties
Establish a public-private leadership body focussed on decarbonising aviation, including operational efficiencies, infrastructure improvements, and frameworks to encourage research, development and innovation in sustainable aviation.	Public-private leadership body established.	By end of 2022	МОТ	Ministers of Transport and Energy, and leaders/senior representatives at MOT, MfE, Civil Aviation Authority, SCION Research, TNZ, alongside key private-sector organisations across aviation, energy, research and sustainability sectors
Implement a sustainable aviation fuel (SAF) mandate.	<ul> <li>Proposed settings for a SAF-specific mandate developed by December 2022, once the findings of Air New Zealand's SAF feasibility study are available.</li> <li>SAF mandate established.</li> </ul>	Policy recommendations on the design of a SAF mandate to be developed by December 2022.	MOT/MBIE	Local aviation bodies, such as Air New Zealand and other domestic airline carriers/fuel suppliers
Action 10.3.4: Progress the decarbonisation	of maritime transport			
Develop a national action plan to reduce commercial and recreational maritime emissions.	National action plan completed. The plan will align with international and domestic decarbonisation ambitions and include targets for maritime (see sub-action below).	By 2025	МОТ	Maritime New Zealand, MFAT, MPI, shipping industry
Set new targets for maritime, including:  supporting the uptake of zero-emissions small passenger, coastal fishing and recreational vessels	Targets set as part of the national action plan.	Ву 2025	МОТ	Maritime New Zealand, MFAT, MPI, and the shipping industry

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
<ul> <li>all new large passenger, cargo, and offshore fishing vessels to meet highest carbon intensity reduction, as set by the International Maritime Organization, by 2035.</li> </ul>				
Undertake research to advance the development and uptake of alternative lowand zero-carbon fuels for shipping in Aotearoa and develop safety and environmental standards for their use.	Research completed.	By 2025	МОТ	Maritime New Zealand, MFAT, MPI, fuel industry, ports, shipping industry
Work with other like-minded countries to put in place the conditions to allow low- or zero-carbon shipping on key trade routes by 2035.	Conditions are in place for zero-carbon shipping on key trade routes.	Ву 2035	МОТ	Maritime New Zealand, MFAT, MPI, shipping industry
Action 10.3.5: Implement the Sustainable Bi	ofuels Obligation			
Implement the Sustainable Biofuels Obligation, which requires liable fuel suppliers to reduce the total emissions of the fuels they supply by a set percentage each year through the deployment of biofuels (in blended or neat form).	Sustainable Biofuels Obligation implemented.	2023	MOT/MBIE	Environmental Protection Authority
Action 10.4: Support cross-cutting and enab	ling measures that contribute to the delivery of a low-em	issions transport system		
Ensure the next Government Policy Statement on Land Transport (GPS-LT) guides investment consistent with the emissions reduction plan.	GPS-LT 2024 provides a transport investment strategy consistent with the emissions reduction plan.	Mid 2024	МОТ	Waka Kotahi, local government, KiwiRail

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Develop a strong evidence base to inform transport decarbonisation and an equitable transition and ensure actions taken are effective within the Aotearoa context.	Transport Climate Research Plan published.	Research plan completed in 2023	мот	Waka Kotahi, local government, Interagency Climate Change Data and Modelling Group, universities
Embed long-term transport planning to give greater confidence that Aotearoa is on track to eliminate emissions and achieve other goals.	MOT's Generational Investment Approach used to support long-term planning activities across transport agencies.	From 2022	мот	Waka Kotahi, KiwiRail, HUD
Provide people and businesses with information and education to support behaviour change as we transition to a low-carbon economy.	Scope of intervention to be established.	To be confirmed once scope established	мот	Waka Kotahi, EECA
Develop the skills and capability required to transition to a low-emissions transport system and support an equitable transition.	Review completed into what capability and capacity is needed for the transition.	By 2025	мот	MBIE, Waka Kotahi, local government, multiple sectors (eg, education, construction, transport)

#### **Energy and industry (Chapter 11)**

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships	
Focus area 1: Use energy efficiently and manage demand for energy					
Action 11.1.1: Improve business and	household energy efficiency				
Gen Less.	Communications and marketing activities to encourage New Zealanders to understand energy and climate change, take climate-positive action, and live more with less energy, aimed at the mass market, particularly households, and small and medium-sized enterprises (SMEs).	Launched in 2019	EECA	Households, small businesses	
Energy Equipment Efficiency (E3) Programme.	<ul> <li>Products sold in Aotearoa meet minimum energy efficiency standards and consumers have information to compare energy efficiency and running costs of different products when deciding what to buy.</li> <li>An amendment to the Energy Efficiency (Energy-Using Products) Regulations 2002 for the following products is currently underway: clothes washers and dryers, dishwashers, domestic refrigeration, air conditioners and electric motors.</li> </ul>	Amendments to regulations for products are made on a regular basis.	EECA/MBIE	Installers, households, Australian Commonwealth, state and territorial governments, Aotearoa Government	
Improve energy efficiency products and services regulation (supporting the E3 programme).	A review of the regulatory system will lead to legislative and regulatory changes to ensure that the system continues to be effective and fit for purpose, to enable further energy efficiency and emissions reductions.	Review complete by mid 2022	MBIE/EECA	Installers, households, Australian Commonwealth, state and territorial governments, Aotearoa Government	
Warmer Kiwi Homes programme.	Grants for insulation and heating for lower-income New Zealanders, to achieve warmer, drier homes.	Underway – ongoing until mid 2024	EECA	Households, installers	

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Support for Energy Education in Communities programme.	Building and expanding a network of support services to provide targeted, specialist energy advice to achieve warmer, more energy efficient homes, and lower energy bills.	Round 3 opens mid 2022, round 4 in 2023	МВІЕ	Organisations such as community service training organisations, social enterprises, iwi support services, non-governmental organisations, businesses, community groups and budget advisory bodies are eligible for funding to work closely with households in need
Provide rebates for energy efficient equipment.	Rebates for all businesses, including smaller businesses, farms and factories, to procure and install approved high efficiency electrical equipment for industrial uses.	2022–28	MBIE/EECA	Businesses including SMEs, energy service providers
Action 11.1.2: Improve the state sec	tor's energy efficiency and fuel switching			
State Sector Decarbonisation Fund (component relating to energy and industry sectors).	Co-funding for state sector organisations to increase energy efficiency and the use of renewable energy, with a focus on replacing the largest, most used fossil-fuel boilers. Co-funding is also available for other projects including electric vehicles.	2021–25	MBIE/EECA	State sector entities, including schools, hospitals and tertiary institutions
Focus area 2: Ensure the electricity s	ystem is ready to meet future needs			
Action 11.2.1: Accelerate developme	ent of new renewable electricity generation across the economy			
Review national direction tools for new renewable generation and electricity infrastructure.	A review of national direction tools for enabling investment in new renewable electricity generation and infrastructure, including small-scale generation. Determine whether, and how, resource consenting processes could be improved.	Consultation expected late 2022, with any changes to follow	MBIE/MfE	Local government, electricity industry participants, renewable resource owners, Māori
Develop offshore energy regulatory framework.	Development of regulatory settings to enable investment in offshore renewable energy.	2022–24	MBIE	Government agencies, local government, Māori
Use government electricity purchasing to support investment in new renewable generation.	Assistance for government agencies and local government to explore power purchase agreements with new generation projects to support new investment in renewable electricity generation.	2022–24	MBIE	Government agencies, local government

