

Mahere Hohenga kia Whakakorea te Waro ā-Kawenga 2022-25 | Decarbonising Transport Action Plan **2022-25**

Implementation plan for the actions in the Transport chapter of *Te hau mārohi ki anamata – Towards a productive, sustainable and inclusive economy: Aotearoa New Zealand's first emissions reduction plan*

December 2022



**Ko te pae tawhiti whaia kia
tata. Ko te pae tata, whakamaua
kia tina [The potential for
tomorrow is determined by
what we do today**



TE MANATŪ WAKA
MINISTRY OF TRANSPORT

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GLOSSARY

Kuputaka | Glossary

ATAP Auckland Transport Alignment Project

CATi Climate Assessment Tool for Investment

CCRA Climate Change Response
(Zero Carbon) Amendment Act 2019

CO₂ carbon dioxide

DOC Department of Conservation

EECA Energy Efficiency and
Conservation Authority

ERP Emissions reduction plan

EV electric vehicle

FBT fringe benefit tax

GHG greenhouse gas

GIA Generational Investment Approach

GPS Government Policy Statement

HUD Ministry of Housing and
Urban Development

IMO International Maritime Organization

LETf Low Emission Transport Fund

LGWM Let's Get Wellington Moving

MaaS Mobility as a Service

MBIE Ministry of Business, Innovation
and Employment

MFAT Ministry of Foreign Affairs and Trade

MfE Ministry for the Environment

MPI Ministry for Primary Industries

MRT mass rapid transit

MSD Ministry of Social Development

NLTF National Land Transport Fund

NPF National Planning Framework

PEET Project Emissions Estimation Tool

PTAs public transport authorities

PTOM Public Transport Operating Model

RCAs road controlling authorities

RM resource management

RSS Regional Spatial Strategies

RUB Requirements for Urban Buses

RUC road user charges

SAF sustainable aviation fuel

SPTF Sustainable Public Transport Framework

UGA Urban Growth Agenda

VKT vehicle kilometres travelled

He kupu nā
te Minita |
Minister's
Foreword



He kupu nā te Minita | Minister's foreword

At its heart, transport is about people. It determines how we get to work, school, and home again, influences how we connect with our whānau and communities, and dictates whether we have the materials, equipment, and services we need in our homes and workplaces.

Aotearoa New Zealand needs a well-functioning, low-emissions transport system that supports everyone to get where they need to go, access the things they need, and spend time with the people they care about.

By now it is abundantly clear that climate change is the biggest threat we are facing. We are already experiencing the impacts, with more extreme weather events affecting people's homes, communities, and businesses.

Our Government was elected in part because voters trust us to take bold action on climate change. During our first term, we committed to the net zero 2050 target, made it legally binding, and established the Climate Change Commission to give independent advice to successive governments about how best to achieve this.

This term, we received the Commission's advice and published Aotearoa New Zealand's first Emissions Reduction Plan (ERP). The ERP outlines an ambitious programme of work comprising more than 300 initiatives across many different sectors.

Transport is one of our largest sources of emissions, so decarbonising transport will be critical to the overall success of this response. Fortunately, there are many tools and approaches

already available to do this. There are also plenty of opportunities to reduce transport emissions in ways that benefit our society, economy, and environment.

The transport chapter sets out a comprehensive and ambitious approach to reducing emissions. Many of its initiatives will be complex and challenging to deliver.

We are off to a good start, having already made significant progress on some key ERP initiatives. The Clean Vehicle Programme is well underway, and the Clean Vehicle Discount scheme has already helped triple electric vehicle sales since it was introduced. More makes and models of low emission vehicles are entering the country all the time providing more options for people to reduce their fuel consumption. Planning is also advanced for the Clean Car Upgrade and social leasing trials to ensure low-income communities benefit from this transition.

We chose this early focus on fleet transition because we know it is an effective way to quickly reduce transport emissions. Accelerating this transition will help us get on track early for the 2050 target and stay there.

Transitioning the fleet will not be enough on its own and can't deliver change fast enough. We also need to ensure we can grow our cities, regions, and opportunities for people without further increasing transport emissions. This will require bigger changes like making it easier for people to get around without a car, aligning transport and land use planning, and decarbonising heavy transport.

Here too, good progress has been made, with the Bus Decarbonisation and Community Connect projects underway, an initial \$350 million invested to support mode-shift, and ongoing improvements to bus driver terms and conditions.

But we have much more to do.

This plan builds on the ERP and sets out in detail what the Government will do in the next three years to implement the ERP's transport actions and embed a long-term strategic approach across the transport system.

It will complement the *Climate System Implementation Plan* developed by the Ministry for the Environment, which sets out the implementation roadmap for the whole ERP.

If we manage this necessary transition well, we will benefit from a range of significant opportunities that will more than make up for the costs, risks, and challenges associated with the actions and initiatives in this plan:

- We will transition to a healthier transport system that gives people more transport options, makes travel safer, and creates better places to live, work, and visit.
- We will have cars and trucks powered by our abundant natural resources at a fraction of the cost of imported fossil fuels.
- We will have fast, frequent, convenient buses and trains, and safe walkways and cycle lanes through our cities meaning more people have good transport choices
- We will make better use of infrastructure and put Aotearoa New Zealand on a stronger and more resilient footing.

Reaching these aspirations will improve people's everyday lives, support new businesses in low carbon industries, and create sustainable jobs.

We know what's at stake, and what's to gain. This plan sets out the first tranche of actions that will get us there.



Hon Michael Wood
Minister of Transport



Whakarāpopoto whakarae | Executive summary

Aotearoa New Zealand's first *Emissions Reduction Plan* (ERP) laid down the challenge: we need to reduce our transport emissions by 41% by 2035 and reach net zero by 2050.

To do this, we need to focus on three things:

- Making it easier to get around without a car
- Helping people and businesses make the switch to zero emission vehicles
- Encouraging low-emissions freight options

The ERP set targets and actions in each of these focus areas to successfully reduce transport emissions.

This plan, the *Decarbonising Transport Action Plan 2022-25*, **builds on the ERP and sets out in detail how the Government will implement its transport actions in the next three years. It outlines how government transport agencies will work together and partner with Māori, local government, businesses, and communities to embed a long-term strategic approach to reducing transport emissions.**



The transport emissions reduction challenge

While future governments will have different priorities for the transport system, Aotearoa New Zealand’s commitment to reach net zero emissions by 2050 will remain.

Successfully achieving this target will require a consistent approach. The strategic analysis in Part 1 is intended to set the scene for the plan, and to inform transport emissions reduction efforts over successive emissions budget periods.

Transport emissions rose more than any other source between 1990 and 2019, by approximately 80 percent. In 2019, transport was responsible for 39% of CO₂ emissions and 17% of gross emissions. Reducing transport emissions will therefore be critical to our overall success in meeting our climate change commitments.

Most transport emissions come from light vehicles like cars

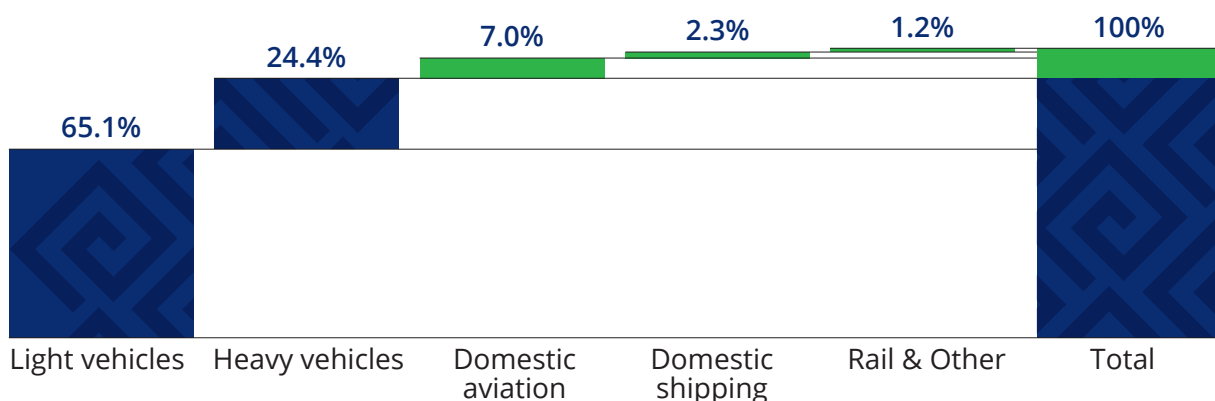
Most of our transport emissions (65.1%) come from light vehicles such as cars. We need to reduce both how much we drive in these vehicles, and how many emissions they produce.

The second largest source of transport emissions is heavy vehicles, primarily trucks (24.4%). Decarbonising freight and heavy transport will be more challenging as there are fewer alternative technologies currently available, but these will improve over time.

Other forms of transport such as rail, shipping, and aviation contribute a relatively small proportion of transport emissions. Due to the cost and availability of low carbon technologies, fully decarbonising these sectors will be a long-term project, but there are opportunities to begin now.

Figure 1: Domestic greenhouse gas emissions by transport

Year 2019 (total estimated value 14,655 kt CO₂-e)



Light vehicles include light passenger vehicles, light commercial vehicles and motorcycles.
Heavy vehicles include heavy trucks and buses

EXECUTIVE SUMMARY

Transport emissions need to reduce 41% by 2035 to fully decarbonise by 2050

To reach net zero emissions by 2050, Aotearoa New Zealand’s transport emissions need to fall 41 percent from 2019 levels by 2035, according to the pathway modelled by the Climate Change Commission. This is now a formal target set by the ERP. Beyond 2035, transport will need to be almost fully decarbonised by 2050 for us to meet our target.

Not meeting these targets will have unacceptably high costs and impacts

If we don’t meet these 2035 targets, we will need to find ways to make more rapid and significant cuts to emissions, either by making more drastic changes to the transport system later, or by shifting the burden onto other sectors of our economy. Both options are likely to have unacceptably high costs and impacts for current and future generations of New Zealanders.

Success factors for a long-term strategic approach

Ensuring a successful long-term strategic approach to reducing transport emissions will require a significant shift in how the sector has operated to date. Te Manatū Waka Ministry of Transport (Te Manatū Waka) has identified seven factors necessary to successfully embed a long-term strategic approach to transport emissions reduction.

1. Upholding Te Tiriti o Waitangi
2. Relevant agencies leading in their areas of expertise
3. Strategically sequencing interventions
4. Delivering multiple benefits across multiple outcomes
5. Working together and with communities
6. Adapting swiftly when necessary
7. Avoiding the risks of delayed action

Without these factors, we could miss the promising (but shrinking) window of opportunity to set Aotearoa New Zealand’s transport system up for a successful, equitable transition. In the view of Te Manatū Waka, these factors should inform emissions reduction efforts in the transport sector through successive emissions budget periods.



The plan in brief

Applying the ERP's principles to transport

The ERP establishes five principles to guide Aotearoa New Zealand's climate change response:

1. Playing our part

This principle means: Aotearoa New Zealand's climate response should contribute to global efforts to limit temperature rise to 1.5°C above pre-industrial levels.

The Government will apply this principle to transport by implementing ambitious, robustly evidenced, well-designed initiatives that result in effective, sustainable emissions reductions.

2. Empower Māori

This principle means: Aotearoa New Zealand's climate response should ensure an equitable transition for Māori and uphold their rights and interests under Te Tiriti o Waitangi. This will require resourcing and empowering Māori to partner with the Crown on transport issues, as well as developing the equivalent capacity and capability within relevant government agencies.

The Government will apply this principle to transport by embedding Māori-Crown relationship and engagement principles, working with Māori to identify strategic transport projects to partner on, and contributing to the Interim Ministerial Advisory Group and Māori Climate Platform.

3. Equitable transition

This principle means: Aotearoa New Zealand's climate response should seize the opportunities of the transition, support proactive transition planning, enable an affordable and inclusive transition, build the evidence base and tools

to monitor and assess impacts, and encourage informed public participation.

The Government will apply this principle to transport by implementing transport emissions reduction interventions that also deliver inclusive access and improved health and safety outcomes. Transport agencies will engage with affected communities and address potential equity impacts of transport emissions reduction efforts.

4. Working with nature

This principle means: Aotearoa New Zealand's climate response should align with national biodiversity objectives. It should support native ecosystems to remove and store carbon, increase national resilience to climate change impacts, and support thriving biodiversity, marine and freshwater environments, and natural systems throughout the lifecycle.

The Government will apply this principle to transport by implementing transport emissions reduction interventions that also deliver benefits for biodiversity, air quality, and resilience to natural hazards (such as creating green spaces and ecological corridors) as part of new and improved transport infrastructure and services.

5. A productive, sustainable and inclusive economy

This principle means: Aotearoa New Zealand's climate response should support an economy that is more productive, more sustainable, and more inclusive than the one we have today. Climate action should be an investment in higher paying jobs and more productive business, rather than a cost to bear along the way.

The Government will apply this principle to transport by prioritising transport emissions reduction interventions that support sustainable economic development, including efficient and effective access to domestic and international markets.

EXECUTIVE SUMMARY

Key moves in each focus area

 <p>Focus Area 1: Reduce reliance on cars and support people to walk, cycle and use public transport</p>	<ul style="list-style-type: none"> • Improve the reach, frequency, accessibility, and quality of public transport and make it more affordable for low-income New Zealanders. • Fund and maintain infrastructure to increase safe and accessible walking and cycling routes. • Ensure safer streets and well-functioning urban areas to support better use of infrastructure and more liveable cities to reduce the number and distance of trips that people need to make. 	<p>Target 1: Reduce total vehicle kilometres travelled (VKT) by the light fleet by 20% by 2035 through improved urban form and providing better travel options, particularly in our largest cities.</p>
 <p>Focus Area 2: Rapidly adopt low-emissions vehicles</p>	<ul style="list-style-type: none"> • Incentivise the uptake of low emissions vehicles and remove barriers to access for more New Zealanders. • Improve the supply of electric vehicle (EV)-charging infrastructure to ensure all EV users can access chargers when they need to. • Introduce further measures to shift the fleet away from internal combustion engine (ICE) vehicles, especially older, high-emitting vehicles. 	<p>Target 2: Increase zero-emissions vehicles to 30% of the light fleet by 2035</p>
 <p>Focus Area 3: Begin work now to decarbonise heavy transport and freight</p>	<ul style="list-style-type: none"> • Develop a national freight and supply chain strategy that takes a long-term systems approach to improve efficiency and reduce emissions from heavy transport. • Continue to implement the New Zealand Rail Plan and support coastal shipping. • Accelerate the uptake of low emissions trucks and buses. • Take steps to decarbonise the aviation and maritime sectors and support the uptake of new low-carbon fuels. 	<p>Target 3: Reduce emissions from freight transport by 35% by 2035</p> <p>Target 4: Reduce the emissions intensity of transport fuel by 10%</p>
 <p>Focus Area 4: Advancing cross-cutting and enabling actions</p>	<ul style="list-style-type: none"> • Align transport policy and long-term planning with the ERP. • Develop a strong evidence base to inform transport decarbonisation. • Support transport behaviour change, and develop the skills and capability required to enable the transition. 	

Progressing the focus areas together and paving the way for the future

The three focus areas are interdependent. Changes affecting one will have implications for the others. If we are unable to sufficiently reduce emissions with interventions in one focus area, we will have to try to reduce them more in another. This may not always be possible.

Similarly, the targets are interrelated. The projected impact of achieving each one is conditional on achieving one or more of the others – for example, successfully enabling more people to get around without a car by improving the alternatives (focus area 1) will reduce the pressure to source large numbers of zero emissions vehicles in the next two decades and improve our chances of achieving a 30% fleet conversion rate (focus area 2). It is therefore important that the focus areas are advanced together and not traded-off against one another.

The actions in this plan are necessary, but not sufficient

If we successfully implement all the actions in this plan alongside projected changes in the vehicle fleet, we can achieve the transport emissions reductions required between 2022–25. However, this is not a given, and depends largely on the successful and timely implementation of this plan.

This plan places particular emphasis on rapidly transitioning the vehicle fleet because this is a change with the potential to make a rapid and meaningful dent in our transport emissions that can be set in motion quickly. However, it is neither possible nor desirable to rely solely on this method.

At the same time as rapidly transitioning the light fleet, we need to prepare for, invest in, and implement actions in all three focus areas that will come on stream in five, ten, or fifteen years. This will ensure that transport emissions continue to trend down once the gains from fleet decarbonisation have been largely spent.

Future actions also rely on collaboration with other sectors

Achieving the ERP's transport targets will also require complementary policies that sit outside the core responsibility of the transport sector. Government transport agencies will partner with other sectors, particularly housing and urban development, infrastructure, energy, forestry, and building and construction, to maximise the potential for coordinated cross-sector emissions reductions for Aotearoa New Zealand in the long-term.

Establishing a monitoring framework to track progress

Te Manatū Waka has developed a Decarbonising Transport Monitoring Framework (DTMF) to help drive action and hold relevant agencies accountable for the actions in this plan. The DTMF is guided by principles that support best practice in monitoring and reporting. For more detail about the DTMF see page 37.



EXECUTIVE SUMMARY

The plan in detail

This part of the document sets out how the Government, working with key stakeholders across the transport system and communities, will deliver on the transport actions in the ERP.

Each of the thirteen transport actions and one cross-cutting action in the ERP has several detailed initiatives attached to it. For each of these initiatives, Part 3 sets out the following information:

- What are we doing?
- Responsible agency/s and key stakeholders
- Key milestones

Funding and investment

The Government has already made significant investment to decarbonise the transport system. Recently, this includes \$569 million to support low-income households to shift to low-emission alternatives when scrapping a vehicle, and \$375 million from the Climate Emergency Response Fund in Budget 2022 to support the uptake of active and shared transport modes.

Achieving our targets and fully decarbonising transport will require significant further investment. The Government will continue to look for opportunities to support this, as well as to encourage non-government investment.



How to read and use the *Decarbonising Transport Action Plan 2022–25*

This plan, the *Decarbonising Transport Action Plan 2022–25*, sets out how government transport agencies will work together and partner with Māori, local government, businesses, and communities to embed a long-term strategic approach to reducing emissions across the whole transport system, and to implement the actions required from the transport sector in the first Emissions Reduction Plan (ERP) between 2022 and 2025.

Part 1: Strategic context – the transport emissions reduction challenge

This section sets out Te Manatū Waka Ministry of Transport’s analysis of the transport emissions reduction challenge, drawing on He Pou a Rangi Climate Change Commission’s first advice to Government and modelling undertaken by Te Manatū Waka. It suggests seven success factors that will be important for a long-term strategic approach to reducing transport emissions. This strategic analysis sets the scene for the plan that follows and is intended to inform emissions reduction efforts in the transport sector over successive emissions budget periods.

Part 2: The plan in brief – meeting the expectations of the ERP

This part of the plan gives an overview of how the Government will deliver on the expectations for the transport sector in the first ERP, including how government transport agencies will apply the ERP principles to their work and how they will approach each of the ERP’s three focus areas. It also provides an overview of how progress will be tracked over time.