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Support renewable and affordable energy in communities.	Māori and Public Housing Renewable Energy fund to trial community-scale renewable energy solutions with a focus on Māori communities and public housing.	2021–24	MBIE/Kāinga Ora	Community partnerships with Māori to scope and develop projects for Māori residents
Action 11.2.2: Ensure the electricity	system and market can support high levels of renewables			
Investigate options for dry-year electricity storage through the New Zealand Battery Project.	<ul> <li>Understanding of the technical, environmental, social and commercial feasibility of pumped hydro and other potential energy storage projects.</li> <li>Depending on outcomes of the first stage, future stages would lead to development of a renewable solution/s for ensuring electricity supply security through dry-years in a highly renewable electricity system.</li> </ul>	Feasibility studies expected to be completed by end of 2022.  Solution/s expected to be in place by 2030.	МВІЕ	Entities across the state sector, including TSY, Transpower, EA, MfE, DOC, Te Arawhiti, Te Waihanga, electricity industry participants, Māori
Support the electricity market to transition to 100 per cent renewable generation.	Investigation of the need for and implementation of additional market mechanisms and regulation to support affordable and reliable electricity supply, while accelerating the transition to a highly renewable electricity system.	Consultation expected late 2022, implementation by 2024	MBIE	Electricity industry participants, renewable electricity generation developers
Investigate future electricity-system security and resilience.	Delivery by the EA and Transpower (as the system operator) of a multi-year programme of studies and solutions to address the challenges and opportunities relating to electricity system security and resilience.	2022	EA	Transpower (as system operator), electricity industry participants, owners and operators of distributed energy resources
Market Development Advisory Group price discovery project: wholesale market operation and investment under 100 per cent renewable electricity generation.	Investigation of price discovery (including market operation and new investment in generation) in the wholesale electricity market to determine whether changes are required to electricity wholesale market design to support market operation under 100 per cent renewable electricity supply.	2022	EA	Electricity industry participants
Implementation of real time wholesale electricity pricing.	Implementation of real-time pricing in the electricity wholesale market, including a low-cost way for distributed energy resources and demand response to engage with the market.	2022	EA	Transpower, New Zealand Exchange, electricity industry participants, owners and operators of distributed energy resources

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Ban new fossil-fuel baseload generation.	Policy enacted to ban new fossil-fuel baseload generation.	Consultation expected late 2022, implementation by 2024	MBIE	Electricity generation developers, government agencies, local government
Electricity price review – energy hardship expert panel and reference group.	Recommendations for policy priorities and actions to government on how best to alleviate household energy hardship in Aotearoa.	2021 to June 2023	МВІЕ	Energy consumers, other stakeholders will depend on the recommendations the independent expert panel makes and the Government's response
Establish a definition and indicators for energy hardship.	Definition of energy hardship and development of associated indicators to identify those in energy hardship in Aotearoa.	2022	МВІЕ	Energy consumers, government agencies, community groups, others working with those experiencing energy hardship
Action 11.2.3: Support development	and efficient use of transmission and distribution infrastructure to furth	ner electrify the economy		
Renewable Energy Zones (REZ) pilot.	Transpower is exploring a REZ pilot in one region to enable new renewable generation investment (or more with battery coinvestment). A REZ can expand electricity network capacity in regions where network capacity constraints may be a barrier to clusters of new renewable generation or industry demand for electrification. Lessons from the pilot could be used to expand the model to other regions in Aotearoa.	Transpower consultation on REZ pilot from February to April 2022	Transpower	Electricity lines companies, renewable electricity generation developers
Implement new transmission pricing methodology.	Updated Transmission Pricing Methodology (TPM) implemented. The new TPM set by the EA seeks to address potential disadvantages for early investors, among other things.	April 2023	EA	Transpower, electricity industry participants, renewable generation developers, businesses seeking to electrify processes
Update electricity distribution network regulation.	Updated regulatory settings in the electricity distribution sector support transition to a low-emissions economy, while promoting competition, reliability and efficiency for consumers.	Consultation on issues and opportunities in 2022	EA	Government agencies, electricity industry participants, including electricity lines companies, owners and operators of distributed energy resources

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Explore measures to ensure electric vehicle charging is energy efficient.	Development of demand response standards to smooth demand for EV charging is enabled and helps to avoid the need to upgrade electricity distribution infrastructure.	2022–24	MBIE/EECA	Electricity distribution businesses, automotive industry, EV charger manufacturers
Develop specifications for in-home and commercial/industrial electric vehicle charging installation.	Standards New Zealand (Standards NZ) and EECA make specifications for EV charging safety and efficiency publicly available.	2022	EECA/Standards NZ	EECA, Standards NZ, EV owners, electricity lines businesses
Amendment to Electricity Code to facilitate distribution networks' ability to have small scale generation connect to, operate on, and export from networks without causing power quality issues.	Amendment to the Electricity Code (Part 1A application process in Part 6 of the code), to include hosting capacity requirements for distributed energy resources that will apply for a five-year period.	Completed 2021 – monitoring is underway	EA	The EA continues to engage with Standards NZ and WorkSafe (Energy Safety) about this policy work.
Exploring electricity distribution and transmission issues as they relate to the Commerce Act 1986.	Review of input methodologies and information disclosure requirements applying to regulated electricity distribution networks and Transpower under Part 4 of the Commerce Act, as well as reopening price-quality paths for new investments.	End of 2023	Commerce Commission	Electricity industry participants, including Transpower, electricity lines companies, household representatives, Consumer Advocacy Council, government agencies
Update electricity demand and generation scenarios (EDGS).	Updated EDGS to align with emissions budgets. The scenarios are used to support consideration of Transpower's proposals for major capital investment in the grid.	2023	MBIE	Commerce Commission, Transpower
Faster reform to efficient electricity distribution pricing.	Reform of efficient electricity distribution pricing to support efficient use of and investment in distribution networks (or alternatives).	2022	EA	Electricity industry participants, including electricity lines companies, major electricity users, retailers, consumer groups
Phase out of low fixed charge regulations.	Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004 are phased out over five years, to facilitate electricity distribution pricing reform.	2022–27	МВІЕ	Electricity industry participants, including electricity lines businesses, households