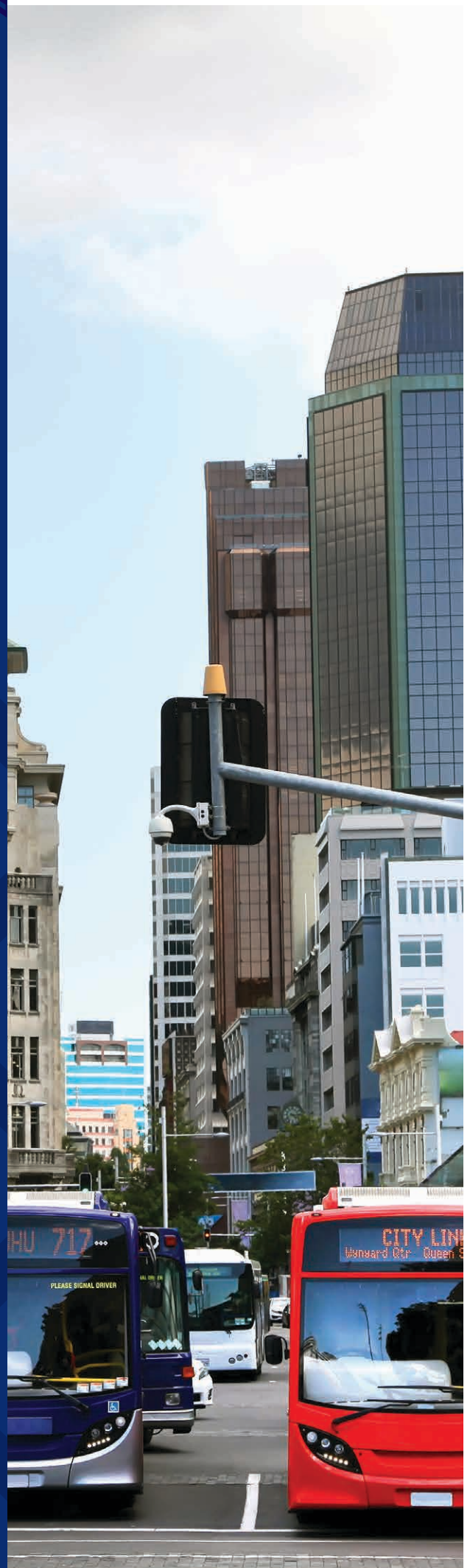
Part 3: The plan in detail – actions, initiatives, and timings

This part of the plan sets out how the Government working with key stakeholders across the transport system, Māori, and communities will deliver on the individual transport-related actions in the ERP. This builds on the ERP Table of Actions by providing more detailed information about how Te Manatū Waka, Waka Kotahi New Zealand Transport Agency, and other key stakeholders in the system will progress actions over time.

Wāhanga 1 | Part 1

Horopaki ā-rautaki – te wero kia whakaitia ngā tukuwaro ā-kawenga | Strategic context – the transport emissions reduction challenge

This section sets out Te Manatū Waka Ministry of Transport's analysis of the transport emissions reduction challenge, drawing on the Climate Change Commission's first advice to Government and modelling undertaken by Te Manatū Waka. It suggests seven success factors that will be important for a long-term strategic approach to reducing transport emissions. This strategic analysis sets the scene for the plan that follows and is intended to inform emissions reduction efforts in the transport sector over successive emissions budget periods.



The task at hand

Climate change is the biggest threat facing Aotearoa New Zealand and the world. We are already experiencing the impacts, with more extreme weather events affecting people's homes, communities, and businesses. We need to rapidly reduce greenhouse gas (GHG) emissions and transition to net-zero emissions to avoid much more damaging and far-reaching impacts in the future.

Transport is one of Aotearoa New Zealand's largest sources of GHG emissions. It produces 39% of our domestic carbon dioxide (CO₂) emissions, and 17% of total GHG emissions.¹ Reducing transport emissions will therefore be critical to our overall success in meeting our climate change commitments.

Fortunately, there are many tools and approaches available now to decarbonise transport. There are also plenty of opportunities to reduce transport emissions in ways that benefit our society, economy, and environment. We can transition to a cleaner and healthier transport system that gives people more transport options, makes travel safer, and creates better places to live, work, and visit. We can also make better use of infrastructure for moving people and freight and, by reducing our dependence on oil, we can put Aotearoa New Zealand on a stronger and more resilient footing.

What has led us to this point

Aotearoa New Zealand joined the international response to the climate crisis when we ratified the Paris Agreement in 2016 and committed to playing our part in global efforts to limit temperature rise to 1.5°C above pre-industrial levels.

In response, Parliament passed the Climate Change Response (Zero Carbon) Amendment Act 2019 (CCRA) with near-unanimous support in 2019. The CCRA requires:

- all GHGs, other than biogenic methane, to reach net zero by 2050, and
- a minimum 10% reduction in biogenic methane emissions by 2030 and a 24–47% reduction by 2050 compared to 2017 levels.

1. From a 2019 estimate of transport emissions based on New Zealand's Greenhouse Gas Inventory 1990–2020. Cited in Manatū Mō Te Taiao | Ministry for the Environment, 2022, *Te hau mārohi ki anamata | Towards a productive, sustainable and inclusive economy: Aotearoa New Zealand's first emissions reduction plan*, p171.

PART 1: STRATEGIC CONTEXT – THE TRANSPORT EMISSIONS REDUCTION CHALLENGE

These long-term targets will be met via a series of interim targets, called emissions budgets, which limit the total permitted emissions in a set period. These emissions budgets will get smaller over time as we work progressively towards our 2050 target.

At the start of each emissions budget period, the Climate Change Minister must set an emissions budget and publish an Emissions Reduction Plan (ERP) detailing the actions the Government will take to keep total emissions within the permitted limit during the budget period.

The CCRA also established the Climate Change Commission, to provide expert advice on:

- emissions budgets and how these can be reasonably met
- preparing for, and adapting to, the impacts of climate change
- monitoring and reporting on how we are tracking towards meeting our climate change commitments.

Following *Ināia tonu nei: a low emissions future for Aotearoa*, the Climate Change Commission's first advice to government in 2021, the Climate Change Minister published *Te hau mārohi ki anamata: Towards a productive, sustainable and inclusive economy*, Aotearoa New Zealand's first ERP, in May 2022.

The Transport chapter of the first ERP lays the foundation for transport emissions reduction efforts for the next 30 years and sets out transport-specific actions that will be taken between 2022 and 2025. The wider plan also includes actions to ensure the right settings are in place across the whole economy to support the scale and pace of change required.

While future governments will have different priorities for the transport system, Aotearoa New Zealand's international and domestic commitments to reach our emissions target by 2050 will remain. This will require a consistent approach if it is to be successfully achieved. The following analysis of the strategic context is intended to set the scene for the 2022–25 action plan, and to inform transport emissions reduction efforts over successive emissions budget periods.



Transport’s role in the transition

Transport emissions rose more than any other emissions source between 1990 and 2019, with an increase of approximately 80%. In 2019, transport was responsible for 17% of gross domestic emissions and 39% of total CO₂ emissions.²

The fact that transport contributes such a large proportion of long-lived gas emissions led the Climate Change Commission to conclude in *Ināia tonu nei* that action to reduce transport emissions is “critical if Aotearoa is going to reach its climate targets.”³ From being a big part of the problem, transport can now be a big part of the solution.

The Climate Change Commission’s advice identifies transport as a sector with the potential to almost completely decarbonise in time to reach the net zero by 2050 target.⁴ Aotearoa New Zealand’s overall emissions reduction success will rely heavily on transport realising this potential.

While there are costs, risks, and challenges associated with reducing transport emissions, there are also significant opportunities. Taking a strategic long-term approach to reducing transport emissions and selecting interventions based on their ability to deliver multiple benefits, presents an exciting opportunity to actively improve the equity, safety, inclusiveness, economic prosperity, and resilience of our

transport system, as well as its environmental sustainability – realising the aspirations of the Transport Outcomes Framework⁵ that underpins the work of all government transport agencies.

Aotearoa New Zealand’s domestic transport emissions

Most transport emissions (89.5%) come from land transport (primarily light vehicles such as cars at 65.1%).⁶ Reducing both **how much we drive in light vehicles** (by improving the alternatives) and **how many emissions light vehicles produce** (by improving vehicles and fuels) will therefore be critical for our pathway to net-zero emissions.

The second-largest source of emissions is heavy vehicles (24.4%), primarily trucks.⁷ **Decarbonising our freight system**, by shifting to cleaner vehicles, fuels, and modes will also be crucial to meet our emissions targets. In the short term, these shifts will be more challenging to achieve than for light vehicles as there are fewer viable alternatives currently available, but these alternatives will improve over time.

Other forms of transport make up a relatively small contribution to total domestic transport emissions compared to light vehicles. However, there are opportunities now to **begin decarbonising rail, shipping, and aviation** (for example, by replacing old technologies with modern equivalents like low-carbon ferries and locomotives and supporting the uptake of low-carbon fuels). Fully decarbonising these sectors will be a longer-term project due to the cost and availability of low carbon technologies, which in many cases are only emerging now.

2. New Zealand’s Greenhouse Gas Inventory 1990–2020.

3. He Pou a Rangi | Climate Change Commission, 2021, *Ināia tonu nei: a low emissions future for Aotearoa*, p260.

4. *Ināia tonu nei*, p76.

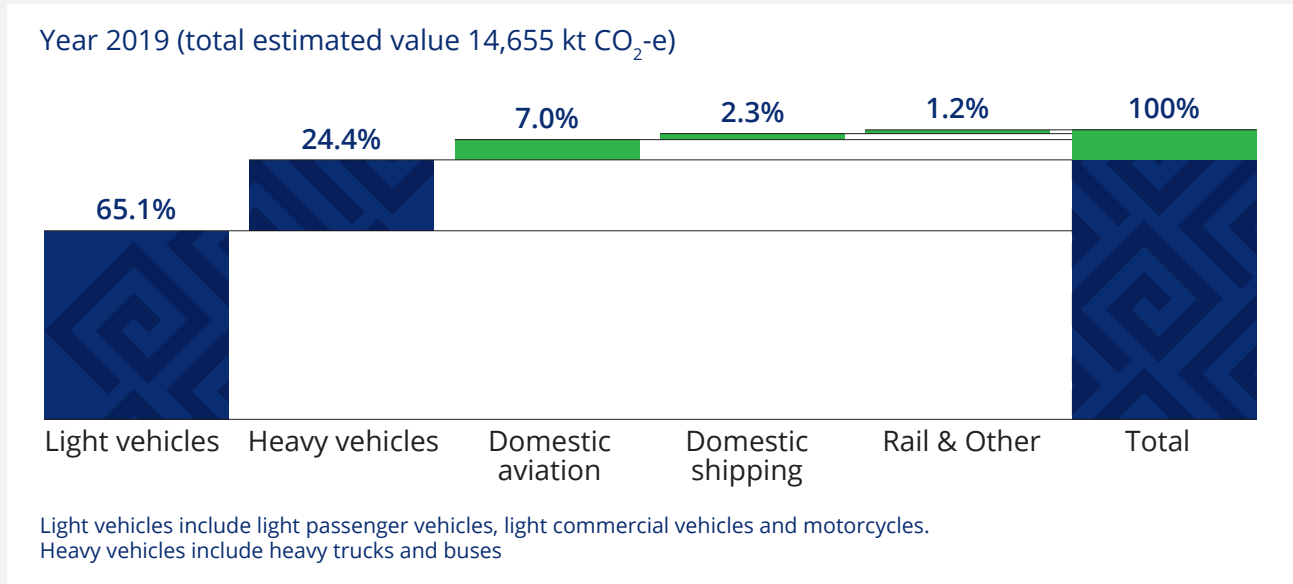
5. Te Anga Whakatakoto Hua mō ngā Waka | Transport Outcomes Framework.

6. Emissions by transport mode are from New Zealand’s Greenhouse Gas Inventory 1990–2020. Further disaggregation of road emissions is estimated by Te Manatū Waka Vehicle Fleet Emissions Model.

7. Heavy vehicles include trucks, buses, and large vans with a gross vehicle mass of 3.5 tonnes or more.

PART 1: STRATEGIC CONTEXT – THE TRANSPORT EMISSIONS REDUCTION CHALLENGE

Figure 1: Domestic greenhouse gas emissions by transport



Transport emissions need to reduce by 41% by 2035

The demonstration path to net zero emissions by 2050 modelled by the Climate Change Commission involved **reducing transport emissions by 41% by 2035**, compared to 2019 levels.⁸ The Government has formally adopted this target for the transport sector in the ERP.

Beyond 2035, **transport will need to be almost fully decarbonised by 2050** for Aotearoa New Zealand to meet our net zero target.⁹

If we do not hit these targets, we will need to find ways to make more rapid and significant cuts to emissions, either by making more-draastic changes to the transport system later or by shifting the burden onto other sectors of our economy. Both options are likely to have unacceptably high costs and impacts for current and future generations of New Zealanders.

Beyond 2035, transport will need to be almost fully decarbonised by 2050 for Aotearoa New Zealand to meet our net zero target

8. *Ināia tonu nei*, p105.

9. Te Manatū Waka Ministry of Transport, 2021 *Hikina te Kohupara – Kia mauri ora ai te iwi* | *Transport Emissions: Pathways to Net Zero by 2050*, p1.

Three ways to reduce transport emissions: Avoid, Shift, Improve

The Climate Change Commission uses an approach known as the ‘Avoid, Shift, Improve’ (ASI) framework to identify opportunities to reduce transport emissions.¹⁰

This well-recognised international framework is used by the Intergovernmental Panel on Climate Change to frame its transport analysis.¹¹ Te Manatū Waka and Waka Kotahi have also adopted this framework.¹²

According to the ASI framework, there are three main ways to reduce transport emissions:

- **Avoid** unnecessary travel. Interventions that support this objective improve the efficiency of the transport system by reducing the overall need to travel and shortening average trip distances.
- **Shift** to low-carbon modes. Interventions that support this objective make it more attractive for people to walk, cycle or use shared or public transport, and make it easier for businesses to use coastal shipping and rail freight.
- **Improve** vehicles and seek fuel efficiencies. Interventions that support this objective encourage uptake of low-carbon or zero-carbon vehicles and the development and use of more efficient, lower-emissions fuels.

Focus areas for decarbonising Aotearoa New Zealand’s transport system

Drawing on the ASI framework, the Climate Change Commission recommended three focus areas for reducing transport emissions in its first advice to Government in 2021:

Focus area 1: Reducing the reliance on cars (or light vehicles) and supporting people to walk, cycle and use public transport

The Commission advised the Government to support this change with clear targets, plans to meet those targets, and substantial increases to funding. It also suggested that local government needs more support from central government to do this job well.¹³

Focus area 2: Rapidly adopting electric vehicles (EVs)

The Commission advised that ambitious policies are needed to address supply and cost constraints and bring more EVs into the country. It recommended that we should import more-efficient vehicles until EVs are widely available and affordable in Aotearoa New Zealand.¹⁴

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

The Commission advised the Government to develop a national low-emissions freight strategy that includes moving more freight by rail and sea and to encourage the production and use of low-emissions fuels, such as biofuels, electricity, and green hydrogen.¹⁵

10. *Ināia tonu nei*, p261.

11. Intergovernmental Panel on Climate Change, 2022, *Climate Change 2022: Mitigation of Climate Change*, Chapter 10, p16.

12. *Hīkina te Kohupara*, p32; Waka Kotahi NZ Transport Agency, 2020, *Toitū Te Taiao – Our Sustainability Action Plan*, p12.

13. Climate Change Commission, 2021, *Ināia tonu nei*, p260, 264.

14. Climate Change Commission, 2021, *Ināia tonu nei*, p260.

15. Climate Change Commission, 2021, *Ināia tonu nei*, p260.

PART 1: STRATEGIC CONTEXT – THE TRANSPORT EMISSIONS REDUCTION CHALLENGE

In addition, the Climate Change Commission made several recommendations aimed at aligning changes across multiple sectors to create conditions to support system-wide emissions reductions. Many of these have implications for transport, especially the Commission's emphasis on changes to urban form, function, and development that support low-emissions transport options.¹⁶

In 2021, Te Manatū Waka published the results from a significant project to model and analyse potential pathways to net zero transport emissions, designed to inform the government's response to the Climate Change Commission's advice and assist with the development of transport-related actions and targets in the first ERP.

Te Manatū Waka identified a range of potential levers that could be used to reduce transport emissions and grouped these similarly to the three focus areas later identified by the Climate Change Commission. Several pathways to reach close to net-zero emissions from transport by 2050 were then modelled, each placing different weight on the Avoid, Shift, and Improve levers listed below:

Levers modelled in Focus area 1:

- Reduce trip distances (Avoid).
- Reduce trips taken (Avoid).
- Promote mode shift to public and active transport modes (Shift).
- Influence passenger transport decisions through pricing mechanisms (Avoid and Shift).

Levers modelled in Focus area 2:

- Increase the proportion of low/zero-emissions vehicles (Improve).
- Increase the use of low-carbon fuels (Improve).

Levers modelled in Focus area 3:

- Improve logistics and efficiency (Avoid and Improve).
- Increase the proportion of low/zero-emissions heavy vehicles (Improve).
- Promote low-carbon fuels for heavy vehicles, including planes (Improve).
- Promote mode shift to rail and coastal shipping (Shift).

While all the pathways modelled had the potential to reach close to net-zero emissions from transport

by 2050, the most feasible pathway to reach a 41% reduction in transport emissions by 2035 and put us on a pathway to net zero by 2050 required almost all the levers to be pulled as far as possible.¹⁷

The results of this analysis were published in *Hikina te Kohupara – Kia mauri ora ai te iwi: Transport Emissions – Pathways to Net Zero by 2050*. These were some of the other key findings of this analysis as they apply to the subsequent ERP focus areas:

- **Focus area 1:** We will need to shape our towns and cities to make it easier, safer, and more attractive for people to access work, schools, shops and other opportunities by public transport, walking, and cycling. Transport will need to be integrated with land-use planning to encourage quality compact mixed-use urban development with good access to active and public transport options. Transport pricing, and other demand management tools, will need to play an important role.¹⁸
- **Focus area 2:** We will need to increase the supply of clean vehicles, increase demand for them and provide supporting infrastructure. Biofuels will also play an important role in reducing emissions from the current fleet (and other modes).¹⁹
- **Focus area 3:** Emissions can be reduced by improving the efficiency of supply chains, shifting freight to low-emission modes (including rail and coastal shipping), and improving the fuel efficiency, and carbon intensity of freight modes and fuel. Trucks will need to be decarbonised through the uptake of alternative fuels such as biofuels, electrification, and/or green hydrogen. Public transport fleets, particularly buses, also need to shift to being cleaner vehicles. Cleaner aviation technologies are in the early stages of development, but there are opportunities to reduce emissions by using sustainable aviation fuel.²⁰

A key lesson from this analysis was that the scale and pace of change required to successfully reduce transport emissions in line with our net zero by 2050 target is significant. It will require coordinated action in all three focus areas using all three approaches in the ASI framework to the fullest extent possible. This in turn will require early, significant, and well-sequenced investment.

16. Climate Change Commission, 2021, *Ināia tonu nei*, p258.

17. *Hikina te Kohupara*, p108.

18. *Hikina te Kohupara*, p1.

19. *Hikina te Kohupara*, p2.

20. *Hikina te Kohupara*, p2.

Success factors for a long-term strategic approach

Ensuring a successful long-term strategic approach to reducing transport emissions will clearly require a significant shift in how the sector has operated to date.

To support Aotearoa New Zealand's climate change commitments, government transport agencies will need to adopt and maintain a shared view of the system and collaborate more to reduce emissions at the same time as achieving other outcomes required from the transport system.

This will require the development and use of transport investment criteria and decision-making tools that support a healthier, cleaner transport system for future generations and the consistent application of strategic planning and other tools by all government transport agencies.

Taking into account the Climate Change Commission's advice and the findings from the analysis undertaken for *Hikina te Kohupara*, as well as the legislative requirements of the CCRA and the aspirations expressed in the Transport Outcomes Framework, Te Manatū Waka has identified seven factors that we think will be necessary to successfully embed a long-term strategic approach to transport emissions reduction.

These success factors are:

1. Upholding Te Tiriti o Waitangi
2. Relevant agencies leading in their areas of expertise
3. Strategically sequencing interventions
4. Delivering multiple benefits across multiple outcomes
5. Working together and with communities
6. Adapting swiftly when necessary
7. Avoiding the risks of delayed action

In the view of Te Manatū Waka, these success factors should inform emissions reduction efforts in the transport sector through successive emissions budget periods. Without these, we risk remaining locked into short-term thinking, and could miss the promising (but shrinking) window of opportunity to set Aotearoa New Zealand's transport system up for a successful, equitable transition to net-zero emissions.



PART 1: STRATEGIC CONTEXT – THE TRANSPORT EMISSIONS REDUCTION CHALLENGE

1. Upholding Te Tiriti o Waitangi

The transport sector needs to build an enduring partnership with Māori over time so that the move to a low-emissions system works for Māori. Te Tiriti o Waitangi should underpin collaboration between Māori and the Crown to develop emissions reduction policies and interventions. This will require relevant government agencies to work in partnership with Māori to maximise their rangatiratanga over their goals, resources, and the services they use, co-design services that recognise differing Māori needs and strive to achieve equity of outcomes and provide Māori with options to participate in ways that are appropriate for their needs and circumstances.

What this could look like:

- Agencies understand and apply an ao Māori view in their work, acknowledging interconnections between people and the environment, affirming mātauranga Māori, and taking a holistic view of transport and what it supports.
- The principles of whanaungatanga (relationships) and kaitiakitanga (environmental guardianship) underpin ongoing engagement.
- Agencies build a stronger evidence base about current issues and opportunities for Māori in the transport system.
- Interventions to reduce transport emissions reflect the realities for whānau Māori, particularly in remote or rural communities.

➤ **To support Aotearoa New Zealand's climate change commitments, government transport agencies will need to adopt and maintain a shared view of the system and collaborate more to reduce emissions**

2. Relevant agencies leading in their areas of expertise

Each government transport agency should understand its role in relation to the overall transport emissions reduction effort and should drive change in the areas for which it is responsible. For some agencies, this may require new resources and/or the redeployment of existing resources.

In addition, it will be important for transport agencies to work closely with other agencies and sectors to deliver a coordinated, system-wide approach to emissions reductions. This may include (but is not limited to) the housing, urban development, employment, energy, social development, community, and local government sectors.

3. Strategically sequencing interventions

Achieving the degree of transformation required in the transport system will involve significant ongoing investment. It will be critical to manage this investment responsibly and sequence it wisely so that early investments lay the foundations for, cumulatively contribute to, and do not undermine future success.

What this could look like

- Interventions to reduce emissions are sequenced to achieve their full potential. This includes policies, regulations, funding, economic tools, and the delivery of infrastructure and services.
- Interventions are sequenced to support an equitable transition (for example, by ensuring that accessible, reliable alternatives are in place before any new road pricing schemes are introduced).
- Agencies support strategically sequenced system change that leads and enables individual behaviour change (through the consistent application of behaviour change approaches to transport emissions reduction efforts).
- System capacity is managed adaptively to support an ambitious pipeline of work within funding and workforce constraints.

Smart sequencing to support generational change

Well-sequenced investment can support the kinds of intergenerational shifts that need to take place if we are to successfully reduce transport emissions.

For example, many people who are children today will need to be supported to adopt walking, cycling or public transport as their ‘default’ modes of travel (especially for short trips) in the next 10–15 years. Smartly sequenced investments could build on each other over time, cumulatively creating the conditions to support this change.

Supporting a generational shift towards active modes might involve:

- **over 1–5 years, investing in** land-use changes that will encourage reduced vehicle trips and travel distances over time, securing access to strategic transport corridors for future infrastructure, safe walking and cycling zones around schools, street space reallocation to encourage cycling, cycle access schemes in schools and communities, and bike safety and maintenance education
- **over 5–10 years, investing in** using strategic transport corridors secured in years 1-5

to create active transport infrastructure connecting key destinations like parks, supermarkets, public transport hubs, and health services while also using land-use changes to support urban development projects that reduce trips and distances

- **over 10–15 years, investing in** significant changes to urban form that support reduced vehicle use, supported by a network of permanent, extensive active transport infrastructure within and between cities and towns to support a population of young adults who have grown up walking and cycling.

Similar considerations apply to supporting a shift in public transport use, for example, by investing immediately to improve pay and conditions to attract and retain drivers and other staff, in the medium term to improve the frequency, reliability, and accessibility of current services, and in the long term to support new infrastructure for future demand.

As progress is made on early steps, other levers (such as pricing mechanisms) can be introduced at appropriate times to support these transitions without disproportionately impacting those currently disadvantaged in the transport system.

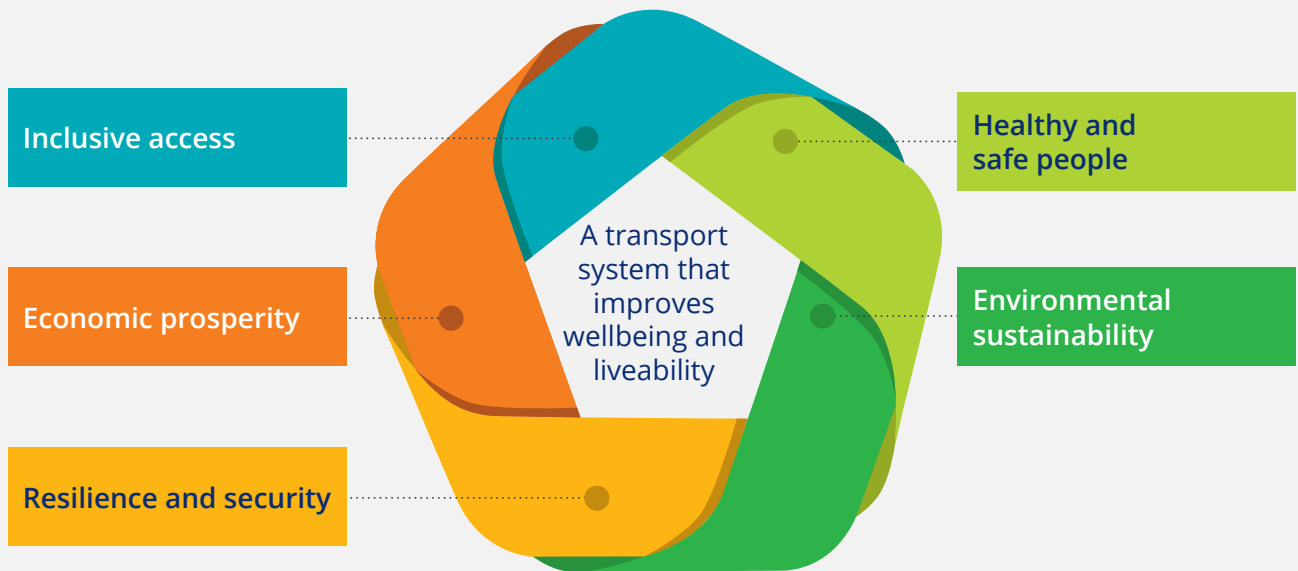
4. Delivering multiple benefits across multiple outcomes

Interventions should be identified and implemented based on their ability not only to reduce transport emissions but also to deliver wider benefits such as increased safety, greater equity, economic efficiencies, and long-term resilience.

What this could look like

- Agencies use the Transport Outcomes Framework to develop interventions to reduce transport emissions and prioritise those that deliver multiple benefits across multiple outcomes (rather than simply trading off outcomes against each other). This is likely to involve the use of generational and multi-criteria decision-making tools.

- Agencies move collectively from a ‘predict and provide’ approach to a ‘decide and provide’ approach to modelling, investment, and decision making. Instead of analysing past transport trends, assuming they will continue, and investing in infrastructure and services to service this presumed demand, agencies determine the changes required for a low-emissions transport system, model options to achieve these and invest in infrastructure and services that support these shifts along with wider benefits across multiple outcomes.

Figure 2: The Transport Outcomes Framework

5. Working together and with communities

In addition to partnering with Māori to uphold Te Tiriti o Waitangi, government transport agencies should work closely with other agencies and organisations to develop and deliver interventions together, taking shared responsibility for results that span multiple sectors such as aligning land-use and transport decision making.

What this could look like

Government transport agencies work closely with:

- other central government agencies, including Te Tūāpapa Kura Kāinga Ministry of Housing and Urban Development (HUD), Manatū Mō Te Taiao Ministry for the Environment (MfE), Manatū Hauora Ministry of Health, Kāinga Ora – Homes and Communities, and Ihi Aotearoa Sport New Zealand
- local authorities, which have a major role to play in planning and co-funding transport infrastructure and services as well as urban development
- businesses and industry representatives, with a major stake in the transport system (since the private sector owns and operates major transport infrastructure and services, leads innovation in many areas, and relies on a well-functioning transport system)

- communities, to ensure the transport system is inclusive and benefits people of all ages, abilities, identities, and income levels.

6. Adapting swiftly when necessary

Even with the best modelling and assessment, we can never be fully certain how successful planned interventions will be at reducing transport emissions. Te Manatū Waka will need to keep a close eye on progress and engage regularly with all government transport agencies to ensure the wider transport sector is ready to respond swiftly, collaborate, and adjust plans as needed in response to emerging evidence and unforeseen changes.

What this could look like

- Te Manatū Waka ensures the use of a consistent monitoring and evaluation framework and all government transport agencies contribute to regularly track and report on progress.
- Agencies scan social, economic, environmental, and technological changes that may affect transport emissions reduction efforts, anticipate potential risks and opportunities, and communicate early to identify potential actions in response.

PART 1: STRATEGIC CONTEXT – THE TRANSPORT EMISSIONS REDUCTION CHALLENGE

- Agencies support Ministers to respond to emerging trends and new data with strategic course corrections to meet our overall emissions targets and avoid wholesale changes of direction where possible.

7. Avoiding the risks of delayed action

Some of the changes required to successfully reduce transport emissions will be challenging. While careful management will limit the potential costs, risks, and potential negative impacts of these, this won't always be possible, and there are likely to be some unforeseen negative impacts of interventions to reduce emissions. Despite these challenges, it is critical that we act now to rapidly reduce transport emissions. This will prevent even more damaging and far-reaching impacts in future and maximise options when some projects prove more successful than others. Challenging as it may be to make changes now, delayed action is only likely to result in more difficult, costly, and unpopular consequences later.

What this could look like

To avoid this, transport agencies:

- develop packages of interventions that deliver a mix of short-term emissions reductions and benefits alongside changes that embed sustainability but take longer to deliver
- identify and prioritise interventions with the potential to deliver long-term benefits, including by explicitly valuing future impact in the design and assessment process
- make strategic enabling investments, applying a 'no regrets' investment approach early to support a range of options in future (understanding that failing to do this will limit future choices). An example of this would be early investment in vehicle charging infrastructure in key locations.

As the Climate Change Commission noted in its advice to government: "Once investments are made there is little scope for revisiting earlier decisions. This means that in the face of continued uncertainty and lack of national direction, building, infrastructure and transport emissions continue to be locked in."²¹



21. Climate Change Commission, 2021, *Ināia tonu nei* p257.

Wāhanga 2 | Part 2

Te mahere tāpoto – kia tutuki i ngā kawatau o te Mahere Ōheketanga Tukuwaro | The plan in brief – meeting the expectations of the Emissions Reduction Plan

This part of the plan gives an overview of how Government will deliver on the expectations for the transport sector in the first ERP, including how government transport agencies will apply the ERP principles to their work and how they will approach each of the ERP's three focus areas. It also provides an overview of how progress will be tracked over time.



Applying the ERP principles to transport

As required by the CCRA, the Government published its first ERP in May 2022 containing strategies, plans, and actions to keep total GHG emissions from 2022–25 within the limits set by the first emissions budget. This lays the foundation for Aotearoa New Zealand’s overall emissions reduction efforts for the next 30 years.

The ERP establishes five principles to guide Aotearoa New Zealand’s climate change response. These principles informed the design of the ERP and its actions and will inform its implementation:

- Playing our part
- Empowering Māori
- Equitable transition
- Working with nature
- A productive, sustainable, and inclusive economy.

The Transport chapter of the ERP sets transport-specific actions that need to be implemented from 2022–25, while the wider plan sets cross-cutting and system-wide actions for all sectors to enact to support the scale and pace of change required. Government agencies will work together and partner with others to implement these actions.

Playing our part

This principle means: Aotearoa New Zealand’s climate response should contribute to global efforts to limit temperature rise to 1.5°C above pre-industrial levels.

The Government will apply this principle to transport by implementing ambitious, robustly evidenced, well-designed initiatives that result in effective, sustainable reductions in transport emissions. These will in turn contribute to successfully meeting Aotearoa New Zealand’s climate change commitments.

Empowering Māori

This principle means: Aotearoa New Zealand’s climate response should ensure an equitable transition for Māori and uphold their rights and interests under Te Tiriti o Waitangi. This requires building Māori-Crown relationships and capability to work together as equal partners. There is a considerable opportunity to do better for Māori in the transport system. This will require resourcing and empowering Māori to partner with the Crown on transport issues as well as developing the equivalent capacity and capability within relevant government agencies.

The Government will apply this principle to transport by embedding Māori-Crown relationship and engagement principles, working with Māori to identify strategic transport projects to partner on, and creating co-design opportunities to progress these. Te Manatū Waka and other transport agencies will work with Māori to determine what Te Tiriti partnership looks like in the transport system and build a stronger evidence base about current issues and opportunities in the transport system for Māori. Government transport agencies will also contribute to the Interim Ministerial Advisory Group, Māori Climate Action platform, coordinated by MfE, to work with Māori on climate action and a Tiriti-led approach to an equitable transition for Māori through Aotearoa New Zealand’s climate response.

PART 2: THE PLAN IN BRIEF – MEETING THE EXPECTATIONS OF THE ERP

Equitable transition

This principle means: Aotearoa New Zealand's climate response should seize the opportunities of the transition, support proactive transition planning, enable an affordable and inclusive transition, build the evidence base and tools to monitor and assess impacts, and encourage informed public participation.

The Government will apply this principle to transport by implementing transport emissions reduction interventions that also deliver benefits in the inclusive access and healthy and safe people areas of the Transport Outcomes Framework. Transport agencies will engage in proactive transition planning with affected communities (including those impacted by major new public and active transport projects) and develop and refine tools and evidence to identify, analyse, and effectively address potential equity impacts of transport emissions reduction efforts.

Working with nature

This principle means: Aotearoa New Zealand's climate response should align with national biodiversity objectives. It should support native ecosystems to remove and store carbon, increase national resilience to climate change impacts, and support thriving biodiversity, marine and freshwater environments, and natural systems throughout the lifecycle.

The Government will apply this principle to transport by implementing transport emissions reduction interventions that also deliver benefits in the environmental sustainability area of the Transport Outcomes Framework. This includes identifying and embedding measures that support biodiversity and air quality such as creating green spaces and ecological corridors, as part of new and improved transport infrastructure and services. It may also involve developing and refining tools and evidence to identify, analyse, and effectively address potential environmental impacts of transport emissions reduction efforts.

A productive, sustainable, and inclusive economy

This principle means: Aotearoa New Zealand's climate response should support an economy that is more productive, more sustainable, and more inclusive than the one we have today. Climate action should be an investment in higher-paying jobs and more productive business, rather than a cost to bear along the way.

The Government will apply this principle to transport by prioritising transport emissions reduction interventions that support sustainable economic development, including efficient and effective access to domestic and international markets. This may include interventions that support investment in new, low-carbon transport technologies as well as developing and refining tools and evidence to identify, analyse, and effectively address potential economic impacts of transport emissions reduction efforts.

➤ **Climate action should be an investment in higher-paying jobs and more productive business, rather than a cost to bear along the way.**

Advancing the ERP’s transport targets and actions

The ERP adopts the three focus areas recommended by the Climate Change Commission and formalises these as part of Aotearoa New Zealand’s climate change response.

It sets four transport-specific targets that need to be achieved by 2035 – one each for Focus areas 1 and 2, and two for Focus area 3 – and lists specific actions for each focus area that government transport agencies are required to implement between 2022 and 2025.

Focus area 1: Reduce reliance on cars and support people to walk, cycle and use public transport

Target 1: Reduce total vehicle kilometres travelled (VKT) by the light fleet by 20% by 2035 through improved urban form and providing better travel options, particularly in our largest cities

To achieve this target²², the Government will:

- improve the reach, frequency, accessibility, and quality of public transport and make it more affordable for low-income New Zealanders
- fund and maintain infrastructure to increase safe and accessible walking and cycling routes
- ensure safer streets and well-functioning urban areas to support better use of infrastructure and more liveable cities to reduce the number and distance of trips that people need to make.

Two-thirds of transport emissions come from the light vehicle fleet (cars, vans and utility vehicles that weigh up to 3.5 tonnes). Reducing reliance on fossil-fuelled vehicles is at the heart of the transport emissions challenge.

Achieving a 20 percent reduction in light VKT travelled by 2035 would represent a substantial portion of the transport emissions sub-targets and total emissions budgets. If Aotearoa New Zealand achieved Target 1, this is estimated to reduce emissions by 0.8Mt, 4.7Mt and 7.9Mt in the first three budget periods respectively.

Government agencies from multiple sectors will work together to shape urban form to reduce both the average number of trips and the average distance people need to travel in their daily lives. Central government will work with local government to shape urban form and support mode shift by providing better travel options, such as more accessible and reliable public transport, better active transport infrastructure, and shared mobility options. The Government intends to use pricing mechanisms responsibly to support more liveable cities (without penalising those already disadvantaged), make better use of infrastructure, and support and incentivise more people to use active and public transport modes as their main form of transport. Most of this change needs to happen in our largest cities, where people are more likely to have transport options other than travelling by car.