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Focus area 3: Reduce our reliance or	fossil fuels and support the switch to low-emissions fuels			
Action 11.3.1: Manage the phase ou	t of fossil gas			
Develop a gas transition plan.	A gas transition plan that sets out a transition pathway for the fossil gas industry, explores opportunities for renewable gases and ensures an equitable transition.	2022–23	MBIE	Māori, gas industry, gas user groups, Gas Industry Company (GIC)
Work with the GIC on gas availability for industrial users.	Investigation of whether additional or changed mechanisms are needed to ensure fossil gas is available to industrial users in times of unexpectedly tight supply, and of improvements to the timeliness and detail of information about fossil gas supply and demand to market participants.	2022–23	MBIE/GIC	Gas industry, gas user groups, GIC
Explore fossil gas issues as they relate to the Commerce Act 1986.	Review of input methodologies applying to regulated gas pipeline businesses under Part 4 of the Commerce Act, and reset of price-quality paths for gas pipeline businesses.	Price quality path reset in 2022 Input methodologies review by end of 2023	Commerce Commission	Gas industry (including gas distribution and transmission sector), gas user groups, GIC
Action 11.3.2: Develop low-emission	is fuels			
Investigate low-emissions energy supply options for renewable gas and bioenergy.	Investigation of low-emissions energy supply options for renewable gas and bioenergy to support future emissions reductions.	2022–23	MBIE	Māori, gas industry, gas user groups, biogas industry, GIC
Develop a hydrogen roadmap.	A hydrogen roadmap setting out the Government's strategy to guide future investment in – and development of – hydrogen, and determine steps that provide maximum economic benefits and emissions reductions.	2022–23	MBIE	Māori, central government agencies (MfE, MOT), domestic and international hydrogen industry (including investors), international governments
Review hydrogen regulation.	Review and evaluation of current hydrogen regulatory settings to ensure they are fit-for-purpose for new hydrogen technologies and novel applications of hydrogen, and consistent with international best practice standards.	Mid 2022	MBIE	Māori, central government agencies (MfE, MOT), regulators (WorkSafe, GIC), hydrogen industry
Adopt standards for hydrogen.	Changes to relevant standards affecting hydrogen use.	Mid 2022	Standards NZ	WorkSafe

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Focus area 4: Reduce emissions and	energy use in industry			
Action 11.4.1: Decarbonise Aotearoa	a Industries			
Set an action plan for decarbonising the industrial sector.	An action plan for decarbonising the industrial sector. The plan will support existing industries to decarbonise and allow innovative low-carbon industries to grow. The plan will include considering a timetable for phasing out fossil fuel use in boilers.	2022–24	МВІЕ	Māori, industrial firms, industry groups, energy-sector stakeholders, energy service providers
Continue the roll out of the Government Investment in Decarbonising Industry (GIDI) fund.	Grants for businesses to implement projects to decarbonise the use of industrial process heat through fuel switching and energy efficiency improvements.	2021–22	MBIE/EECA	Industrial firms, businesses, large energy users
Fund further decarbonisation of industry and heat through expansion of the GIDI.	Funding for:     high-impact process heat decarbonisation projects, with adapted criteria to fund larger and longer projects     using regional energy transition plans to inform investment and optimise options for fuel switching at a regional level     additional electricity network connections and distribution network upgrades to unlock and/or accelerate fuel-switching for multiple process heat users     more technology diffusion projects.	2022–29	MBIE/EECA	Industrial firms, businesses, large energy users, energy service providers, Transpower, electricity lines businesses
Provide grant funding for commercial space and water heating and high efficiency electrical equipment.	Grants or rebates for commercial buildings to replace fossil fuel boilers for space or water heating with low-emissions alternatives (primarily electric heat pumps).	2022–26	MBIE/EECA	Energy service providers, equipment vendors, commercial building owners, businesses
Support businesses to decarbonise through the EECA business programmes, including the energy transition accelerator, large energy user partnerships and sector decarbonisation plans.	Businesses have the information and support they need to overcome barriers to identifying and implementing energy efficiency projects and to switching from fossil fuels to renewables for non-transport energy use.	Underway – work with businesses is ongoing	EECA	MBIE, industrial firms, businesses, large energy users, energy service providers

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Support businesses to decarbonise through the EECA technology demonstration fund.	Funding recipients adopt proven technology or an innovative process-improvement opportunity that has yet to be widely deployed in Aotearoa.	Underway – regular funding opportunities	EECA	MBIE, industrial firms, businesses, large energy users
Finalise and implement the Advanced Manufacturing Industry Transformation Plan.	The Advanced Manufacturing Industry Transformation Plan, to accelerate the growth and transformation of a thriving Aotearoa manufacturing sector. It has been created in partnership between industry and government.	Plan in place by end of 2022, with implementation following	MBIE	Central government, advanced manufacturing industry stakeholders, including businesses and unions
Implement national direction for industrial GHG emissions.	National direction under the Resource Management Act 1991 implemented, to support councils to make nationally consistent decisions on GHG discharges when considering applications for air discharge permits. Includes a ban on new low- and medium-temperature coal boilers and phasing out existing coal boilers by 2037.	In place by the third quarter of 2022	MBIE/MfE	Local government, industrial firms, clean-energy service providers, fuel suppliers, equipment vendors
Develop a mandatory energy and emissions reporting scheme.	A mandatory scheme to require large energy users to provide information about their annual energy use and emissions, with data produced to inform a range of stakeholders and drive emissions reductions.	In place by mid 2024	MBIE	Central government, large energy users, clean-energy service providers, fuel suppliers, equipment vendors
Regional Heat Demand Database.	An interactive data visualisation tool to enable users to view fuel demand for process heat by region, site count, heat demand and energy demand.	2022	EECA	Transpower, electricity lines businesses, fuel suppliers, industrial firms
Regional energy transition accelerator pilot.	A pilot regional decarbonisation plan in Southland, to inform investment for optimal fuel switching and low-emissions energy supply at a regional level.	Pilot complete in 2022, followed by evaluation and potential roll-out in other regions	EECA	Regional suppliers of bioenergy, electricity generators, Transpower, electricity lines businesses, industrial firms and other stakeholders

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Action 11.4.2: Develop an approach	for single-firm industries with emissions that are hard to reduce or remo	ove		
Develop a strategic approach or framework for addressing emissions from single-firm industries with emissions that are hard to abate.	A strategic framework for considering and addressing issues relating to single-firm industries and the strategic role of such firms in facilitating Aotearoa's wellbeing.	Development to begin in late 2023	MBIE	Government agencies, single-firm industries, workers and unions, regions, Māori
Focus area 5: Strategic approaches a	and targets to guide us to 2050			
Action 11.5.1: Set targets for the end	ergy system			
Set a renewable energy target.	A renewable energy target of 50 per cent of total final energy consumption to come from renewable sources by 2035.	Target set 2022, followed by ongoing monitoring	MBIE	Energy-system stakeholders, electricity industry participants, consumers, government agencies
Monitor progress towards the aspirational renewable electricity target.	Monitor progress towards the Government's aspirational target of 100 per cent renewable electricity by 2030. A review of the Government's renewable electricity target in 2024.	Ongoing monitoring, with a review in 2024	MBIE	Energy-system stakeholders, electricity industry participants, consumers, government agencies
Develop secondary indicators for the energy system.	A set of secondary indicators, monitored alongside the targets above, that:     measure progress in the energy and industry focus areas     ensure the energy system remains affordable, secure and reliable as we transition.	2022–24, alongside development of an energy strategy	MBIE	Energy-system stakeholders, electricity industry participants, consumers, government agencies
Action 11.5.2: Develop energy strate	egies for Aotearoa			
Develop an energy strategy.	<ul> <li>An energy strategy to address strategic challenges in the energy sector, including signalling a pathway away from fossil fuels and toward greater levels of renewable electricity and other low- emissions fuels.</li> </ul>	2022–24	MBIE	Māori, energy-system stakeholders, central government agencies, consumers
Develop a new New Zealand Energy Efficiency and Conservation Strategy (NZEECS).	A new NZEECS aligned with the emissions reduction plan and energy strategy. The NZEECS guides the EECA's work programme.	2022–24	MBIE	Māori, energy and industry sectors stakeholders, large energy users, consumers, clean-energy service providers