Government transport agencies (including delivery agencies) and local authorities are responsible for many of the levers that can support people to reduce reliance on cars. These include providing and funding public transport services and infrastructure and funding and planning urban development and infrastructure that makes it safe, easy, and attractive to walk and wheel. Waka Kotahi, alongside Te Manatū Waka, is currently working in partnership with Māori, councils, and communities to develop national and local VKT reduction plans.

Providing better travel options will also support increased housing density in existing urban areas.

22. The 20 percent target reduction refers to the percentage change in 2035 light vehicle VKT that would otherwise take place under a BAU-type scenario. Light vehicle fleet VKT is estimated to increase by 24 percent between 2019 and 2035 without further intervention. The 20 percent reduction against the 2035 baseline is equivalent to a 1 percent VKT reduction compared to 2019 levels.

PART 2: THE PLAN IN BRIEF – MEETING THE EXPECTATIONS OF THE ERP

Transport improvements will be progressed in tandem with increased supply of affordable housing. Te Manatū Waka and other agencies will provide advice on the best use of legislative and regulatory settings to enable these changes.

ERP actions for Focus area 1

- **Action 1.1:** Integrate land-use planning, urban development and transport planning and investments to reduce transport emissions
- **Action 1.2:** Support people to walk, cycle and use public transport
- **Action 1.3:** Enable congestion charging and investigate other pricing and demand management tools to reduce transport emissions
- **Action 1.4:** Require roadway expansion and investment in new highways to be consistent with transport targets
- **Action 1.5:** Embed nature-based solutions as part of our response to reducing transport emissions and improving climate adaptation and biodiversity outcomes

Detailed implementation plans for each of these actions are set out in Part 3, starting on page 42.

Focus area 2: Rapidly adopt low-emissions vehicles**Target 2: Increase zero-emissions vehicles to 30% of the light fleet by 2035**

To achieve this target, the Government will:

- incentivise the uptake of low emissions vehicles and remove barriers to access for more New Zealanders
- improve the supply of EV-charging infrastructure to ensure all EV users can access chargers when they need to
- introduce measures to restrict ongoing import of internal combustion engine vehicles, especially older, high-emitting vehicles.

While the ambitions outlined in Focus area 1 will support people to travel more by public and active transport, most trips in Aotearoa New Zealand will likely still be made by car in the short to medium term. Therefore, alongside reducing reliance on light vehicles, decarbonising the light vehicle fleet is critical for meeting our emissions reduction targets.

Te Manatū Waka will provide advice on the best use of policy and investment settings to increase the supply of clean vehicles in Aotearoa New Zealand, support more New Zealanders to buy low/zero-emissions vehicles and ensure the necessary infrastructure is in place for their use.

Te Manatū Waka will provide advice on the introduction of measures to avoid Aotearoa New Zealand becoming a dumping ground for high-emitting vehicles. With many countries phasing out internal combustion engine vehicles, there is a risk that these unwanted vehicles will end up on our roads.

The scale and pace at which New Zealanders transition to low/zero-emissions vehicles will be determined by the choices of individual car owners, businesses, and community groups with the potential to swap their existing vehicles for low/zero-emissions alternatives. Government agencies will support more people to make the switch with schemes to address the high upfront costs of low/zero-emissions vehicles. Māori and community enterprises such as the Ohomairangi Trust in Māngere, Auckland, are demonstrating the benefits of transitioning to low/zero-emissions vehicles. Government agencies will also lead by example in transitioning their vehicle fleets and supporting transition of the public transport fleet.

The Clean Car Sector Leadership Group has been established to advise on measures to accelerate the uptake of clean vehicles, including measures to address future supply constraints.

Fleet transition will only take place at the scale required if there is widespread access to an affordable, reliable, secure, and safe charging network. There are currently fast/rapid direct current (DC) charging stations at least every 75km across over 96% of the state highway network. A long-term EV charging infrastructure strategy will consider the role of different parts of the transport, housing and electricity sectors in ensuring a complete public charging network. Individuals, workplaces, community spaces, and marae can also contribute by hosting charging points.

ERP actions for Focus area 2

- **Action 2.1:** Accelerate the uptake of low-emission vehicles
- **Action 2.2:** Make low-emissions vehicles more accessible for low-income and transport-disadvantaged New Zealanders
- **Action 2.3:** Support the rollout of EV charging infrastructure

Detailed implementation plans for each of these actions are set out in Part 3, starting on page 82.

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

Target 3: Reduce emissions from freight transport by 35% by 2035

Target 4: Reduce the emissions intensity of transport fuel by 10% by 2035

To achieve these targets²³, the Government will:

- develop a national freight and supply chain strategy that takes a long-term systems approach to improve efficiency, support more freight travelling via low-emissions modes, and reduce emissions from heavy transport
- continue to implement the New Zealand Rail Plan and support coastal shipping
- accelerate the uptake of low-emissions trucks and buses
- take steps to decarbonise the aviation and maritime sectors and support the uptake of new low-carbon fuels.

Heavy transport, mostly trucks used for freight, is responsible for almost a quarter of total transport emissions.

Te Manatū Waka will develop a national freight and supply chain strategy with industry that takes a long-term systems approach. This strategy will look for opportunities to improve efficiency and reduce emissions across Aotearoa New Zealand's freight transport system while ensuring our freight system remains productive and resilient to shocks and meets the needs of the wider economy.

In the short term, the freight sector will need to improve vehicle fuel efficiency and accelerate the uptake of low/zero-emissions trucks, while the

wider transport sector will need to decarbonise other heavy vehicles such as buses. While making up only a small proportion of transport emissions, decarbonising the bus fleet will become increasingly important as more people are encouraged to travel by bus.

In the longer term, reducing emissions from freight and heavy transport will also require significant modal shift from road to both rail and coastal. Long term planning and investment will ensure that resilient and reliable assets are in place, and that there is capacity to respond to increased demand for low/zero-emissions freight options. KiwiRail is currently pursuing a fleet decarbonisation business case to inform long-term fleet and infrastructure planning, and the New Zealand Rail Plan and Rail Network Investment Programme funding model will help to guide long-term investment.

The relevant transport agencies and industry bodies are taking steps to decarbonise aviation and maritime emissions. Domestic aviation and maritime emissions only make up 9% of CO₂ emissions. Nevertheless, our international obligations will drive domestic emissions reductions in these sectors as we join in global efforts to reduce emissions from international aviation and shipping. Reducing our international aviation and maritime emissions will be important for Aotearoa New Zealand's long-term economic viability given our geographical location and the importance of international export markets to our economy.

The wider transport sector also needs to reduce emissions from the fuels used for transport. Low-carbon liquid fuels, such as biofuels, will play a role alongside electrification, the use of hydrogen and other technologies. Relevant agencies will provide advice on the best use of regulatory settings to provide investment certainty for the development of sustainable feedstocks and to support the staged investment that will be required to build a diversified biofuels industry, and agencies are actively considering how to do this. Getting regulatory settings right will also be important to support the uptake of other new low-carbon fuels and technologies as well as to manage any new environmental or safety risks these may pose.

23. Target 3 is compared to the level of emission from freight transport in 2019. Target 4 is conditional on undertaking activities a part of achieving Targets 1, 2, and 3 that would bring about lower project liquid fossil fuel use in 2035. Even with targets 2 and 3, much of the transport fleet will still rely on fossil fuel in 2035 and the emissions intensity of fuel will remain constant overtime without intervention, which determines the GHG emissions produced when fuel is used.

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While the freight and heavy transport sectors are largely driven by private enterprises, the task of future-proofing the freight and supply chain system will be shared by those who manage, operate, and use the system. This includes central and local government, Crown agencies, Māori, unions, and industry partners across the supply chain within and outside of the transport sector.

A more strategic and coordinated approach to the freight and supply chain system will be necessary to deliver change of the magnitude and in the time required in a system in which government transport agencies are one small part. Ports, airports, and rail will need to decarbonise their operational emissions, not only to meet our emissions reduction targets but also to remain attractive to international carriers and resilient to international market changes. This is likely to require significant investment in current and new infrastructure, certainty around government investment and the future of our port system, and certainty around future energy supplies.

ERP actions for Focus area 3

- **Action 3.1:** Support the decarbonisation of freight
- **Action 3.2:** Accelerate the decarbonisation of the public transport bus fleet
- **Action 3.3:** Work to decarbonise aviation
- **Action 3.4:** Progress the decarbonisation of maritime transport
- **Action 3.5:** Implement the Sustainable Biofuels Obligation

Detailed implementation plans for each of these actions are set out in Part 3, starting on page 94.

Advancing cross-cutting and enabling actions (Focus area 4)

To support cross-cutting and enabling actions, the Government will:

- align transport policy and long-term planning with the ERP
- develop a strong evidence base to inform transport decarbonisation
- support transport behaviour change, and develop the skills and capability required to enable the transition.

The ERP also requires a fourth focus area: cross-cutting and enabling actions to support the necessary changes and contribute to achieving a low-emissions transport system. Government agencies from multiple sectors will collaborate on wider ERP implementation planning.

This will involve developing a strong evidence base, embedding long-term decision making, developing skills and capability to support the necessary transition in the transport sector, and supporting behaviour change. Tools include the Transport Outcomes Framework, which will be used to prioritise transport interventions that can deliver multiple benefits across multiple outcomes, and Te Manatū Waka Behaviour Change Framework²⁴, which will be used to assess five dimensions that influence transport



24. Te Manatū Waka Behaviour Change Framework

PART 2: THE PLAN IN BRIEF – MEETING THE EXPECTATIONS OF THE ERP

behaviour. These dimensions are institutional factors; socio-cultural factors; infrastructural factors; business, corporate, and organisational factors; and individual factors. Changes will be advanced together across all five areas.

We also need to maintain links between this action plan and other related work programmes.

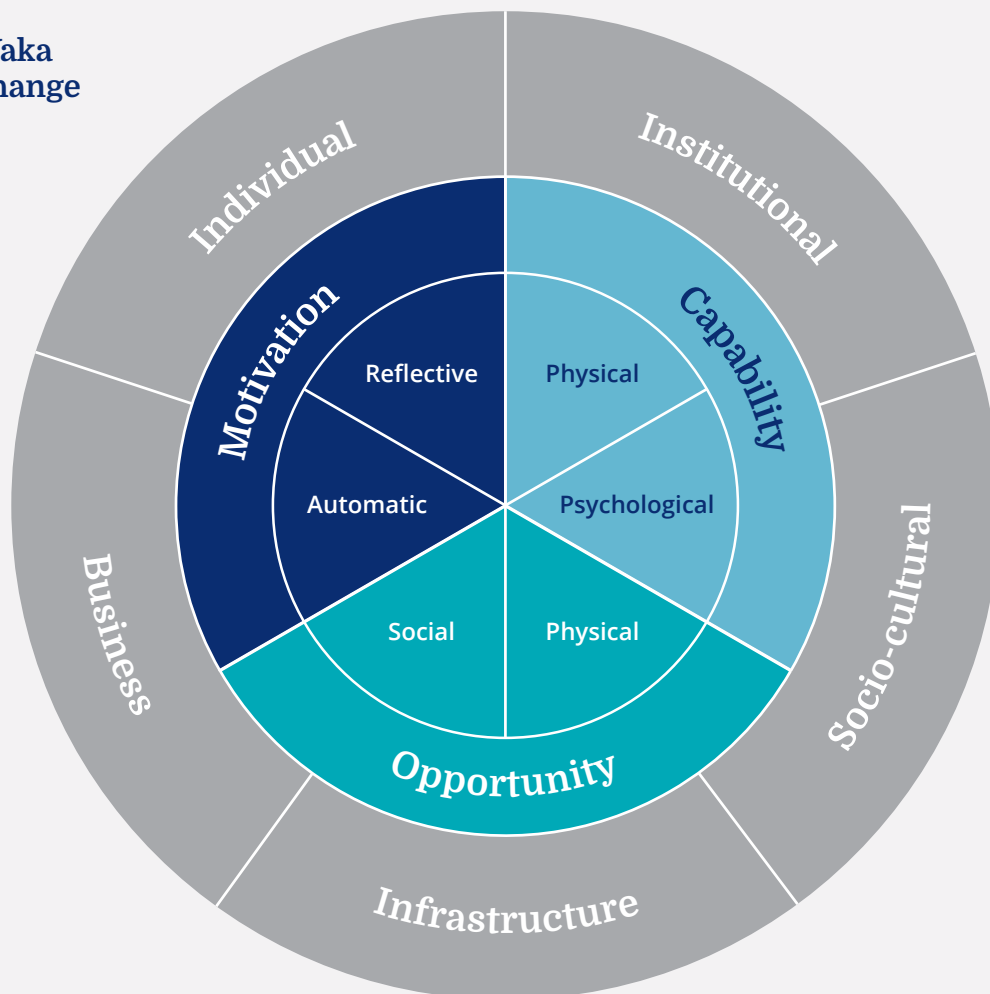
Initiatives for Focus area 4

- **Initiative 4.1:** Ensure the next Government Policy Statement on Land Transport guides investment consistent with the emissions reduction plan
- **Initiative 4.2:** Develop a strong evidence base to inform transport decarbonisation and an equitable transition and ensure actions taken are effective within the Aotearoa New Zealand context

- **Initiative 4.3:** Embed long-term transport planning to give greater confidence that Aotearoa New Zealand is on track to eliminate emissions and achieve other goals
- **Initiative 4.4:** Provide people and businesses with information and education to support behaviour change as we transition to a low-carbon economy
- **Initiative 4.5:** Develop the skills and capability required to transition to a low-emissions transport system and support an equitable transition

Detailed implementation plans for each of these initiatives are set out in Part 3, starting on page 112.

Figure 3:
Te Manatū Waka
Behaviour Change
Framework



Progressing the focus areas together

If we are going to succeed at reducing Aotearoa New Zealand’s transport emissions, the focus areas, targets, and actions set out in the first ERP will need to be pursued together.

The three focus areas are interdependent. For example, reducing reliance on cars (Focus area 1) would reduce the number of vehicles in the light fleet to be transitioned and the amount of fuel to be decarbonised (Focus area 2).

Changes affecting one focus area will also have implications for the others. For example, interventions to decarbonise heavy vehicles including buses (Focus area 3) may influence the reliability, frequency, and accessibility of public transport and thus influence mode shift (Focus area 1).

Relatedly, if we are unable to sufficiently reduce emissions with interventions in one focus area, we will have to try to reduce them more in another. For example, if we are not successfully able to influence the average number and length of trips taken in private cars (Focus area 1), we may need to rely more on transitioning the light vehicle fleet to low/zero-emissions vehicles (Focus area 2). This may not always be possible.

Similarly, the targets are interrelated. The projected impact of achieving each one is conditional on achieving one or more of the others.

It is therefore important that the focus areas are advanced together and not traded off against one another.

What if everyone had an EV? Why we can’t rely on fleet conversion alone

It is tempting to think we could achieve our transport emissions reduction targets in a relatively low-impact way by simply transitioning the light fleet to zero-emissions vehicles as quickly as possible.

Rapid fleet transition does need to be an early priority, and this is reflected in the ERP. However, it is neither possible nor desirable to rely solely on this method for several reasons:

- International supply constraints mean we are unlikely to be able to access enough EVs to rely on this pathway, even if we bulk-purchase vehicles and massively increase subsidies.
- Infrastructure upgrades necessary to support a fully transitioned fleet, like an EV charging network and/or hydrogen fuel stations, are not yet available at scale and will take time to put in place.
- Hybrid and plug-in EVs still have a significant carbon footprint. EVs generate around 60% fewer emissions than petrol vehicles over their lifetime. While manufacturing emissions occur overseas and don’t ‘count’ for our totals, offloading emissions to other countries like this is inconsistent with the first ERP principle of *playing our part*.
- Converting the fleet without reducing VKT will not address other harmful costs of our over-reliance on cars, like road deaths and injuries, inequitable mobility, and mental and physical harms associated with limited physical activity. The ERP principle of equitable transition requires us to seize the opportunities of the transition and embed options that will deliver multiple benefits. Fleet conversion alone does not do this.

Paving the way for future action

Actions in this plan are necessary, but not sufficient, to meet 2035 and 2050 transport emissions reduction targets.

Te Manatū Waka modelling suggests that if we successfully implement all the actions in the first ERP alongside projected (and quite ambitious) changes in the vehicle fleet's profile and fuel efficiencies, we can achieve the transport emissions reductions required in the first emissions budget period. However, this is not a given and depends largely on the successful and timely implementation of this plan.

The first ERP places particular emphasis on Focus area 2 (Rapidly adopt low-emissions vehicles), because this is a change with the potential to make a rapid and meaningful dent in our transport emissions and can be set in motion quickly. However, as noted on the previous page (see textbox), Focus area 2 will not be enough on its own.

Actions in this plan support further changes in future emissions budget periods

At the same time as rapidly transitioning the light fleet, we need to prepare for, invest in, and implement actions in all three focus areas that will come on stream in 5, 10, or 15 years. This will ensure that transport emissions continue to trend down once the gains from fleet decarbonisation have been largely spent.

Successfully reaching our 2035 and 2050 targets requires a significant transformation of the transport system – a transformation that will take time. Because this is Aotearoa New Zealand's first ERP, most of its actions are enabling, intended to be followed up in future emissions budgets with additional and more-specific actions and refinements.



PART 2: THE PLAN IN BRIEF – MEETING THE EXPECTATIONS OF THE ERP

For example, all the pathways to net zero transport emissions modelled by Te Manatū Waka assume the eventual introduction of a congestion charge or other pricing mechanism, but the first ERP does not include a firm commitment to this.²⁵ Further actions will need to be developed for future emissions budget periods and ERPs. When developing future actions, government transport agencies will use the Transport Outcomes Framework to prioritise interventions with the greatest potential to deliver co-benefits.

Te Manatū Waka is building its capacity to generate long-term, strategic options

Te Manatū Waka is in the process of embedding a Generational Investment Approach to ensure long-term benefit is given sufficient weight in transport decision-making. Applying this approach, Te Manatū Waka recently convened a panel of experts to consider a range of approaches to Target 1 (reduce VKT by 20% by 2035) using a multi-criteria analysis process based on the Transport Outcomes Framework with an additional measure of long-term impact.

The results suggested that active and public transport interventions and interventions that integrate land use and transport have the greatest potential to deliver both successful transport

emissions reductions and wider co-benefits, according to the expert panel's assessment. These findings provide a base for building a portfolio of investment options that could be included in ERPs for future emissions budget periods. A case study of the Generational Investment Approach assessment of potential approaches to VKT reduction can be found on Te Manatū Waka website alongside this Action Plan.

Future actions also rely on complementary and collaborative action with other sectors

Achieving the ERP's transport targets will also require complementary policies that sit outside the core responsibility of the transport sector. The price setting for the Emissions Trading Scheme and changing the way we plan our towns and cities are two key examples. Government transport agencies will partner with other sectors, particularly housing and urban development, infrastructure, energy, forestry, and building and construction, to maximise the potential for coordinated cross-sector emissions reductions for Aotearoa New Zealand in the long term.