#### **Building and construction (Chapter 12)**

Action for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Focus area 1: Reduce embodied carbo	n of construction materials			
Action 12.1.1: Progress regulatory cha	nge to reduce embodied emissions of new buildings			
Progress regulatory change to reduce embodied emissions of new buildings.	<ul> <li>Sector advisory group established.</li> <li>Options to address barriers in existing regulations identified.</li> <li>Regulations discussion document consulted on in late 2022.</li> <li>New Building Code requirements introduced.</li> <li>Associated guidance, tools and compliance methods introduced.</li> </ul>	2022–24	MBIE	Construction sector, building consent authorities, central government, building research organisations
Action 12.1.2: Spark and foster innova	tion across the sector		,	
Establish an Embodied Emissions Climate Innovation Platform.	Established mechanism to target and support investment in building and construction sector climate innovation.	2022–25	MBIE	MBIE (Research, Science, Innovation and Technology), Construction Sector Accord
Explore providing industry grants to increase the number of Environmental Product Declarations for building materials and products.	Options for a grant programme to help address potential cost barriers to manufacturers seeking environmental product declarations for their products.	2022–26	MBIE	Local government, building research organisations, manufacturers, construction sector
Explore providing independent specialist advice to households and grants to support households to reduce their carbon impact.	<ul> <li>Options to deliver independent advice and support to address information asymmetry between households and the sector.</li> <li>Scope an associated grant programme.</li> </ul>	2022–26	MBIE	Local government, construction sector, consumer organisations, building research organisations
Support development of the Forestry and Wood Processing Industry Transformation Plan (ITP).	Options and guidance to support the ITP to develop, and increase use of, innovative timber-based construction materials.	2022–24	MBIE	MfE, construction sector

Action for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Action 12.1.3: Realise cross-sector opp	oortunities to reduce whole-of-life embodied emissions			
Explore requiring waste minimisation or recovery plans for building consent.	Proposals for legislative and regulatory requirements that could minimise construction waste and increase diversion from landfill.	2022–23	MBIE/MfE	Local government, building-consent authorities, MfE, construction sector, waste sector
Support Kāinga Ora's waste minimisation programme and share lessons learned.	Kāinga Ora is prioritising relocation and deconstruction over demolition as site-clearance options, with landfill-diversion targets of 80 per cent in Auckland/Northland and 60 per cent elsewhere, and a house-relocation target of 7 per cent.	2022 and ongoing	Kāinga Ora	HUD, MBIE, MfE
	A Construction Waste Minimisation Programme Plan is in development.			
Investigate barriers to reusing, repurposing and recycling building materials.	Research to understand regulatory and system barriers to repurposing and recycling building materials, adaptive reuse of buildings and the development of a market for reused building materials.	2022–25	MBIE/MfE	Local government, building-consent authorities, construction sector, waste sector, building research organisations.
Explore circular economy initiatives for building and construction.	<ul> <li>Options for how action in the building and construction sector can reduce waste sector emissions.</li> <li>These could include more targeted use of waste levy for building and construction, creation of end markets for reused building materials, and exploration of product stewardship schemes.</li> </ul>	Options identified in 2022–23	MBIE/MfE	MfE, MBIE, MPI, construction sector, waste sector
Contribute to the national freight and supply strategy.	Contribution from building and construction sector to national freight and supply chain strategy.	Options identified in 2022–23	MBIE	MBIE, MOT, Waka Kotahi
Support the use of project management and prefabrication to reduce road transport.	Options for how action in the building and construction sector can reduce transport emissions.	Options identified in 2022–23	MBIE, MOT, Waka Kotahi	MBIE, MOT, Waka Kotahi, construction sector, manufacturers

#### Focus area 2: Accelerate the shift to low-emissions buildings

Action 12.2.1: Shift expectations and grow the market for low-emissions buildings						
Identify and explore potential options to address financial barriers to low-emissions buildings.	•	Research finance-related barriers and how financial incentives such as government subsidies or tax settings might support reducing building-related emissions.	2022–26	TSY/MBIE	MBIE (Energy and Resource Markets, Economic Development, Industry), DIA, MfE, Te Waihanga, MPI, HUD, Kāinga Ora,	

Action for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
	Opportunities and barriers to develop the market for low-emissions, or alternative, key building materials.			Construction Sector Accord, local government, construction sector, financia sector
Recognise and showcase low- emissions buildings.	Options to promote low-emissions building and designs through competitions, recognition or rewards schemes.	2022–24	MBIE	Construction Sector Accord, HUD
Explore providing business change advice and support.	<ul> <li>Options to deliver independent business change advice and support for construction businesses to move to a low-emissions business model.</li> <li>Scoping an associated grant programme.</li> </ul>	2022–26	MBIE	Construction sector, Construction Sector Accord, HUD
Support a shift to medium density and modular designed buildings.	<ul> <li>Reviewed and updated Building Code settings.</li> <li>Modular component manufacturer certification scheme implemented to support growth in offsite manufacturing.</li> <li>Urban Growth Agenda and National Policy Statement – Urban Development.</li> </ul>	2022–26	МВІЕ	Building-consent authorities, local government, central government agencies (such as HUD), modular component manufacturers
Test emissions reporting and caps for buildings.	Finalised reporting processes and emissions caps that have been trialled with sector partners and are implementation-ready.	2022–24	MBIE	Kāinga Ora, Construction Sector Accord
Action 12.2.2: Use the Government's	purchasing power to drive market change			
Support implementation of Government procurement guidelines and rules for buildings.	Requirements for mandated agencies to procure low-emissions and low- waste goods, services and works, and to encourage innovation to significantly reduce emissions and waste.	2022 and ongoing	MBIE	MBIE New Zealand Government Procurement, with input from other agencies, including Kāinga Ora
Convene the Climate Change Government Infrastructure and Property Group.	Regular cross-government meetings between agencies with property portfolios.	Ongoing	MBIE	Central and local government agencies with property portfolios
Deliver building-related measures within the Carbon Neutral Government Programme (CNGP).	Requirements for some agencies' owned or tenanted buildings to meet third-party energy efficiency requirements (NABERSNZ), and for some agencies' new non-residential buildings to meet third-party climate standards (Green Star).	Ongoing	MFE/MBIE	Led by MBIE New Zealand Government Property Group. Involvement from MBIE and EECA if additional initiatives are developed within the CNGP