It will also be important to maintain links with other related work programmes, including the Carbon Neutral Government Programme and the national adaptation plan²⁶.

25. *Hīkina te Kohupara*, p144; *Te hau mārohi ki anamata*, p180.

26. Aotearoa New Zealand's first national adaptation plan contains strategies, policies, and actions that will help New Zealanders adapt to the changing climate and its effects. The national adaptation plan can be found at <https://environment.govt.nz/publications/aotearoa-new-zealands-first-national-adaptation-plan>.

Establishing a monitoring framework to track progress

Te Manatū Waka has developed the Decarbonising Transport Monitoring Framework (DTMF) to ensure that effective reporting mechanisms are in place to help drive action and hold relevant agencies accountable for the implementation of various decarbonising transport actions²⁷.

The DTMF is guided by the following principles that support best practice in monitoring and reporting progress to achieving desired outcomes:

- **Strategic alignment** of existing systems
- **Quality** in accurate, transparent reporting
- **Value for money** across the entire lifecycle
- **Inclusiveness** ensuring equity and access to information
- **System approach** coordinating data and systems across agencies and frameworks
- **Continuous improvement** of evidence gathering
- **Consistency** in monitoring and reporting

➤ **A key feature of the framework is that it will make it possible to track immediate, short-term, and long-term changes that result from actions in this plan**

Measuring progress

To track progress against a diverse range of interrelated actions, we need to understand each action's role in the intervention lifecycle and know how we will measure success for each one (see Figure 4).

Indicators are data that need to be identified in advance and tell us measurable information about the impact of interventions. The DTMF (see Figure 5) sets out linkages between action indicators and outcome indicators and shows how they relate to the targets.

This framework will make it possible to assess progress against key objectives in each of the focus areas and to demonstrate the overall impact of the actions in this plan on transport emissions.

A key feature of the framework is that it will make it possible to track immediate, short-term, and long-term changes that result from actions in this plan. The framework will be adapted and updated over time.

Roles and responsibilities

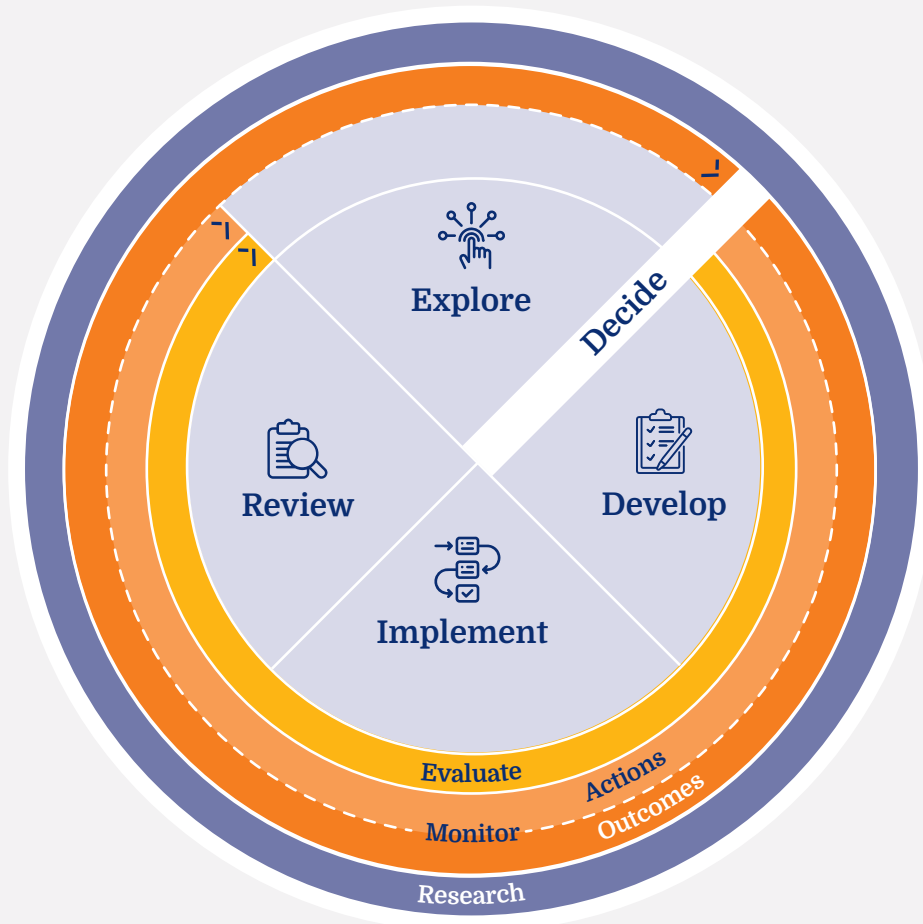
Government agencies will collaborate to report progress against this framework.

Te Manatū Waka will lead continued refinement and adaptation of the framework and indicators for transport initiatives. This includes working with other government agencies and the wider transport sector to identify appropriate mechanisms to fill data and research gaps related to indicators that are not currently monitored.

Implementation agencies (including Te Manatū Waka, Waka Kotahi, KiwiRail, and local authorities) and other agencies will play a key role in developing and optimising indicators that provide relevant real-world indications of progress.

27. For a more detailed description of how this framework will be used to track progress across the transport sector's decarbonisation initiatives, a technical paper will be published in early 2023 and will be available alongside this Action Plan on Te Manatū Waka website.

Figure 4: Measuring progress through the intervention lifecycle



Where are we?

Broadly defining what phase an action is in helps to identify how far it has progressed.

- **Explore** the options
- **Decide** on a path
- **Develop** a plan
- **Implement** an action or set of actions
- **Review** effectiveness, lessons learned and next steps

Monitoring actions tells us how much progress we’ve made against that action’s planned inputs, process and outputs

How do we measure progress?

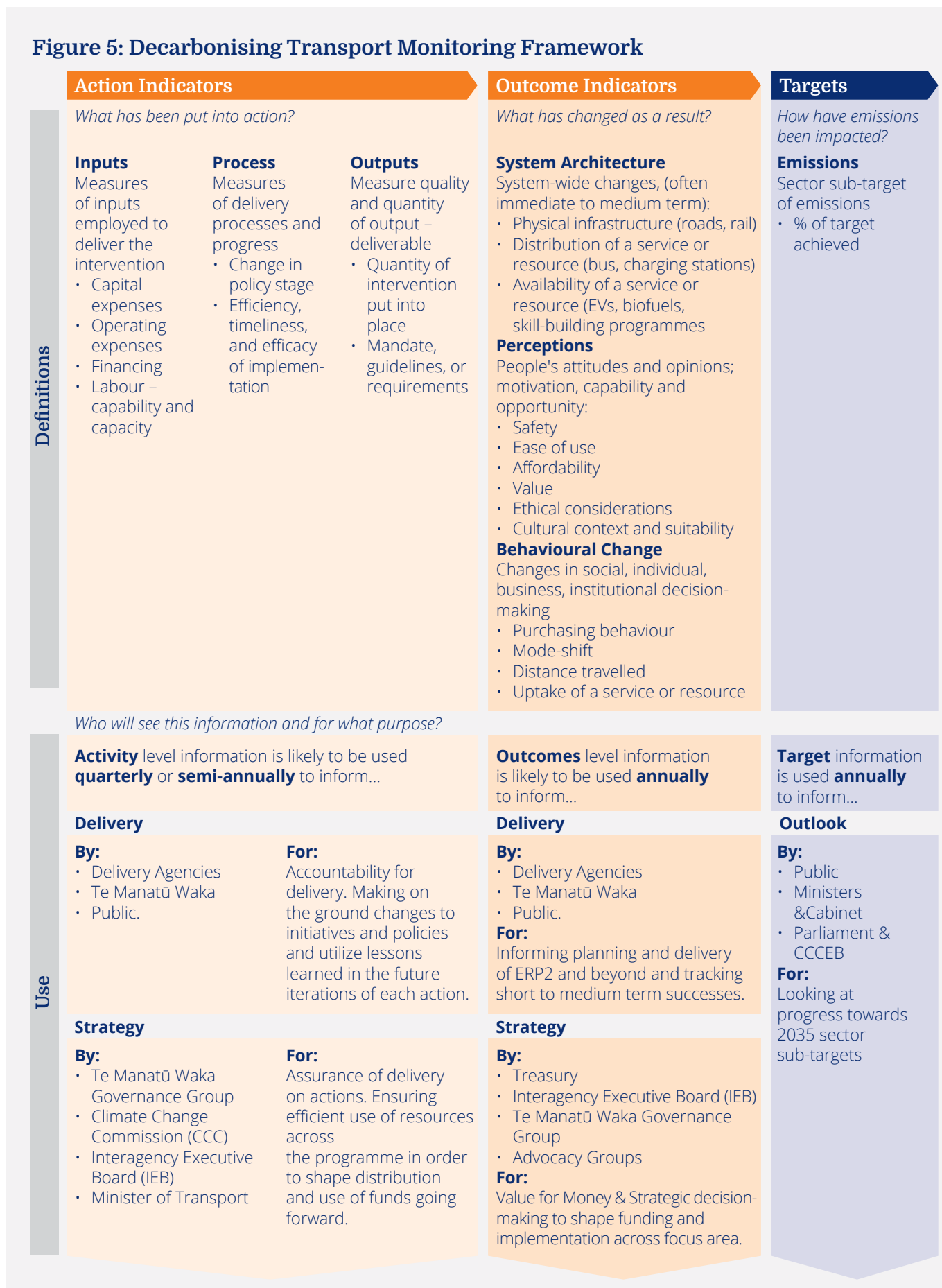
Gather and examine data to measure the impact of an action or suite of actions.

- **Monitor** data for each action, overarching **outcomes**, progress toward **target(s)**
- **Research** context, gaps, improvements, options & alternatives
- **Evaluate** effectiveness of an action or set of actions

After a cabinet decision is made, monitoring and evaluation of an action can begin.

Links to existing **outcomes** can be made, and new **outcomes** established.

Figure 5: Decarbonising Transport Monitoring Framework

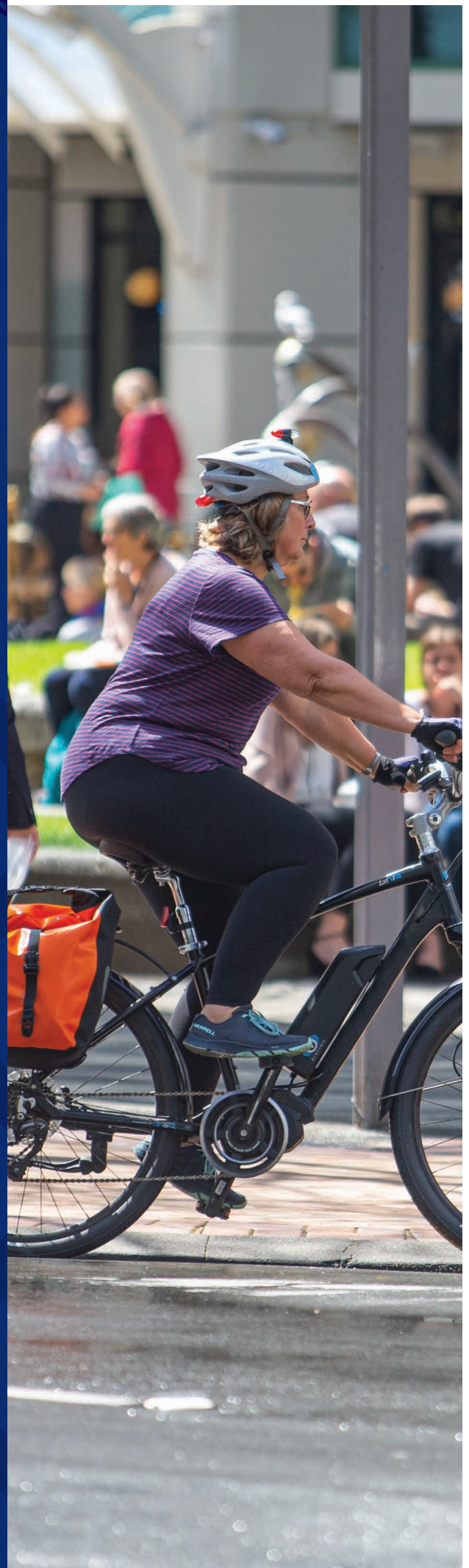


Wāhanga 3 | Part 3

Te mahere ā-taipitopito – hohenga, marohi, ā, wā whakahaere | The plan in detail – actions, initiatives, and timings

This part of the plan sets out how the Government, working with key stakeholders across the transport system, Māori, and communities, will deliver on the individual transport-related actions in the ERP. This builds on the ERP table of actions by providing more detailed information about how Te Manatū Waka, Waka Kotahi, and other key stakeholders in the system will progress actions over time.

This is an ambitious, far-reaching plan for the transport system. As each initiative is progressed, the Government may need to adapt its approach and timelines may change.



Introduction

Funding and investment

The Government has already made significant investment to decarbonise the transport system. Recently, this includes \$569 million to support low-income households to shift to low-emissions alternatives when scrapping a vehicle and \$375 million to reduce reliance on cars and support the uptake of active and shared transport modes from the Climate Emergency Response Fund in Budget 2022. These investments are a critical step in supporting our transition to net-zero emissions by 2050.

Going forward, there will continue to be significant funding requirements to decarbonise the transport system and achieve our targets. The Government will continue to consider funding and investment requirements, and opportunities for encouraging non-government investment as part of delivering this plan.

\$569M

in Government support from Budget 22 for low-income households to shift to low-emissions alternatives when scrapping a vehicle

\$375M

from the Climate Emergency Response Fund as a part of Budget 22 to reduce reliance on cars and support the uptake of active and shared transport modes

Scope

The actions in this plan address emissions produced from vehicle use (tailpipe emissions) rather than embodied or operational emissions from construction, maintenance, and operation. Some of these emissions are addressed through actions in ERP Chapter 12: Building and construction. A whole-of-life approach to transport emissions should consider emissions that arise from constructing and maintaining transport infrastructure such as streets and roads, rail, and ports. The operators of a large proportion of transport infrastructure are Crown agencies, and they will be expected to measure, verify, report, and reduce emissions from their operations under the Carbon Neutral Government Programme. This approach also supports a circular economy. The Government is considering how to manage whole-of-life carbon in the aviation and maritime sectors.

The actions and initiatives in this plan are focused on mitigation. Plans to enhance resilience to climate change risks are contained in the national adaptation plan.

Number referencing of actions and initiatives in this plan

The transport commitments in Aotearoa New Zealand's first emissions reduction plan sit under Chapter 10, and each focus area and action is numbered as 10.x.x accordingly. For the purpose of this document, the '10' has not been referenced, but all other numbering remains consistent with the ERP.

For example

ERP:

Action 10.2.1: Accelerate the uptake of low-emissions vehicles

Action plan:

Action 2.1: Accelerate the uptake of low-emissions vehicles



Focus area 1: Reduce reliance on cars and support people to walk, cycle and use public transport

Focus area 1 includes five initial actions that are described in more detail in the following pages.

Focus area 1 is further supported by actions in ERP Chapter 7: Planning and infrastructure, which takes a multi-sectoral approach to resource management planning and infrastructure investment.

Actions for Focus area 1

Action 1.1: Integrate land-use planning, urban development and transport planning and investments to reduce transport emissions

Action 1.2: Support people to walk, cycle and use public transport

Action 1.3: Enable congestion charging and investigate other pricing and demand management tools to reduce transport emissions

Action 1.4: Require roadway expansion and investment in new highways to be consistent with transport targets

Action 1.5: Embed nature-based solutions as part of our response to reducing transport emissions and improving climate adaptation and biodiversity outcomes

Action 1.1: Integrate land-use planning, urban development and transport planning and investments to reduce transport emissions

Our planning and investments decisions influence how and where our towns and cities grow. To reduce transport emissions and support well-functioning towns and cities, we need to create places where people are close to jobs, education, shops, and other amenities, reducing their trip lengths and supporting a greater range of transport modes. Intensification of urban areas, with mixed land uses, needs to occur in combination with improvements to clean and healthy transport options, like public transport and active travel networks, to avoid/reduce emissions and improve accessibility. Greenfield developments also need to be public and active transport oriented, with a range of amenities and services located nearby. Achieving this requires the strategic integration of land-use planning, urban development, transport planning, and infrastructure investments to reduce transport emissions. Housing and transport will need to work hand in hand.

This action includes six initiatives that are described in more detail in the following pages.

Initiatives

Initiative 1.1.1: Better integrate transport planning and land-use planning through the resource management reforms

Initiative 1.1.2: Develop the evidence base and tools to quantify and assess transport emissions from proposed transport and urban developments

Initiative 1.1.3: Assess spatial plans to understand emissions implications and key risks and opportunities for reducing emissions

Initiative 1.1.4: Incorporate transport-emissions impact assessments into transport plans

Initiative 1.1.5: Identify ways to incentivise developments that avoid/reduce the need to travel and encourage travel by public transport, walking and cycling

Initiative 1.1.6: Require new investment for transport projects to demonstrate how they will contribute to emissions-reduction objectives and set a high threshold for approving new investment for any transport projects if they are inconsistent with emissions-reduction objectives

Initiative 1.1.1

Better integrate transport planning and land use planning through the resource management reforms

What are we doing?

The Government is reforming New Zealand's resource management (RM) system,²⁸ which presents opportunities to better integrate transport planning and land-use planning. This includes the provision of greater national direction for infrastructure, through the National Planning Framework (NPF). Te Manatū Waka is working with MfE and Te Waihanga New Zealand Infrastructure Commission on the development of infrastructure-related content in the NPF until the first NPF is notified. Following that, Te Manatū Waka will continue to refine content relevant to the transport system with MfE as future iterations of the NPF are developed.

In addition to the NPF, Regional Spatial Strategies (RSS) will provide a regional 30-year plus horizon for future growth and development. The transport sector is anticipating being heavily involved in the development of these strategies to support

integration through reflection of existing, planned, and proposed transport assets.

Through the new RM system, there will be a strengthened relationship between the Regional Land Transport Plans, the Government Policy Statement (GPS) on Land Transport, the GPS on Housing and Urban Development, and the RSS along with the implementation plans and agreements that support the delivery of the RSS.

Responsible agencies and key stakeholders

- **Leads:** Te Manatū Waka, Te Waihanga and MfE
- **Support:** Waka Kotahi, KiwiRail
- **Key stakeholders:** Local government

Key milestones

- **2023:** New RM legislation enacted (Q3: July–September) and first NPF notified (Q4: October–December). The first NPF will be finalised in 2024.
- **2024–29:** First RSS developed within each region in New Zealand

Initiative 1.1.2

Develop the evidence base and tools to quantify and assess transport emissions from proposed transport and urban developments

What are we doing?

Te Manatū Waka is developing a Decarbonising Transport Research Strategy that will identify and prioritise knowledge gaps for the implementation, monitoring, and evaluation of the first ERP and support the development of the next ERP.