#### Focus area 3: Improve building energy efficiency

Action for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Action 12.3.1: Amend the Building Cod	de to improve new buildings' operational efficiency			
Implement amendments to Building Code Clause H1 (energy efficiency)	New buildings are compliant with updated requirements once transition period ends.	2022–23	MBIE	Construction sector, building consent authorities
compliance pathways.  Consult on proposed Building Code changes, to introduce new requirements for building operational efficiency.	<ul> <li>Sector guidance and support provided to support the transition.</li> <li>Regulations discussion document consulted on in late 2022.</li> <li>New Building Code requirements introduced.</li> <li>Sector guidance, tools and compliance methods introduced.</li> </ul>	2022–25	MBIE	Construction sector, building consent authorities, central government, building research organisations
Action 12.3.2: Encourage and enable e	emissions reduction from existing buildings			
Introduce mandatory energy performance certificates for certain building types.	<ul> <li>Legislative and regulatory proposals developed and consulted on.</li> <li>Requirements introduced with appropriate transition plan.</li> <li>Sector guidance and support provided.</li> <li>Options for voluntary or mandatory energy efficiency ratings for residential buildings identified.</li> </ul>	2022–24	MBIE	EECA, MBIE (Energy and Resource Markets), construction sector; property sector, central government, building research organisations
Explore how incentives, support or requirements could reduce existing residential and non-residential buildings' emissions.	<ul> <li>Research about barriers and enablers for building owners to undertake major energy efficiency retrofits, refits or recommissioning.</li> <li>Options and cost-benefit analysis to inform potential incentives and other Government investment.</li> </ul>	2022–24	MBIE	EECA, MBIE (Energy and Resource Markets), construction sector, property sector, building research organisations
Continue implementation of the Healthy Homes Standards and monitor proactive enforcement.	<ul> <li>Ensure all rentals are compliant with Healthy Homes Standards by 1 July 2024.</li> <li>Undertake up to 3,000 enforcement interventions per year.</li> <li>Ongoing information and education campaign to support compliance.</li> </ul>	In progress	HUD/MBIE	Property sector, MBIE
Explore options to expand the Warmer Kiwi Homes programme, such as eligibility criteria, to better achieve equitable outcomes.	<ul> <li>Options to expand the existing Warmer Kiwi Homes programme to different types of retrofits.</li> <li>Options regarding eligibility criteria.</li> </ul>	2022–25	MBIE	EECA, MBIE (Energy and Resource Markets)
Develop education and incentives to encourage less energy and water use.	Options regarding provision of information and incentives (including low-cost, high-impact technologies or tools) to encourage less energy use.	2022–25	MBIE	EECA

Action for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Focus area 4: Shift energy use from fo	ssil fuels			
Assess the equity impacts of shifting away from fossil gas use.	<ul> <li>Research into distributional impacts that may be created where other emissions reduction initiatives affect the supply of, and demand for, fossil gas.</li> </ul>	2022–25	MBIE	MSD, TSY, building research organisations, community groups, fossil fuel users
	Options for support or incentives to manage these impacts.			
Identify potential regulatory and other barriers to shifting away from fossil-fuel use in buildings and investigate options to address these.	<ul> <li>Review of requirements for installation of solid biofuel heating in buildings (eg, wood pellet heaters and boilers).</li> </ul>	2022–25	MBIE	MBIE (Energy and Resource Markets)
Focus area 5: Establish foundations fo	or future emissions reduction			
12.5.1 Work with Māori to identify new opportunities and support an equitable transition.	<ul> <li>Coordinated approach to engage with Māori to inform and develop building and construction initiatives.</li> <li>Research on Māori innovation and leadership in climate change and building and construction, eg, industry partnerships, iwi, hapū and local government climate response plans.</li> <li>Established systems to enable representation of Māori views within the</li> </ul>	2022–25	MBIE	Māori, government partners (such as HUD and Kāinga Ora), local government
	building and construction sector, such as a mātauranga Māori reference group.			
12.5.2 Develop a strong data and evidence base.	<ul> <li>An embodied emissions advisory group of government and non-government building emissions experts is established.</li> <li>Assessment methodology, national building-related emissions database and data, emissions-calculation tools and repository, and benchmarking and baseline research.</li> </ul>	2022–25	MBIE	Research community, building sector experts
	Approach to support research into reducing building-related emissions by key non-government organisations.			
12.5.3 Change behaviours of households and the sector.	Behaviour change programme to support uptake of low-emissions products and more adaptive building practices and drive regulatory compliance. The programme will target households, building owners,	2022–25	MBIE	Building consent authorities, construction businesses and producers, consumers

Action for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
	producers (building sector and building product producers) and building consent authorities.			
12.5.4 Support workforce transition to ensure the sector can build for climate change.	<ul> <li>Options to facilitate building and construction workforce planning and sector education, developed with the Construction Sector Accord and industry.</li> <li>Options for targeted funding or initiatives to train or retrain building professionals, encourage changed practice among key worker groups and support on-the-job mentoring.</li> </ul>	2022–25	МВІЕ	Construction Sector Accord, Workforce Development Councils, industry bodies, central government agencies (such as MSD, MOE, Tertiary Education Commission)
12.5.5 Establish an enabling legislative framework.	<ul> <li>Options to address existing legislative barriers.</li> <li>Legislative amendment to clarify that action to address climate change and reduce emissions falls within the scope of the Building Act.</li> </ul>	2022–23	MBIE	Central government, local government
12.5.6 Introduce an energy and emissions reporting scheme.	Requirements for large emitters across the industrial, commercial and transport sectors to measure and report emissions.	2023–24	MBIE	Energy sector

# Agriculture (Chapter 13)

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Focus area 1: Price agricultural emissions by 2	025			
13.1.1 An emissions pricing mechanism is developed, and agricultural emissions are priced by 1 January 2025.	A pricing mechanism for agricultural emissions will be implemented from 2025. A detailed business case will be developed to support the implementation of a pricing mechanism.	2022–25	MPI	He Waka Eke Noa – Primary Sector Climate Action Partnership (He Waka Eke Noa) partnership members, food and fibre sector
13.1.2 All producers will have emissions reports by the end of 2022 and a farm plan in place by 2025.	All farmers will be measuring their on-farm emissions annually and have a written plan in place to measure and manage their greenhouse gas emissions by 2025.	2022–25	МРІ	He Waka Eke Noa partnership members, food and fibre sector
13.1.3 Further incentivising on-farm mitigation.	Options investigated to support early adopters of on-farm changes that will reduce emissions before the introduction of an agriculture emission pricing system and revenue recycling system from 2025. Farmers and producers will achieve emission reductions beyond what they are already commercially incentivised to do.	First emissions budget and ongoing	MPI	Food and fibre sector, iwi and whenua Māori entities, industry partners
Focus area 2: Accelerate new mitigations				
13.2.1 Strengthen the role of research and development to get mitigations to producers sooner.	Strengthened role of research and development in accelerating the availability and uptake of new mitigations. This will accelerate the development of a pipeline of new technologies, and streamline the uptake of new mitigations to producers sooner.	First emissions budget and ongoing	MPI	Science sector, international science partners, industry and food sector bodies, universities, iwi and whenua Māori entities
13.2.2 Establish a new Centre for Climate Action on Agriculture Emissions to drive a step change in research, development and commercialisation of emissions reduction technologies.	Provide a step change in investment to accelerate development and increase the impact of priority mitigations. This will accelerate development and increase national impact of priority mitigations.	Mid 2022	MPI	Food and fibre sector, Crown Research Institutes (CRIs), whenua Māori entities

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
13.2.3 Support mātauranga-Māori based approaches to emissions reduction from agriculture.	Enable mātauranga Māori-based and Māori-led approaches that will support Māori entities to define priorities for climate change mitigation.	First emissions budget and ongoing	MPI	Māori and whenua Māori entities, science sector, international science partners, industry, food and fibre sector bodies, universities.
13.2.4 Support clear and effective regulatory pathways for agricultural mitigation tools.	Develop a robust regulatory system to manage the risks of new mitigation tools to the trade of primary produce, along with risks to animal welfare, agricultural security and public health, and food safety (eg, methane inhibitors under the Agricultural Compounds and Veterinary Medicines Act).	First stage of this work will be completed in 2022	МРІ	Industry, product entrepreneurs, food and fibre sector, science organisations, Māori organisations
13.2.5 Lead and contribute to global agricultural climate change mitigation.	Build on Aotearoa New Zealand's agricultural investments, commitment and experience to increase global ambition and action to reduce agricultural emissions. This includes Aotearoa providing leadership, participation and investment through the Global Research Alliance on Agricultural Greenhouse Gases (GRA).	First emissions budget and ongoing	MPI	Formal partnership through the GRA with 64 other member countries and 25 multinational organisations, science organisations, food and fibre sector
Focus area 3: Support producers to make chang	ges		•	
13.3.1 Develop further climate-focussed extension and advisory services.	Multichannel information campaigns will be available to upskill producers, build and enhance support networks and rural communities to become more climate resilient. Grow a pipeline of trusted industry advisors with a strong understanding of emission reduction practices.	2022–26	МРІ	Food and fibre sector, rural professionals, science and research
13.3.2 Support Tikanga-based programmes to support needs and aspirations of whenua Māori entities.	<ul> <li>Support tikanga-based programmes to support whenua Māori entities to respond to and adapt their primary sector enterprises to climate change through low emission models.</li> <li>This will build upon MPI's existing Māori Agribusiness Pathway to Increased Productivity and Māori Agribusiness Extension programmes.</li> </ul>	2022–26	MPI	Whenua Māori entities, Māori
13.3.3 Improve rural digital connectivity to improve access to information and online tools.	Reduce congestion and per-network performance for around 55,000 rural users via the Future of Connectivity – Rural Capacity Upgrade programme.	Ongoing to 2023	MPI/MBIE	Producers with poor digital connectivity, interagency relationship between MPI and MBIE

Actions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
Focus area 4: Transition to lower emissions la	nd use and systems			
13.4.1 Build the evidence base for regenerative agriculture.	An evidence base for regenerative agriculture is established, and an understanding of how the practice can contribute to Aotearoa New Zealand's emission reduction targets.	First emissions budget and ongoing	MPI	Quorom Sense, food and fibre sector
13.4.2 Reduce the emissions of our largest farmer – Pāmu.	Consider opportunities for Landcorp Farming Limited (trading as Pāmu) to demonstrate sector leadership by accelerating on-farm emissions reductions while continuing to fulfil its principal objective as a successful business over the long-term.	First emissions budget and ongoing	МРІ	Landcorp Farming Limited (trading as Pāmu)
13.4.3 Develop food and fibre science and mātauranga Māori accelerators.	There are multiple accelerator projects, each delivering different outcomes. These include the te ao Māori accelerator (delivering Māori outcomes), diversifying proteins accelerator, horticulture accelerator, landscape scale decision-making accelerator, social science for change accelerator and net-zero carbon primary sector accelerator.	2022	МРІ	Food and fibre sector, CRIs, universities, whenua Māori entities
Additional agriculture actions				
13.5 Māori Agribusiness Pathway to Increased Productivity.	Providing one-on-one support to Māori landowners and trustees looking to increase the productivity and sustainability of their primary sector assets. This increases access to the knowledge and support Māori landowners need, such as transforming underutilised whenua, overcoming challenges, and developing options to improve the use and management of their assets.	First emissions budget and ongoing	MPI	Whenua Māori entities, Māori

Action	s for delivery	Proposed outputs	Timeline	Lead	Key stakeholders/partnerships
13.6	Māori Agribusiness Extension programmes.	<ul> <li>Bringing together small groups of interested Māori landowners and agribusinesses to work together towards common goals. Together they can build capability of landowners to identify and implement sustainable changes in land-use practice, and to make the most of opportunities to achieve the benefits of scale.</li> <li>Additionally, the programme provides access to a wider range of knowledge, tools, and networks to support whenua development.</li> </ul>	First emissions budget and ongoing	МРІ	Whenua Māori landowners, Māori
13.7	Essential Freshwater.	Halting further degradation of freshwater ecosystems and to restore Aotearoa New Zealand's freshwater to a healthy state within a generation. While not the primary objective, changes in freshwater quality are expected to result in reduced greenhouse gas emissions, through reduced intensification, lower stock numbers, and reductions in the use of synthetic nitrogen fertilisers.	Since 2018	MPI/MfE	Food and fibre sector, CRIs, universities, iwi and Māori partners, local and central government agencies
13.8	Global Research Alliance on Agricultural Greenhouse Gases (GRA).	Aotearoa hosts the GRA Secretariat and Special Representative. Through the GRA, Aotearoa and other countries work to improve greenhouse gas accounting methodologies, and the skills and infrastructure required to accelerate mitigation solutions.	Since 2009	MPI	Formal relationship between Aotearoa and 64 other member countries, with 25 multinational organisations
13.9	Integrated farm planning.	Accelerate the delivery of a national integrated farm planning system for farmers and growers, in partnership with industry and regional sectors. The system will streamline compliance of regulatory requirements, making it easier and less time consuming for farmers and growers to meet their business and regulatory requirements, which are primarily for new freshwater regulations and upcoming greenhouse gas reporting requirements. It will also provide additional support for advisory services.	First emissions budget and ongoing	МРІ	Food and fibre sector, regional councils, iwi and Māori partners

# Forestry (Chapter 14)

Actions for delivery	Proposed outputs	Timeline	Lead (support)	Key stakeholders/partnerships
Focus area 1: Support the right mix, lev	el and location of afforestation			
14.1.1 Ensure regulatory settings deliver the right type and scale of forests, in the right place.	Consider amendments to NZ ETS to support a better mix of forest type, retain important productive land uses, avoid displacing gross emissions reductions, and better manage the potential long-term environmental effects of exotic forests, including:     restricting exotic forests from permanent post-1989 forest category     adjusting the application of accounting rules to remote/marginal land, to support production on this land.	2022: public consultation 2022/23: Cabinet decision expected	MPI (MfE)	Landowners, local government, forestry and wood processing sectors
	Consider amendments to the National Environmental     Standard for Plantation Forestry to ensure environmental     management of all exotic afforestation, including consulting     on whether greater local control over location and forest     types/species of forests is required.	July 2022: public consultation planned 2022/23: Cabinet decisions expected	MPI (MfE)	Local government, Māori, landowners, forestry and wood processing sector
14.1.2 Support landowners and others to undertake afforestation.	Continue to assist landowners and others to undertake afforestation and conservation projects through:     the One Billion Trees Fund (1BT)     Crown Forestry joint ventures     the Hill Country Erosion Programme     the Erosion Control Funding Programme (ECFP).	First emissions budget to 2028 Planting will continue for several years for grants that have been approved	МРІ	Private landowners, Māori landowners, Māori, regional councils
14.1.3 Enhance forestry planning and advisory services.	Better support and inform current and potential forest growers and the full forestry system by providing advisory services across the full cycle of establishing, managing and harvesting forests.	Implementation underway 1 July 2022: core services start up	МРІ	Māori, landowners, the forestry and wood processing sectors