The Decarbonising Transport Research Strategy will also consider knowledge gaps for assessing embodied and enabled transport emissions from proposed transport and urban developments. Building on the existing evidence base is important for informing central and local government, Māori, and private sector decision making and investments that will reduce New Zealand's emissions. Further details on this strategy can be found under Initiative 4.2 (page 113).

Te Manatū Waka will work with Waka Kotahi, HUD and Hīkina Whakatutuki Ministry of Business, Innovation and Employment (MBIE) to review existing tools and methodologies (both horizontal and vertical infrastructure) to understand whether new tools are needed for the wider central and

28. As set out in ERP Chapter 7: Planning and infrastructure – Action 7.1.



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local government to quantify and assess the transport emissions from transport and urban developments over their full lifetime.

HUD and the MfE are leading a similar initiative from ERP Chapter 7: Planning and infrastructure – Action 7.4. Te Manatū Waka, Waka Kotahi, MfE, Kāinga Ora and HUD will work together to progress these initiatives, share relevant information, and avoid duplication.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** HUD, MfE, Waka Kotahi, Kāinga Ora, MBIE
- **Key stakeholders:** Local government

Key milestones

- **Mid 2023:** Identification and prioritisation of knowledge gaps will be completed as part of the Decarbonising Transport Research Strategy (refer to Initiative 4.2, page 113).
- **2022–23:** Review completed of existing assessment tools and methodologies to inform whether any new tools might be needed for informing central and local government. The need and timing for developing new tools and methodologies will depend on the outcomes of the review.

Initiative 1.1.3

Assess spatial plans to understand emissions implications and key risks and opportunities for reducing emissions.

What are we doing?

Under the Urban Growth Agenda (UGA), central government is partnering with local government and Māori to ensure that government investment in infrastructure is aligned to help deliver connected, thriving, and sustainable urban communities.²⁹ Urban growth partnerships formalise these relationships between the Crown, local government, Māori, and local communities to deliver the UGA objectives in our major urban centres. An important aspect of the urban growth partnerships is spatial planning – a long-term and integrated approach to land-use and infrastructure planning.

Waka Kotahi is undertaking an initial assessment of the impact of existing spatial plans (excluding Auckland)³⁰ on VKT, with oversight by other central government UGA partner agencies. This initial assessment will inform the development

of methodologies to be used for comparative assessment of VKT impacts across spatial plans, given that modelling undertaken for each spatial plan differs. The work is also anticipated to be able to inform the scope of assessment tools and methodologies to assess emissions implications of these spatial plans.

Te Manatū Waka will engage with Waka Kotahi, HUD, and Kāinga Ora to determine the scope of work required to support emissions impact assessments of spatial plans (beyond the light fleet VKT emissions impact). This could include case studies to better understand emissions implications, key risks and opportunities for reducing emissions from different land uses and transport investment.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi, HUD, Kāinga Ora
- **Key stakeholders:** Urban Growth Partners

Key milestones

- **Late 2022:** Waka Kotahi completed initial assessments of the VKT impact of spatial plans.
- **2022–23:** Complete further scoping of the work required to support emissions impact assessments of spatial plans.

Depending on outcome of scoping exercise, assessment of selected case studies could be completed by the end of 2023 to better understand emissions reduction potential, risks, and opportunities and to inform development of tools and methodologies.

Initiative 1.1.4

Incorporate transport emissions impact assessments into transport plans

What are we doing?

To ensure that assessment of transport emissions impacts is considered in transport planning and investment decision-making, it is necessary to develop a consistent approach to undertake assessment. Waka Kotahi is currently undertaking work to better incorporate transport emissions and light fleet VKT impact assessments into its transport planning and investment decision-making framework. This includes reviewing aspects of the investment decision-making framework in response to the ERP, including aspects related to planning, business cases, investment decision making, monitoring, and reporting.

29. <https://www.hud.govt.nz/urban-development/urban-growth-agenda>.

30. Hamilton Waikato Metro, Tauranga Western Bay of Plenty (UFTI), Wellington Horowhenua, and Queenstown Lakes.

As part of this work, Waka Kotahi has been developing the Climate Assessment Tool for Investment (CATi) to improve the assessment of and shape investment portfolios such as Regional Land Transport Plans. Waka Kotahi has also been developing the Project Emissions Estimation Tool (PEET) to improve assessment of enabled and embodied emissions arising from infrastructure activities. Changes to investment decision making and guidance on the use of methodologies and tools will be documented and transparently available.

This initiative requires Waka Kotahi to review whether the investment decision-making methodologies and tools are fit for purpose to better understand the limitations and opportunities for improvements.

Responsible agencies and key stakeholders

- **Lead:** Waka Kotahi
- **Support:** Te Manatū Waka
- **Key stakeholders:** Local government

Key milestones

- **2023:**
 - Enhance PEET input and reporting interfaces and make the revised PEET accessible to support transport planning and investment decision-making process.
 - Scope an investigation into additional tools required to complement PEET and/or CATi.
 - Develop guidance and user interface to ensure PEET and CATi are effective and used consistently (by late 2023).
- **2024:**
 - Completion of investigation into additional tools.

Initiative 1.1.5

Identify ways to incentivise developments that avoid/reduce the need to travel and encourage travel by public transport, walking and cycling

What are we doing?

The Government has already taken significant steps to enable more urban development that avoids and reduces the need to travel, and encourages travel by public transport, walking, and cycling. This includes better enabling intensification and transit-oriented development. However, we still need to better understand what additional support or incentives are needed to encourage low-emissions urban form. In

2023, HUD will undertake work to identify ways to support the private sector and developers, including not-for-profit, community, and Māori housing providers, to deliver lower-emissions, resilient developments. This work will involve engagement with the private sector to better understand any barriers, potential incentives, or support that could shift the sector to low-emissions development.

Te Manatū Waka will work alongside the HUD to identify ways to incentivise developments in areas that are (or will be) well connected by public transport and active travel networks with appropriate urban form. This investigation will be scoped together with HUD. In addition, Waka Kotahi has a programme of research that will inform this initiative (such as the Transport Outcomes Intervention Catalogue).

This work will help the Government to understand whether incentives could help to achieve emissions reductions needed from the transport system while supporting the Government's other objectives for housing and urban development.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi, HUD, Kāinga Ora
- **Key stakeholders:** Local government, infrastructure agencies, development sector, Māori

Key milestones

- **March 2023:** Complete scoping for the investigation.
- **December 2023:** Complete the investigation.

Initiative 1.1.6

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

What are we doing?

Te Manatū Waka will develop a threshold for new transport investments being considered for funding either through the National Land Transport Fund (NLTF) or directly from central government to:

- demonstrate how they contribute to emissions reduction objectives



PART 3: THE PLAN IN DETAIL – ACTIONS, INITIATIVES, AND TIMINGS

- set a high threshold for new investment decisions that may be inconsistent with emissions-reduction objectives.

To do this, Te Manatū Waka will:

- work with HUD and Kāinga Ora to understand thresholds that might continue to support housing supply and support a shift to low-emissions urban development patterns
- work with Waka Kotahi to understand existing tools and methodologies in place to assess emissions impacts of land transport projects (including direct impacts and indirect impacts such as land-use changes)
- develop a high threshold to apply when considering new transport projects that may be inconsistent with emissions-reduction objectives and consider whether this could apply to central government investments outside of land transport
- establish which transport projects need to have full emissions impact assessments completed to be eligible for funding consideration (for example, relatively minor walking and cycling projects may be automatically excluded or can follow a simpler process).

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** HUD, Waka Kotahi
- **Key stakeholders:** Te Tai Ōhanga The Treasury, local government, Kāinga Ora, transport agencies

Key milestones

- **Early 2023:** Draft high threshold for approving new investments for land transport projects' use of the NLTF will be included in the draft GPS to be released for consultation early in 2023.
- **1 July 2024:** The next GPS will come into force, which will set a threshold covering the use of the NLTF.



Delivery timeline

Action 1.1: Integrate land use planning, urban development and transport planning and investments to reduce transport emissions

	> 2022	> 2023	> 2024	> 2025
1.1.1: Better integrate transport planning and land use planning through the resource management reforms.		New RM leg.	First NPF	Regional spatial strategies developed
1.1.2: Develop the evidence base and tools to quantify and assess transport emissions from proposed transport and urban developments.		Review of tools completed	TBC: New tools developed	
1.1.3: Assess spatial plans to understand emissions implications and key risks and opportunities for reducing emissions.	Initial assessment completed	Further scoping	TBC: Assessment of case studies	
1.1.4: Incorporate transport emissions impact assessments into transport plans.	Assessments incorporated into WK's investment decision making frameworks		Investigation into additional tools completed	
1.1.5: Identify ways to incentivise developments that avoid/reduce the need to travel and encourage travel by public transport, walking and cycling.		Review into incentives completed		
1.1.6: 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.		Threshold developed and set in GPS 2024 for NLTF		



PART 3: THE PLAN IN DETAIL – ACTIONS, INITIATIVES, AND TIMINGS

Action 1.2: Support people to walk, cycle and use public transport

New Zealanders rely heavily on private vehicles to meet their daily needs. However, private motorised vehicles also produce most of our transport emissions and can be detrimental to people’s wellbeing by contributing to air and noise pollution and poor-quality urban environments. Car-oriented urban expansion also leads to increased traffic, congestion, and journey times, lost productivity, and travel costs.

We need to develop a transport system that addresses these issues and improves the wellbeing of New Zealanders.

New Zealanders need better public transport choices, and it must be safer and easier to travel by active modes. Increasing travel by public transport, walking, and cycling will see significant benefits for New Zealanders beyond reducing emissions. This includes improved travel choice and accessibility, better health and safety, and less congestion.

This programme of initiatives supports mode shift by providing better travel options and reduces transport carbon emissions by supporting a significant shift from travel by car to travel by public transport, walking, and cycling.

This action includes seven sub-actions (a–g) that are described in more detail in the following pages.

Sub-actions

Sub-action 1.2a: Planning – design programmes to reduce total light fleet VKT in our largest cities

Sub-action 1.2b: Public transport – improve the reach, frequency and quality of public transport

Sub-action 1.2c: Walking and cycling – deliver a step change in cycling and walking rates

Sub-action 1.2d: Reshaping streets – accelerate widespread street changes to support public transport, active travel and placemaking

Sub-action 1.2e: School travel – make school travel greener and healthier

Sub-action 1.2f: Equity – improve access and travel choice for the transport disadvantaged

Sub-action 1.2g: Rural areas – investigate the potential for public transport, walking and cycling in rural and provincial areas



Sub-action 1.2a: Planning – design programmes to reduce total light fleet VKT in our largest cities

In urban areas, transport planning needs to provide for effective land use, support transit-oriented development, and prioritise travel by public transport, walking and cycling to reduce VKT by light vehicles. This will also accommodate more people and businesses in our cities without causing ever-increasing congestion and emissions.

This sub-action includes three initiatives that are described in more detail in the following pages.

Initiatives

Initiative 1.2a.1: Set sub-national VKT reduction targets for Aotearoa New Zealand's major urban areas (Tier 1 and 2) by mid-2023³¹

Initiative 1.2a.2: Revise Waka Kotahi NZ Transport Agency'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

Initiative 1.2a.3: Develop VKT reduction programmes for Aotearoa New Zealand's major urban areas (Tier 1 and 2) in partnership with local government, Māori and community representatives

Initiative 1.2a.1

Set sub-national VKT reduction targets for Aotearoa New Zealand's major urban areas (Tier 1 and 2) by mid-2023³²

What are we doing?

Te Manatū Waka has calculated proposed sub-national VKT reduction targets for the light vehicle fleet for Tier 1 and Tier 2 urban areas. Collectively, these targets, combined with reductions expected from the rest of New Zealand, align with reducing national VKT by the light fleet by 20% in 2035. The Government will undertake targeted consultation on these targets in early 2023 before finalising them.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi
- **Key stakeholders:** Local government

Key milestones

- **Mid 2023:** Sub-national VKT targets will be finalised following further targeted consultation

Initiative 1.2a.2

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

What are we doing?

As part of Budget 2022, the Government committed \$22.5 million of the Climate Emergency Response Fund to support the development of a national VKT reduction plan and programmes.

Waka Kotahi and Te Manatū Waka will engage with councils, Māori, other central government agencies, and interest groups to develop a national VKT reduction plan. This plan will set out the national actions required to help achieve the national light fleet VKT reduction target in the ERP. It is likely to include:

- national direction, guidance, and tools to support VKT reduction planning, investment, and delivery in urban, provincial, and rural Aotearoa New Zealand

31. The ERP (as published in May 2022) had sub-national VKT reduction targets to be set by the end of 2022. Te Manatū Waka engaged with council staff in Tier 1 and 2 areas on how they calculated the proposed VKT targets at the end of July 2022 and will undertake consultation with local government in early 2023. Final targets will be confirmed in mid-2023 following this consultation.

32. Tier 1: Auckland, Hamilton, Tauranga, Wellington, Christchurch. Tier 2: Whangārei, Rotorua, New Plymouth, Napier Hastings, Palmerston North, Nelson Tasman, Queenstown, Dunedin.



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- national network planning for all modes that move people – walking, cycling, micro-mobility, public transport (including rapid transit)
- likely impact of land-use and transport commitments
- critical dependencies with other sector-wide interventions such as pricing or regulation
- national benchmark modelling of VKT, mode shift, and transport emissions
- applying the Decarbonising Transport Monitoring Framework to develop monitoring indicator sets for reporting and evaluation purposes
- research and data needs.

This plan will also set a framework for VKT reduction programmes to be developed in urban, rural, and provincial places over time.

Responsible agencies and key stakeholders/partners

- **Lead:** Waka Kotahi, Te Manatū Waka
- **Key stakeholders/partners:** Local government, Māori, other central government agencies, interest groups

Key milestones

- **Early 2023:** Engagement with councils, Māori, and other partners on the national plan.
- **June 2023:** National plan published

\$22.5M

As part of Budget 2022, the Government committed \$22.5 million of the Climate Emergency Response Fund to support the development of a national VKT reduction plan and programmes.

Initiative 1.2a.3

Develop VKT reduction programmes for Aotearoa New Zealand's major urban areas (Tier 1 and 2) in partnership with local government, Māori and community representatives

What are we doing?

As part of Budget 2022, the Government committed \$22.5 million of the Climate Emergency Response Fund to support the development of a national VKT reduction plan and programmes.

In parallel with the development of the national VKT reduction plan (see previous initiative), Waka Kotahi will partner with councils, Māori and communities to develop urban light fleet VKT reduction programmes in each of the Tier 1 and Tier 2 areas with a view to these programmes being in place ahead of the next National Land Transport Programme (by mid 2024). For Tier 1 urban areas and Queenstown, this work will build on mode shift plans developed with Waka Kotahi in 2020/21 and leverage existing mechanisms such as urban growth partnerships.

The urban VKT reduction programmes will comment on the urban form needed (in line with relevant spatial planning) and set out the investment and other activities (for example, demand management measures such as pricing) needed (including prioritisation) to reduce VKT in each urban area in line with the national and sub-national VKT targets.

Responsible agencies and key stakeholders/partners

- **Lead:** Waka Kotahi
- **Key stakeholders/partners:** Councils, Māori, communities

Key milestones

- **First half 2023:** Initiate council engagement for urban VKT reduction programmes.
- **Second half 2023:** Agree Tier 1 urban VKT reduction programmes.
- **2024:** Agree Tier 2 urban VKT reduction programmes.

Delivery timeline

Action 1.2: Support people to walk, cycle and use public transport

Sub-action 1.2a: Planning - Design programmes to reduce total light fleet VKT in our largest cities

	> 2022	> 2023	> 2024	> 2025
1.2a.1: Set sub-national VKT reduction targets for Aotearoa New Zealand's major urban areas (Tiers 1 and 2) by Mid-2023.		Targets set mid-2023		
1.2a.2: 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.		Engagement, plan developed and published	Tbc: implementation	
1.2a.3: 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.		Tier 1 plans developed and agreed	Tbc: implementation	
			Tier 2 plans developed and agreed	Tbc: implementation



Sub-action 1.2b: Public transport – improve the reach, frequency and quality of public transport

Attractive, safe, and reliable public transport systems (including buses, ferries, rail, and light rail) can provide a foundation for the use of more-sustainable modes in cities. Shifting travel from cars to public transport, especially in urban areas where its provision is more viable, can save energy and reduce emissions.

We need to provide New Zealanders with better public transport coverage and availability to reduce VKT. Well-integrated networks of public transport services can significantly increase levels of access between communities and are vital for connecting employers to labour markets, and individuals to social and economic opportunities. Public transport is also essential for our cities to grow in a way that avoids emissions from new development.

This sub-action includes seven initiatives that are described in more detail in the following pages. This sub-action also supports adaptation and is included in the national adaptation plan as Action 8.6.³³

Initiatives

Initiative 1.2b.1: Deliver a national public transport strategy

Initiative 1.2b.2: Complete the review of the public transport operating model

Initiative 1.2b.3: Deliver major public transport service and infrastructure improvements in Auckland, Wellington and Christchurch

Initiative 1.2b.4: Deliver nationally integrated ticketing for public transport

Initiative 1.2b.5: Support a major uplift in all urban bus networks nationwide, including by improving bus driver terms and conditions

Initiative 1.2b.6: Consider improvements to, and new opportunities for, interregional public transport services

Initiative 1.2b.7: Identify and consider addressing barriers to integrating public transport with active and micro-mobility modes and networks

Initiative 1.2b.1

Deliver a national public transport strategy

As the first step, Te Manatū Waka will scope the work required to develop a national public transport strategy. The strategy is intended to develop principles for the planning and funding of diverse forms of public transport within and between urban centres, and its development will be undertaken with a focus on what contribution public transport can make to emissions reduction and what is required to enable that. As part of the scoping, Te Manatū Waka will, by February 2023:

- define and develop a common understanding of ‘public transport’
- determine the appropriate level, aims and role of the strategy and how this relates to existing regional public transport strategies, planning, and funding frameworks
- establish appropriate governance to support the development of the strategy’s scope
- describe linkages with:
 - existing and planned programmes of work with relevance to public transport provision, both internal to Te Manatū Waka such as the Sustainable Public Transport Framework (SPTF) and across local and central government
 - other ERP work underway – for example, integrate public transport with walking, cycling, and micro-mobility, VKT reduction plans, and interregional public transport services.
- briefly outline the current context of public transport in Aotearoa New Zealand – for example, mapping out existing public transport strategy, planning, and funding processes, current mode share, and provision, role of public agencies and commercial operators, and relationship of public transport with other modes.
- briefly describe the key issues the strategy will need to address
- build the *preliminary* evidence-base for the strategy – conduct a targeted literature review and examination of international case studies to provide insights into the ways in which New Zealand can improve the reach, frequency, and quality of urban, regional, and inter-regional public transport services and the role of public transport in emissions reduction

33. Aotearoa New Zealand’s first national adaptation plan, 2022, Chapter 8 Infrastructure – Action 8.6: Invest in public transport and active transport.