Actions for delivery	Proposed outputs	Timeline	Lead (support)	Key stakeholders/partnerships
	<ul> <li>Work with regional councils, tangata whenua and other landowners to support climate change work programmes, including native afforestation, land reversion and establishment of new production forests in the right location.</li> <li>Help understand, at a regional level, where forests will be grown and where harvested wood will be needed so that the forest estate, regional infrastructure and processing capacity align to support the growth of production forestry and domestic manufacturing.</li> <li>Provide advice on diversifying forestry regimes, including alternative species, in order to develop new types of forest crops that deliver new products or woody biomass for emerging markets (eg, bio-energy).</li> <li>Build and share knowledge within the nursery sector to enable the increase in native afforestation. There will be a focus on:         <ul> <li>working with councils to increase their capability and capacity to result in more informed decisions</li> <li>working with Māori to integrate native and exotic forestry into land use decisions, to best meet their aspirations.</li> </ul> </li> </ul>	Oct 2022: extension services begin End of June 2023: fully operational		
Focus area 2: Encourage native fores	ts as long-term carbon sinks			
14.2.1 Update NZ ETS yield tables to include indigenous species.	<ul> <li>Invest in review of NZ ETS yield tables to ensure accuracy and extend the tables beyond the current 50 years, including recognition of carbon storage resulting from some indigenous forest management practices.</li> <li>Explore technologies that enable accurate measurement of carbon in specific forests and provide improved understanding of how current management of forest links to the long-term carbon stock.</li> </ul>	2022/23: research programme to start October 2024: regulation process expected to start	MPI (MfE)	Landowners, including Māori, public, forestry sector

Actions for delivery	Proposed outputs	Timeline	Lead (support)	Key stakeholders/partnerships
14.2.2 Reduce the cost of native afforestation.	<ul> <li>Explore and test science-based practices, technologies to support sustainable expansion of native sector, including by demonstrating best practice/technology and providing training for the native plant nursery sector.</li> <li>Harness technology to increase scale and lower the cost of native seedlings. This will focus on developing and demonstrating best practice in seed collection, propagation and forest management.</li> <li>Work with the nursery sector to identify barriers and needs to support gearing up for higher native afforestation levels.</li> <li>Investigate options to lower costs, address supply chain</li> </ul>	May 2022: budget decisions to enable work to be started 2022/23: research programme underway 2024/25: increased production of native tree seedlings expected to begin  From 2022, subject to	MPI	Nursery owners, private and Māori landowners, science providers
14.2.3 Encourage greater levels of native afforestation over the long term.	<ul> <li>barriers, and improve the successful establishment of native forests.</li> <li>Engage stakeholders on a longer-term strategy and action plan.</li> <li>Undertake research to protect/enhance sequestration of existing native forests.</li> <li>Support Māori-led approaches to native forest establishment.</li> <li>Establish a cross-agency group to improve demand signals to nurseries, to ensure seedling supply is available.</li> </ul>	Cabinet and funding decisions	МРІ	Landowners, including Māori, nursery owners, science providers, other partners
Focus area 3: Maintain existing forests				
14.3.1 Explore measures to reduce deforestation of pre-1990 native forests.	<ul> <li>Continue to monitor the deforestation of pre-1990 native forests.</li> <li>Explore how to address He Pou a Rangi – Climate Change Commission's recommendation to improve and enforce measures to reduce deforestation and the need for additional measures.</li> </ul>	2022 and ongoing	МРІ	Landowners, including Māori landowners

Actions for delivery	Proposed outputs	Timeline	Lead (support)	Key stakeholders/partnerships
14.3.2 Maintain and increase carbon stocks in pre-1990 forests.	<ul> <li>Research and investigate which forest management activities will increase carbon sequestration in pre-1990 forests.</li> <li>Consider opportunities to incentivise and encourage management activities and mechanisms to enable recognition of additional carbon sequestration for pre-1990 forests.</li> </ul>	December 2022: natural forest remeasurement analysis and research completed	МРІ	Landowners, Māori landowners, research organisations
Focus area 4: Grow the forestry and wo	od processing industry to deliver more value from low carbon produ	cts		
14.4.1 Develop forestry and wood processing industry transformation plan (ITP).	Set out a cohesive set of actions to transform the forestry sector, grow the domestic wood processing industry and get more value from our logs.	2022 and ongoing	MPI	The Government is taking a partnership-led approach to developing the ITP. An advisory
	<ul> <li>Consider options to attract investment in the production of low-emissions wood products and biofuels.</li> </ul>			group, consisting of members from the forestry and wood
	<ul> <li>Provide a transformation roadmap to lift value from the forestry and wood processing sector to:</li> </ul>			processing sector, expertise from other sectors, Māori and unions,
	<ul> <li>increase wood processing and accelerate the bioeconomy</li> </ul>			has been established, to shape policy development.
	<ul> <li>lift productivity and resilience across the forestry and wood processing supply chain</li> </ul>			policy development.
	<ul> <li>scale up internationally competitive wood-processing clusters</li> </ul>			
	<ul> <li>support increased use of wood in construction and improve export outcomes.</li> </ul>			
14.4.2 Invest in expanding supply of woody biomass.	<ul> <li>Work with landowners to increase planting of commercial forest crops to replace coal in process heat and/or as input to biofuels and biomaterials.</li> </ul>	July 2022/23: engagement with landowners begins	МРІ	Landowners, forestry and wood processing sectors, research organisations
	<ul> <li>Undertake research to support cost effective recovery of harvest residues to supply biomass.</li> </ul>	2022/23: research programme underway		
	<ul> <li>Undertake operational research to support species selection and forest management of short rotation crops.</li> </ul>	2023/24: crop planting to begin		

Actions for delivery	Proposed outputs	Timeline	Lead (support)	Key stakeholders/partnerships
14.4.3 Develop policies that support Māori to meet their aspirations.	Work with Māori to understand impacts and inform advice on options for forestry policies that support Māori to meet their aspirations.	2022 and ongoing	MPI (DOC/MfE)	Māori, forestry experts, other agencies (including DOC, MfE)
Action 14.5: Improve fire-management	planning			
Increase awareness of forest fire risk and improve planning for fire management.	Consult later in 2022 on options to require fire management plans for all exotic forests over one hectare.	Late 2022: consult on options to require fire management plans for all exotic forests over one hectare.	MPI (MfE)	Landowners, forestry and wood processing sector

# Waste (Chapter 15)

Actions for delivery	Proposed outputs	Timeline	Lead (support)	Key stakeholders/partnerships
Focus area 1: Enable households and	businesses to reduce organic waste			
15.1.1 Encourage behaviour to prevent waste at home.	National scale programmes to support consumers to prevent and reduce food and garden waste at home.	2023–25	MfE	Central government agencies, local government, Māori, non-governmental organisations (NGOs), community agencies
15.1.2 Enable businesses to reduce food waste.	<ul> <li>Programmes to support business sectors to reduce food waste.</li> <li>Voluntary agreements by businesses to reduce food waste.</li> </ul>	2023–25	MfE	Central government agencies, local government, business sector, NGOs
15.1.3 Support participation in improved kerbside collections.	Resources and support to increase participation in and correct use of kerbside organic waste collections.	2023–25: subject to kerbside transformation consultation in 2022	MfE	Local government
Focus area 2: Increase the amount o	f organic waste diverted from landfill			
15.2.1 Improve household kerbside collection for food and garden waste.	Improvements to kerbside collections to increase the diversion of food and (where appropriate) garden waste. These may include a mix of voluntary and regulatory measures such as funding, standardised collection, separation, condition and handling of recyclable materials and food waste, and reporting against diversion targets.	2023–30: subject to kerbside transformation consultation in 2022	MfE	Local government, waste collectors and facilities
15.2.2 Invest in organic waste processing and resource recovery infrastructure.	A targeted resource recovery infrastructure fund, providing investment in infrastructure such as compost facilities, to process household (and business) food and garden waste. Increased investment in resource recovery infrastructure such as transfer stations upgrades to improve recovery and diversion of key organic waste.	2023–25	MfE	Local government, waste sector, resource recovery operators
15.2.3 Require the separation of organic waste.	Source separation of business food waste from rubbish is being consulted on (kerbside transformation proposals 2022).	2024/25: subject to Waste Minimisation Act	MfE	Local government, waste collectors and facilities