- use the Behaviour Change Framework to help scope the work
- engage with central and local government stakeholders regarding the potential scope.

Drawing on the above, this scoping exercise will produce a strategy development plan setting out the purpose of the strategy, what is within scope, and who the intended audience is (private sector, local government, or central government). The strategy development plan will also set out an initial stakeholder plan and indicative timeframes and resourcing estimates for the delivery of the strategy in 2025.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi
- **Key stakeholders:** Public transport authorities (PTAs), KiwiRail, other central government partners, local government

Key milestones

- **Early 2023:** Scoping complete.
- **2025:** Strategy developed and published.

Initiative 1.2b.2

Complete a review of the Public Transport Operating Model (PTOM)

What are we doing?

The Government is reforming the planning, procurement and delivery of public transport services by introducing and passing legislation to replace the Public Transport Operating Model (PTOM) with the Sustainable Public Transport Framework (SPTF). The reforms include:

- establishing new objectives for the planning, procurement, and delivery of public transport services, to be embedded in the Land Transport Management Act 2003
- enabling in-house delivery of public transport services (PTAs would be able to operate public transport services – owning buses, employing bus drivers, and running services themselves)
- requiring services to be procured, contracted, and/or delivered in such a way that protects and improves bus driver terms and conditions
- requiring services to be procured, contracted, and/or delivered in such a way that ensures transparency around key aspects of service delivery



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- enabling different asset ownership arrangements, including PTAs owning assets directly
- encouraging greater collaboration between regional councils and territorial authorities in preparing regional public transport plans
- changes to the framework for exempt services (including commercial and inter-regional public transport services)
- including on-demand public transport services (like MyWay in Timaru and AT Local in South Auckland) in the SPTF.

Waka Kotahi is developing operational policy that implements the SPTF, which will then be reflected in the future planning, procurement, and delivery of services by PTAs.

Responsible agencies and key stakeholders

Legislative process for the SPTF

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi
- **Key stakeholders:** PTAs, bus operators, unions

Operational policy to implement the SPTF

- **Lead:** Waka Kotahi
- **Support:** Te Manatū Waka
- **Key stakeholders:** PTAs, bus operators, unions, Māori

Key milestones

- **Mid 2022:** Final policy advice on the PTOM review provided to the Minister of Transport.
- **Mid 2022:** Cabinet agreed to reforms through amending the Land Transport Management Act 2003 and to replace the PTOM with the SPTF.
- **2022–2023:** Waka Kotahi develops operational policy to give effect to the SPTF.
- **Early 2023:** Bill to amend the Land Transport Management Act introduced.
- **Late 2023 onwards:** PTAs implement the SPTF through planning, procurement, and delivery of public transport services.

➤ **Well-integrated networks of public transport services can significantly increase levels of access between communities and are vital for connecting employers to labour markets**

Initiative 1.2b.3

Deliver major public transport service and infrastructure improvements in Auckland, Wellington and Christchurch

Auckland: What are we doing?

The Government, as part of the Auckland Transport Alignment Project (ATAP) partnership, will progress rapid transit, bus and ferry improvements, as outlined in the ATAP. This includes the City Rail Link, light rail along the City Centre to Māngere corridor, completion of the Eastern Busway, a programme of rail network upgrades, bus lane programmes, and service improvements.

The ATAP partners will continue to work on a longer-term plan for Auckland's transport network. This includes:

- expansion of the rapid transit network
- work on the Waitemata Harbour Connections programme, investigating all modes, including light rail, buses, connections for walking and cycling, and freight
- establishing what further public transport infrastructure and services improvements are required to significantly increase Auckland's public transport mode share by 2035
- putting a greater focus on achieving equitable access to public transport across Tāmaki, for example, increasing service provision and frequency in the south and west
- integrating more of the Auckland ferry services into the wider public transport system
- review of the metropolitan rail operating model (Te Manatū Waka).

Responsible agencies and key stakeholders

- **Lead:** ATAP partnership (Auckland Council, Auckland Transport, Te Manatū Waka, Waka Kotahi, KiwiRail, the Treasury).
- **Key stakeholders:** Central government, local government, business and social groups

Key milestones

- **2022:** Northern Busway extension.
- **2022:** Establishment of Auckland Light Rail (ALR) Limited and onboarding of alliance consortium to progress the detailed planning phase. Development of the detailed business case and detailed planning activities commenced.
- **Mid 2024:** Submission of ALR detailed business case for consideration and final investment decisions made.
- **2026:** Eastern Busway – Pakuranga to Botany.

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- **TBC:** City Rail Link and wider rail network upgrades as outlined in the New Zealand Rail Plan, including New Zealand Upgrade Programme (NZUP) and extending rail electrification from Papakura to Pukekohe, third main development, and new rail stations at Drury (2) and Paerata.

Wellington: What are we doing?

Over the coming decades, the Government will provide its share of funding to deliver Let's Get Wellington Moving (LGWM), making a major investment in mass rapid transit, walking and cycling, public transport, and state highway improvements. This is on top of maintaining and upgrading the existing network. LGWM aims to develop a transport system that reduces carbon emissions by increasing mode shift away from private vehicles. LGWM includes three phases:

- **Three year programme** – early improvements to start moving more people with fewer vehicles and improve travel options ahead of larger construction projects to come.
- **City Streets** – improvements over 10–12 years on key routes between the suburban centres and the central city, improving bus reliability as well as walking and cycling experiences.
- **Transformational (longer-term) programme** – larger elements that will help shape future growth and transform Wellington, substantially changing how people get around. This programme includes mass rapid transit, Basin Reserve improvements, and an extra Mt Victoria Tunnel to improve public transport service to the airport and eastern suburbs. These projects will be complemented by behaviour change initiatives.

LGWM partners have conducted ongoing public engagement and will continue to do so throughout the programme.

The Government is also making significant investments in the Wellington rail network to maintain rail connections north of the city as outlined in the New Zealand Rail Plan.

Responsible agencies and key stakeholders

- **Lead:** LGWM partnership (Greater Wellington Regional Council, Wellington City Council, Waka Kotahi)
- **Support:** Te Manatū Waka
- **Key stakeholders:** Central government, local government, Māori, other key partners

Key milestones

Below is a timeframe for the LGWM three packages detailed above, as advised by LGWM.

Three year programme

- This includes a range of projects that have either already been completed or will complete design and start construction in 2023.

City Streets

- **Phase 1:** community engagement completed in 2023, detailed design completed in 2024, and construction completed in 2026.
- **Phase 2:** community consultation completed in 2026, detailed design completed in 2028, and construction completed in 2031.

Transformational (longer-term) programme

- Detailed business case completed 2024, design completed 2027, construction begins 2028 and completed in 8–15 years depending on the final option.

Christchurch: What are we doing?

The Government is working with the Greater Christchurch Partnership to undertake long-term integrated land-use and transport planning that includes the Greater Christchurch Spatial Plan and Public Transport Futures business case, including mass rapid transit (MRT).

Waka Kotahi and local road controlling authorities (RCAs) will progress the Public Transport Futures project and complete bus priority activities as outlined in the current National Land Transport Programme. A combined business case for these two components was formally endorsed by the partner councils in December 2020 and by the Waka Kotahi Board in May 2021. The preferred programme will deliver short-term interventions focused on making best use of existing infrastructure through enhanced frequencies. The medium-term interventions focus on more substantial route changes.

In June 2021, the Greater Christchurch Partnership released an interim report from the team investigating an MRT system for Greater Christchurch. It was recommended the next phase of the business case aligns its development with the proposed development of a spatial plan for Greater Christchurch.



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MRT in Christchurch will make better use of existing corridors and centres, with opportunities for intensification along the route key to MRT's success. MRT will provide good accessibility to all key city centre destinations.

Waka Kotahi is working with the Greater Christchurch Partnership to develop a Transport Investment Programme that will enable accelerated implementation of public transport service and infrastructure improvements and will contribute to significantly reduce VKT and GHG emissions.

The Transport Investment Programme is still under development. Emerging works are likely to include accelerating the Public Transport Futures programme, walking and cycling schemes, road use pricing investigation, enhanced travel demand management, completing the major cycle routes and local connectors, and reviewing of the freight network as well as progressing MRT investigations. The confirmed programme of works will form part of the Regional Land Transport Plan 2024–27, with funding sought through the National Land Transport Programme planning process.

Responsible agencies and key stakeholders/partners

- **Lead:** Greater Christchurch partnership (Christchurch City Council, Environment Canterbury, Selwyn District Council, Waimakariri District Council, mana whenua, Te Whatu Ora Health New Zealand, Waka Kotahi)
- **Support:** Te Manatū Waka
- **Key stakeholders/partners:** Central government, local government, Māori, other key partners

Key milestones

Public Transport Futures

- **2023:** Implementation planned.

Greater Christchurch Spatial Plan, and Mass Rapid Transit Indicative Business Case

- **2023:** MRT indicative business case to be completed.
- **By 2024:** Joint work programme for its implementation to be completed.

Greater Christchurch Transport Investment Programme

- **Early 2023:** To be completed

Initiative 1.2b.4

Deliver nationally integrated ticketing for public transport

What are we doing?

Waka Kotahi in partnership with the PTAs will deliver a national ticketing solution that will provide all public transport users across Aotearoa New Zealand with a user-friendly, consistent, and convenient way to travel on public transport, including a cashless payment system. Waka Kotahi will support PTAs to manage this system within a cost-effective and flexible operating model.

Responsible agencies and key stakeholders

- **Lead:** Waka Kotahi, PTAs
- **Key stakeholders:** Public transport operators

Key milestones

Pending completion of contracts and agreement to proceed:

- **October–December 2022:** Implementation programme commenced. This will be followed by public engagement and customer testing in 2023.
- **April–June 2024:** National ticketing launched in Canterbury region.
- **TBC:** Subsequent deployments of national ticketing in other regions of New Zealand to be confirmed but all regions launched by 2026.

Initiative 1.2b.5

Support a major uplift in all urban bus networks nationwide, including by improving bus driver terms and conditions

What are we doing?

The Government recognises the need for action to support a major uplift in bus networks across the country, starting with efforts to stabilise the public transport bus driver workforce. Many networks are currently experiencing significant driver shortages that are affecting the frequency and reliability of services.

The Government has been working with the public transport sector (local government, operators, and unions) to improve the terms and conditions of public transport bus drivers to support increased recruitment and retention.

The sector has identified a minimum set of terms and conditions to assist with stabilising the workforce over the short and longer term. Improvements include increases to wage rates and other payments and improvements

to recruitment, training, and the working environment for drivers.

Te Manatū Waka and Waka Kotahi will also provide the Government with advice on what further measures are needed to support bus networks, including through the development of VKT reduction programmes, the national public transport strategy, and the next GPS on Land Transport.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka (funding), Waka Kotahi (delivery)
- **Support:** Local government
- **Key stakeholders:** Public transport operators, unions

Key milestones

- **2022:** Funding agreed through Budget 2022 (from the Climate Emergency Response Fund) will support initial improvements to bus driver wages towards base wage rates identified by the sector.
- **2023:** Subject to additional funding, further improvements are made to base wage rates and allowances are implemented to reach the wages and conditions identified by the sector.
- **2024:** The sector will progress initiatives (subject to funding) to address other terms and conditions, including recruitment and training, rosters, and working environment.

➤ **The Government recognises the need for action to support a major uplift in bus networks across the country, starting with efforts to stabilise the public transport bus driver workforce**

Initiative 1.2b.6

Consider improvements to, and new opportunities for, interregional public transport services

What are we doing?

Te Manatū Waka is considering scoping this initiative as part of its work on a national public transport strategy (refer to Initiative 1.2b.1). This scoping exercise would confirm whether this initiative will be addressed through the strategy or as a separate initiative.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka (initially)
- **Support:** Waka Kotahi
- **Key stakeholders:** PTAs, public transport operators, KiwiRail, other central government partners, local government

Key milestones

- **Early 2023:** Key milestones will be determined during scoping of the national public transport strategy (Initiative 1.2b.1), to be completed early 2023.
- **2025:** National public transport strategy published.

Initiative 1.2b.7

Identify and consider addressing barriers to integrating public transport with active and micro-mobility modes and networks

What are we doing?

Te Manatū Waka is considering scoping this initiative as part of its work on a national public transport strategy (refer to Initiative 1.2b.1). This scoping exercise would confirm whether this initiative will be addressed through the strategy or as a separate initiative.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi
- **Key stakeholders:** PTAs, KiwiRail, other central government partners, local government, micro-mobility companies, disability sector

Key milestones

- **Early 2023:** Key milestones will be determined during scoping of the national public transport strategy (Initiative 1.2b.1), to be completed early 2023.
- **2025:** National public transport strategy published.



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Delivery timeline

Action 1.2: Support people to walk, cycle and use public transport

Sub-action 1.2b: Public transport – improve the reach, frequency and quality of public transport

	> 2022	> 2023	> 2024	> 2025
1.2b.1: Deliver a national public transport strategy.		Scoping	Strategy developed and published	
1.2b.2: Complete a review of the Public Transport Operating Model (PTOM).	PTOM Review completed	Operational policy development and legislative changes	PTAs implement SPTF	
1.2b.3: Deliver major public transport service and infrastructure improvements in Auckland, Wellington and Christchurch.	Planned improvements as part of ATAP, LGWM and Greater Christchurch Partnership			
1.2b.4: Deliver nationally integrated ticketing for public transport.	Programme commenced	Public engagement and customer testing	Canterbury Launch	Further implementation
1.2b.5: Support a major uplift in all urban bus networks nationwide, including by improving bus driver terms and conditions.	Initial improvements to driver wages	Further improvements to driver wages (subject to funding)	Other initiatives to support recruitment and retention (subject to funding)	
1.2b.6: Consider improvements to, and new opportunities for, interregional public transport services.	Scoping	TBC – in line with 1.2b.1		
1.2b.7: Identify and consider addressing barriers to integrating public transport with active and micro-mobility modes and networks.	Scoping	TBC – in line with 1.2b.1		

Sub-action 1.2c: Walking and cycling – deliver a step change in cycling and walking rates

Walking, cycling, and other active modes can play a much greater role in meeting everyday travel needs for people of all ages and abilities. A third of all transport trips in New Zealand are less than 2km — a distance that is easy for most people to walk, run, scoot, or cycle when good options exist.

Increasing travel by active modes will deliver broad benefits in addition to emissions reductions. By making streets better for walking and cycling, New Zealanders will have more opportunities to incorporate more physical activity into their daily life. Aotearoa New Zealand has the third-highest adult obesity rate in the OECD,³⁴ partly due to lack of physical activity. A 2010 Aotearoa New Zealand study found that physical inactivity costs us \$1.3 billion a year.³⁵ We also need to make our cities more walkable and bikeable to create well-functioning, efficient cities that support wellbeing and urban development.

This sub-action includes six initiatives that are described in more detail in the following pages.

Initiatives

Initiative 1.2c.1: Substantially improve infrastructure for walking and cycling

Initiative 1.2c.2: Support initiatives to increase the uptake of e-bikes

Initiative 1.2c.3: Deliver a national plan to significantly increase the safety and attractiveness of cycling and micromobility (e.g., electric scooters)

Initiative 1.2c.4: Deliver a national plan to significantly increase the safety and attractiveness of walking

Initiative 1.2c.5: Provide support for local government to develop network plans for walking and cycling

Initiative 1.2c.6: Implement Accessible Streets proposals nationwide to support safe walking, cycling/scootering and other active modes

Initiative 1.2c.1

Substantially improve infrastructure for walking and cycling

What are we doing?

As part of Budget 2022, the Government committed \$350 million of the Climate Emergency Response Fund to support the uptake of active and public transport (the Transport Choices package).

Most of this funding will help Waka Kotahi and local government rapidly roll out around 100km of urban cycle networks over the next 2 years as well as supporting the creation of more-walkable neighbourhoods. This programme will enable councils to accelerate delivery of planned cycling networks through funding the construction of low-cost, on-street facilities that fill gaps and connect to key destinations. It will also pilot walkable neighbourhoods: low-traffic residential areas where walking, cycling, and scootering become the most convenient and direct choice for local trips.

The Transport Choices package is one component in initiatives to substantially improve walking and cycling infrastructure. Ongoing walking and cycling improvements will be supported and delivered through multiple funding streams, such as the National Land Transport Programme and Crown-funded programmes. The national walking plan and cycling plan (see Initiatives 1.2c.3 and 1.2c.4) and VKT reduction plans (see Initiatives 1.2a.2 and 1.2a.3) will also provide clear direction to improve the safety and quality of walking and cycling in our towns and cities.

Responsible agencies

- **Lead:** Waka Kotahi and local government (in partnership)
- **Support:** Te Manatū Waka

Key milestones

- **Late 2022:** Engagement with local government on the Transport Choices package.
- **2022–24:** Implementation of Transport Choices package.
- **Ongoing:** Additional substantial improvements supported through the National Land Transport Programme and Crown-funded programmes.

34. Manatū Hauora Ministry of Health, 2022, *Obesity*.

35. Auckland Council, Waikato Regional Council, Wellington Regional Strategy Committee, 2013, *The Costs of Physical Inactivity: Toward a regional full-cost accounting perspective*.



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Initiative 1.2c.2**Support initiatives to increase the uptake of e-bikes****What are we doing?**

Waka Kotahi is supporting e-bike trials in Wainuiomata and Māngere in 2022/23 to help inform future e-bike programmes. The Government is also considering further initiatives to support increased use of e-bikes.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka (developing policy options)
- **Key stakeholders:** Waka Kotahi, e-bike providers

Key milestones

- **2022/23:** E-bike trials supports in Wainuiomata and Māngere.
- **From 2023:** Consideration of further options to support e-bike uptake.

**Initiative 1.2c.3****Deliver a national plan to significantly increase the safety and attractiveness of cycling and micro-mobility****What are we doing?**

Waka Kotahi is developing a National Cycling Plan, which outlines the steps that need to be taken to dramatically increase the safety and attractiveness of cycling and micro-mobility. Engagement has taken place with councils, stakeholders, organisations, and private sector groups.

The plan highlights the importance of rapidly developing connected networks of safe cycling infrastructure, with a focus on everyday local trips. It will set out the investment priorities for the next decade and the system changes to support an increased pace of delivery. Actions are being structured around four key themes:

- Planning connected networks
- Streamlining our funding system
- Accelerating delivery
- Putting people at the heart of change

The National Cycling Plan will also be aligned with the national VKT reduction plan (page 49) and will inform the sub-national VKT reduction programmes (page 50).

Responsible agencies and key stakeholders

- **Lead:** Waka Kotahi, Te Manatū Waka
- **Key stakeholders:** Local government, Māori, community groups, micro-mobility companies, the disability sector

Key milestones

- **2022–23:** National cycling plan published.

Initiative 1.2c.4**Deliver a national plan to significantly increase the safety and attractiveness of walking****What are we doing?**

Waka Kotahi is developing a National Walking Plan, which outlines the steps that need to be taken to dramatically increase walking. The plan will highlight the importance of making it safe and appealing for people to travel by foot (including by wheelchairs). Walkable places support health and wellbeing and vibrant towns and cities, as well as emissions reductions.