Actions for delivery	Proposed outputs	Timeline	Lead (support)	Key stakeholders/partnerships
	Regulations (following new legislation) to establish obligations for households, businesses, collectors, disposal facilities and others to separate out specified organic materials including food waste.	2008 (WMA) review in 2022/23		
Focus area 3: Reduce and divert con-	struction and demolition waste to beneficial uses			
15.3.1 Support the building and construction sector to minimise waste through research and improved capability.	Research, training and technological initiatives that minimise construction and demolition waste, including research into alternatives, techniques and processes for hard-to recycle construction materials (like treated timber).	2022–25	MfE (MBIE)	MBIE, MPI, SCION Research, BRANZ, New Zealand Green Building Council, Kāinga Ora, building and construction industry
15.3.2 Invest in sorting and processing infrastructure for construction and demolition waste.	A targeted resource recovery infrastructure fund. Increased investment in sorting and processing plant, as well as resource recovery network infrastructure to improve the separation of construction and demolition waste materials, targeting wood waste.	2023–25	MfE	Local government, waste sector, resource recovery operators
15.3.3 Enable the separation of construction and demolition materials.	Future regulations (following new legislation) to establish obligations for households, businesses, collectors, disposal facilities and others to separate out specified organic materials, including construction and demolition waste, targeting wood.	2024/25: subject to WMA review in 2022/23	MfE	MBIE, local government, building and construction sector, waste collectors and facilities
Focus area 4: Explore bans or limits	to divert more organic waste from landfill			
15.4 Investigate banning organic waste from landfill by 2030.	Proposed limits or bans of organic waste to landfill will be considered based on evidence of the combined impact (reduction of organic wastes to landfill) of waste policy implementation and infrastructure investment. To ban materials there must a reasonably practicable alternative to disposal available.	Monitor and assess the need from 2026	MfE	Māori, local government, businesses, waste industry, communities, households

Actions for delivery	Proposed outputs	Timeline	Lead (support)	Key stakeholders/partnerships
Focus area 5: Increase the capture of	of gas from landfills			
15.5.1 Regulations will require landfill gas capture at municipal landfills.	Regulations are introduced to require landfill gas capture at all municipal (Class 1) landfills that receive organic material by 31 December 2026.	Proposed by 31 December 2026	MfE	Local government and private sector landfill operators
15.5.2 Feasibility studies will determine the need for additional landfill gas capture requirements.	Investigation into the composition of waste received at a range of landfill types that receive organic waste. Research to determine landfill gas capture feasibility at Class 2–5 landfills.	2022–25	MfE	Local government and private sector landfill operators
Focus area 6: Improve waste data a	nd prioritise a national waste licensing scheme			
15.6.1 Develop a national waste licensing scheme.	New legislation and regulations to support a national waste licensing scheme for more effective regulation, administration and data collection from a range of parties.	2025: subject to WMA review in 2022/23	MfE	Local government and private sector operators of waste disposal, recovery collections and facilities
15.6.2 Improve information on greenhouse gas emissions from waste disposal.	A new national data collection and reporting programme on emissions reductions from waste, including: a landfill waste material composition survey programme, kerbside collection reporting and feasibility studies for landfill gas capture improvements.	2022–25	MfE	Local government and private sector operators of waste disposal, recovery collections and facilities

# Fluorinated gases (Chapter 16)

Actions for delivery	Proposed outputs	Timeline	Lead (support)	Key stakeholders/partnerships	
Focus area 1: Build the capability to shift to low-global warming potential Fluorinated-gases (F-gases)					
16.1 Develop training and accreditation for handling alternative gases.	Training and accreditation schemes for workers installing, servicing and disposing of equipment that uses natural or other alternative refrigerant gases.	First emissions budget (2022–25)	WorkSafe (MfE)	MBIE, WorkSafe, other regulatory organisations, users and technicians of hydrofluorocarbons (HFCs) and goods containing HFCs	
Focus area 2: Control imports of pre-charge	d equipment containing high global warming potential F-gases				
16.2 Prohibit imports of pre-charged equipment.	Regulatory proposals for prohibiting the import of products containing high global warming potential (GWP) F-gases.	First emissions budget (2022–25)	MfE	Importers and users of HFCs and goods containing HFCs	
Focus area 3: Investigate prohibiting F-gase	s where low-global warming potential alternatives are available	•			
16.3 Investigate prohibiting F-gases with high GWP.	Decision on regulatory proposals to prohibit the sale and use of high-GWP F-gases, where alternatives are available and provisions for ensuring worker safety have been made.	First emissions budget (2022–25)	MfE	Importers and users of HFCs and goods containing HFCs	
Focus area 4: Regulated product stewardshi	ip for refrigerants				
16.4 Introduce a mandatory product stewardship scheme for refrigerants.	Implement regulated product stewardship via an accredited scheme for refrigerants.	First emissions budget (2022–25)	MfE	MBIE, WorkSafe, other regulatory organisations, installers of heating, refrigerating and air conditioning equipment	

#### **Further actions**

Act	ions for delivery	Proposed outputs	Timeline	Lead	Key stakeholders / partnerships
1	Guidance to departments on how to consider low emissions objectives and climate targets.	MfE will scope appropriate mechanism(s) for delivering guidance. This will be undertaken alongside the review of Climate Implications of Policy Assessment (CIPA).	2022–23	MfE	ERP agencies, wider public sector, Māori
2	Ministerial accountability for implementing the emissions reduction plan (ERP).	Ministers are responsible to Cabinet for implementing Government climate policy within their portfolio, including in relation to any sector sub-target, and for monitoring progress against sub-targets. Individual Chief Executives are accountable for implementing the aspects of the ERP relevant to their departmental responsibilities, advising on whether new policy is consistent with any relevant sector sub-target and reporting on progress towards meeting any relevant sector sub-target. Collectively, Chief Executives coordinate implementation of the plan, monitor and advise on progress, and publish reports on the implementation and effectiveness of the plan.	First emissions budget and ongoing	MfE and ERP agencies	ERP agencies, Ministers
3	Monitoring and reporting framework.	The monitoring and reporting framework will provide 'progress reports' that evaluate the implementation and effectiveness of the ERP. This will support greater transparency and promote adaptative management of the ERP. These progress reports will provide the Climate Change Chief Executives Board and Climate Response Ministerial Group with timely information to enable active management of any risks and/or shortfalls and allow insights to inform new policy development.	First emissions budget and ongoing	MfE and ERP agencies	ERP agencies, Ministers, Climate Change Chief Executives Board, Department of the Prime Minister and Cabinet's Implementation Unit, Māori
4	Review of CIPA with a view to expansion/enhancement to better support ERP implementation.	A review of CIPA will be undertaken, commencing in July 2022, with a focus on expanding and enhancing CIPA to support agencies to consider climate implications in policymaking decisions.	2022–23	MfE	ERP agencies, Ministers, Māori