The plan will emphasise the need for roads and streets to be safe and accessible for people of all ages and abilities. It will include key priorities,

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actions, and investment considerations. The plan will inform investments to substantially improve infrastructure for walking (see Initiative 1.2c.1). It will also be aligned with the national VKT reduction plan and will inform the sub-national VKT reduction plans (see Initiatives 1.2a.2 and 1.2a.3).

Waka Kotahi will work closely with partners and stakeholders to develop the plan and to ensure that walking is prioritised in the transport system.

Responsible agencies and key stakeholders/partners

- **Lead:** Waka Kotahi, Te Manatū Waka
- **Key stakeholders/partners:** Local government, Māori, community groups (particularly those representing the transport disadvantaged and the disabilities sector)

Key milestones

- **2022–23:** National walking plan published.

Initiative 1.2.c.5

Provide support for local government to develop network plans for walking and cycling

What are we doing?

This initiative is a sub-action of developing VKT reduction programmes (see Initiatives 1.2a.2 and 1.2a.3). The VKT reduction plans will call for walking and cycling plans to be developed in towns and cities. Network plans are being finalised for Tier 1 cities as part of the One Network Framework, and planning for supporting Tier 2 cities is under way. The support will include things like tools and evidence along with guidance for maximising uptake and integrating with other networks.

Responsible agencies and key stakeholders

- **Lead:** Waka Kotahi
- **Key stakeholders:** Local government

Key milestones

- **TBC** – Key milestones will be determined as VKT reduction programmes are developed

Initiative 1.2.c.6

Implement Accessible Streets proposals nationwide to support safe walking, cycling/scootering and other active modes

What are we doing?

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.

Accessible Streets involves amending existing transport rules and making a new transport rule to:

- establishing a national framework for the use of footpaths, shared paths, and cycle paths
- allow transport devices (such as e-scooters and skateboards) in cycle lanes and on cycle paths
- introduce a minimum overtaking gap for motor vehicles passing vulnerable road users
- make give way rule changes to prioritise vulnerable road and path users.

Waka Kotahi will support the implementation of Accessible Streets with a public information and education campaign that will help shape public support for careful and considerate shared use of footpaths, shared paths, cycle lanes, and cycle paths.

Documents such as the Cycling Code and Road Code will also need to be updated.

The rule changes will be implemented in stages. The first stage will include the rules for footpaths, shared paths, and cycle paths and can come into force 12 months after signing (allowing time for the education campaign to be developed and run). The second stage will include changes to the roadway rules and will follow 2 months later.

Responsible agencies and key stakeholders

- **Lead:** Waka Kotahi
- **Support:** Te Manatū Waka
- **Key stakeholders:** Local government, community groups (such as walking/cycling advocacy groups)

Key milestones

- **Early 2023:** Legislation and Cabinet decisions on rules.
 - Some changes will be made after 2, 4 and 6 months. These changes are not expected to require as much guidance or education campaigns to introduce.
 - 11 months after rules made: Stage 1 rules in force – footpaths, shared paths, cycle paths.
 - 12 months after rules made: Information and education campaign.
 - 13 months after rules made: Stage 2 rules in force – give way roadway rules.



PART 3: THE PLAN IN DETAIL – ACTIONS, INITIATIVES, AND TIMINGS

Delivery timeline

Action 1.2: Support people to walk, cycle and use public transport

Sub-action 1.2c: Walking and cycling - Deliver a step-change in cycling and walking rates

	> 2022	> 2023	> 2024	> 2025
1.2c.1: Substantially improve infrastructure for walking and cycling.	NLTF and NZ upgrade walking and cycling investments			
		Transport choices engagement and implementation		
1.2c.2: Support initiatives to increase the uptake of e-bikes.		Options considered by government	TBC	
1.2c.3: Deliver a national plan to significantly increase the safety and attractiveness of cycling and micro-mobility.		National plan developed and published	Implementation	
1.2c.4: Deliver a national plan to significantly increase the safety and attractiveness of walking.		National plan developed and published	Implementation	
1.2c.5: Provide support for local government to develop network plans for walking and cycling.	TBC – Key milestones determined as VKT reduction programmes are developed			
1.2c.6: Implement Accessible Streets proposals nationwide to support safe walking, cycling/scootering and other active modes.		Policy development and legislative changes	Information and education campaign	Stage 1 & 2 rules in force (staggered)

Sub-action 1.2d: Reshaping streets – accelerate widespread street changes to support public transport, active travel and placemaking

Reallocating street space to provide dedicated bus lanes, bike/scooter networks, and walking improvements can be a quick and cost-effective way to make it safer and more attractive for people to travel by clean and healthy transport modes. We need to support and encourage local government to make these changes and set clear expectations that it should happen.

This sub-action includes three initiatives that are described in more detail in the following pages.

Initiatives

Initiative 1.2d.1: Incentivise local government to quickly deliver bike/scooter networks, dedicated bus lanes, and walking improvements by reallocating street space (including during street renewals)

Initiative 1.2d.2: Consider regulatory changes to make it simpler and quicker to make street changes

Initiative 1.2d.3: Scale up Waka Kotahi NZ Transport Agency's Innovating Streets for People programme to rapidly trial street changes

Initiative 1.2d.1

Incentivise local government to quickly deliver bike/scooter networks, dedicated bus lanes and walking improvements by reallocating street space (including during street renewals)

What are we doing?

There are three broad ways that central government could incentivise local government to quickly deliver street changes that support public transport and active travel. These are:

- increasing and/or targeting funding for street changes that involve reallocating street space
- adjusting funding assistance rates for street changes that support public transport and/or active travel

- making funding for some activities (such as renewals) linked with making improvements that support public transport and/or active travel.

As noted for Initiative 1.2c.1 (Substantially improve infrastructure for walking and cycling), the Government is delivering the Transport Choices package to rapidly roll out improvements to walking and cycling infrastructure. This initial funding will support many changes at a local level that involve reallocating street space.

During development of the GPS on Land Transport (2024), Te Manatū Waka will also consider the most appropriate mechanisms, or combination of tools to further incentivise street changes. This will include considering how to ensure that RCAs maximise opportunities to make streets safe and better places for people travelling by public and active transport when doing street renewals.

As part of this work, we will consider the most appropriate ongoing funding sources to deliver ongoing improvements to public transport and active travel networks.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi
- **Key stakeholders:** Local government

Key milestones

- **December 2022:** Consider what role the GPS will play in delivering incentives.
- **2022–early 2023:** Engagement on GPS 2024, including considering the role GPS 2024 will play for delivering incentives.
- **Late 2023:** Consider whether there are other options for incentives and approaches that could be used.
- **2022–24:** Implementation of Transport Choices package.
- **1 July 2024:** GPS 2024 comes into effect.



PART 3: THE PLAN IN DETAIL – ACTIONS, INITIATIVES, AND TIMINGS

Initiative 1.2d.2

Consider regulatory changes to make it simpler and quicker to make street changes

What are we doing?

The Government wants to make it easier for local authorities to make street changes that support public transport, active travel, and placemaking. Local authorities need to roll out more bus lanes, bike lanes, and other street improvements to make it safe, quick, and attractive to travel by public transport and active modes. Regulatory change is necessary to support local government in making street changes at the pace and scale required to meet our emissions targets.

The Government will consider regulatory changes, including changes that:

- enable local authorities to make street changes more efficiently
- provide new ways for communities to be involved in changes that affect them.
- remove any unnecessary regulatory barriers that limit the ability of RCAs to make street changes.

The Government developed a set of proposed changes and consulted the public on the proposals from August to mid-September 2022. After considering public feedback, Government will decide whether to progress a final set of changes.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi
- **Key stakeholders:** Local government, community groups

Key milestones

- **Early-mid 2022:** Proposed regulatory changes developed.
- **August–September 2022:** Public consultation completed.
- **Early-mid 2023:** Finalise proposed regulatory changes and consider/decide on changes to implement.

Initiative 1.2d.3

Scale up Waka Kotahi's existing Innovating Streets for People programme to rapidly trial street changes

What are we doing?

In 2020, Waka Kotahi launched Innovating Streets for People, which supported 32 councils to implement 62 street change projects around Aotearoa New Zealand. Collectively, this programme delivered approximately 89km of interim treatments in town centres, outside schools, and in neighbourhoods by June 2021. Interventions ranged from temporary cycleways, parklets, and one-way streets to safe crossing points, traffic calming, and kerb buildouts. Many councils reported safer streets with fewer vehicles, people driving at slower speeds, more people cycling, walking and scootering, safer and more accessible areas, and more people enjoying public spaces.

Waka Kotahi's new programme, Streets for People 2021–24, will deliver another \$30 million of tactical street changes in the next 2 years. This programme builds on the solid learnings and experiences from Innovating Streets and will support councils to do things differently by using quick, low-cost, scalable improvements that help create more vibrant, people-friendly spaces in our neighbourhoods.

Responsible agencies and key stakeholders

- **Lead:** Waka Kotahi
- **Key stakeholders:** Local government

Key milestones

- **2021:** The funding for this initiative was confirmed.
- **2021–24:** Implementation of the initiative takes place.

Delivery timeline

Action 1.2: Support people to walk, cycle and use public transport

Sub-action 1.2d: Reshaping streets - Accelerate widespread street changes to support public transport, active travel and placemaking

	> 2022	> 2023	> 2024	> 2025
<p>1.2d.1: Incentivise local government to quickly deliver bike/scooter networks, dedicated bus lanes and walking improvements by reallocating street space (including during street renewals).</p>		<p>GPS 2024 role considered</p>	<p>GPS 24 consultation</p> <p>Options considered</p>	
			<p>Transport choices implemented</p>	
<p>1.2d.2: Consider regulatory changes to make it simpler and quicker to make street changes.</p>	<p>Proposed reg changes developed</p>	<p>Public consultation</p>	<p>Finalise proposed reg changes</p>	
<p>1.2d.3: Scale up Waka Kotahi's existing Innovating Streets for People programme to rapidly trial street changes.</p>			<p>Implementation</p>	





Sub-action 1.2e: School travel – make school travel greener and healthier

Active travel rates in Aotearoa New Zealand have continued to decrease and are low when compared to other similar countries. Low rates of active travel are concerning as New Zealand children have low levels of physical activity, with a third overweight or obese.³⁶ There is untapped potential to encourage more children to use active modes for a substantial proportion of school journeys. Making walking and cycling and scootering to and from schools safer for children will encourage greater use of these modes and as a result improve health and access, reduce road and parking congestion around schools, and reduce emissions.

This sub-action includes five initiatives that are described in more detail in the following pages.

Initiatives

Initiative 1.2e.1: Set targets for active travel to and from schools and work with councils and schools to implement active transport plans around schools

Initiative 1.2e.2: Improve walking and cycling infrastructure to and along school routes, in schools, and in surrounding neighbourhoods

Initiative 1.2e.3: Implement the Tackling Unsafe Speeds programme to ensure safer speed limits around schools

Initiative 1.2e.4: Investigate opportunities to improve school bus services

Initiative 1.2e.5: Explore dedicated active transport funding and/or education programmes for schools

Initiative 1.2e.1

Set targets for active travel to and from schools and work with councils and schools to implement active transport plans around schools

What are we doing?

The Government is going to set national targets for active school travel (e.g., walking, cycling, or scootering to/from school) in New Zealand. These targets will send a strong signal on the level of ambition the Government has for active school travel and enable us to track progress of policies and initiatives to increase active school travel. The targets will provide guidance to multiple sectors that need to work together to increase active school travel, including the education, urban planning, transport, and health sectors.

This initiative is still to be scoped but it will likely involve:

- establishing a baseline for active travel to and from schools in New Zealand
- undertaking research and modelling to estimate the level of change in active travel that could be possible and aligns with the national and sub-national VKT reduction targets
- engaging with schools and local government on proposed targets and what support may be required from central government to achieve them
- publishing targets alongside a programme of activities to increase active travel in New Zealand.

Active school travel is impacted by several factors, including the distance between home and school (which is affected by factors such as school zone size and number of out-of-zone enrolments), the quality of walking and cycling infrastructure, motor vehicle speeds, personal safety, and community/social context. There is significant variation in community, school, and physical environment characteristics across New Zealand. The solutions for encouraging active school travel will look different depending on the context, including for individual families. Community-based, cross-sector approaches are needed to facilitate meaningful change in active school travel. The Government will work with councils and schools to implement active transport plans for schools that are suited to each school's context and support the achievement of national targets.

36. Ministry of Health, 2016, *Clinical Guidelines for Weight Management in New Zealand Children and Young People*.

Responsible agencies and key stakeholders

Setting targets

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi, Te Tāhuhu o te Mātauranga Ministry of Education
- **Key stakeholders:** Local government, schools

Implementing active transport plans

- **Lead:** Waka Kotahi
- **Support:** Ministry of Education, local government, schools

Key milestones

- **2023:** Te Manatū Waka will scope this initiative.
- **2024–25:** Scoping will determine key milestones for this work programme.

Initiative 1.2e.2

Improve walking and cycling infrastructure to and along school routes, in schools, and in surrounding neighbourhoods

What are we doing?

As part of Budget 2022, the Government committed \$350 million of the Climate Emergency Response Fund to support the uptake of active and public transport (the Transport Choices package). Part of this funding will support Waka Kotahi to work with councils to rapidly deliver walking and cycling improvements around 75–100 schools and kura by 2025. Waka Kotahi will use a range of interventions depending on each school's needs and will take an area-wide approach, especially where it can wrap around several schools in a neighbourhood. Where possible, Waka Kotahi will coordinate this work with local safer speeds programmes and align Bikes in Schools and cycle skills education to maximise the benefits for children.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka (funding), Waka Kotahi, Local government (delivery in partnership)
- **Key stakeholders:** Ministry of Education, schools

Key milestones

- **Early 2023:** Waka Kotahi to stand up design and delivery model to assist with delivery of Transport Choices package.

- **From early 2023 to 2024:** RCAs to investigate, design, and deliver Transport Choices package, including improvements around schools.

Initiative 1.2e.3

Implement the Tackling Unsafe Speeds programme to ensure safer speed limits around schools

What are we doing?

The Government is undertaking various safety-related activities as part of the initial action plan under the current road safety strategy Road to Zero. This includes a package of reforms called Tackling Unsafe Speeds, which introduces a new approach to speed management, including:

- a new Land Transport Rule: Setting of Speeds Limits 2022 (Speed Rule), which came into force on 19 May 2022 and provides a framework for speed management planning
- a key initiative requiring safer speed limits, in line with the new rule, in place around 40% of schools under RCAs responsibility by 30 June 2024 and around all schools by the end of 2027. These will be maximum limits of either 30km/h for category one schools³⁷ or 60km/h for category two schools³⁸ depending on schools' risk profiles.

We expect safer speeds around schools to help to reduce emissions by creating safer roading environments, thus encouraging greater use of active transport to and from school and reducing private vehicle use.

Introducing safer speeds around schools is dependent on RCAs (mostly territorial authorities) undertaking the planning process under the Speed Rule to introduce new limits. RCAs are required to consult their communities under the Speed Rule when undertaking speed management planning, including changing speed limits.

Responsible agencies and key stakeholders

- **Lead:** Waka Kotahi
- **Support:** Te Manatū Waka
- **Key stakeholders:** Local government, schools, New Zealand Police

37. Category one schools will be in areas with higher numbers of more vulnerable road users in the vicinity (adult/child pedestrians, cyclists, micro-mobility users) with consequently higher risk. This may be from more housing reasonably close to the school area, making it more suitable to use active transport modes.

38. Category two schools will be in areas with relatively less risk to vulnerable road users (for example, where pupils are generally driven or bussed to school, as distances make active transport modes less practical, and pick up/drop off space is provided off road). Speed limits could be 40, 50, or 60km/h.



PART 3: THE PLAN IN DETAIL – ACTIONS, INITIATIVES, AND TIMINGS

Key milestones

- **2022:** Waka Kotahi begins supporting RCAs to implement the Speed Rule via the *Speed management guide: Road to Zero* edition..
- **2023:** Territorial RCAs and regional transport committees undertake the speed management planning process and Waka Kotahi (as state highway RCA) develops the state highway speed management plan.
- **2024:** RCAs must have safe speed limits in place around 40% of schools under their responsibility by 30 June 2024.
- **2027:** RCAs must have safe speed limits in place around all schools by the end of 2027.
- **Ongoing:** Waka Kotahi supports territorial RCAs in speed management planning and continues to develop state highway speed management plans.

Initiative 1.2e.4

Investigate opportunities to improve school bus services

What are we doing?

The Government will review school transport assistance to consider how school transport services delivered by all agencies can effectively support education priorities, including barrier-free access to education. The review is still being scoped, but it is likely to consider opportunities to enhance co-benefits of school transport assistance, including mode shift, reduced transport emissions, and supporting an integrated and efficient land transport system.

The review will be led by the Ministry of Education, who will work closely with Te Manatū Waka and Waka Kotahi to consider these opportunities to improve coverage, affordability, and access for students and whānau in both urban and rural areas.

Responsible agencies and key stakeholders

- **Lead:** Ministry of Education
- **Support:** Te Manatū Waka, Waka Kotahi
- **Key stakeholders:** Local government, schools

Key milestones

- TBC – review currently on hold

✂ **Low rates of active travel are concerning as New Zealand children have low levels of physical activity, with a third overweight or obese.**

Initiative 1.2e.5

Explore dedicated active transport funding and/or education programmes for schools

What are we doing?

Te Manatū Waka will investigate dedicated active transport funding and/or education programmes for schools. This initiative is still to be scoped but will likely consider:

- what gaps and/or barriers to uptake exist in current cycling education in schools such as BikeReady
- whether additional funding is required for in-school infrastructure such as safe/secure cycle and scooter parking and/or cycling skills areas
- opportunities to leverage off or align with existing schemes such as the Aotearoa Bike Challenge.

This initiative will complement the development of active school travel targets and school travel planning and improvements to walking and cycling infrastructure around schools (see Initiatives 1.2e.1 and 1.2e.2).

Responsible agencies and key stakeholders/partners

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi
- **Key stakeholders/partners:** Ministry of Education, local government, Māori

Key milestones

- **2023:** Te Manatū Waka will scope this initiative as part of scoping school travel targets (see Initiative 1.2e.1).

Delivery timeline

Action 1.2: Support people to walk, cycle and use public transport

Sub-action 1.2e: School travel - Make school travel greener and healthier

	> 2022	> 2023	> 2024	> 2025
1.2e.1: Set targets for active travel to and from schools and work with councils and schools to implement active transport plans around schools.		Scoping	TBC	
1.2e.2: Improve walking and cycling infrastructure to and along school routes, in schools, and in surrounding neighbourhoods.		Transport choices		
1.2e.3: Implement the Tackling Unsafe Speeds programme to ensure safer speed limits around schools.	Support for the RCAS to implement the speed rule	Speed management process planning	40% of schools at safe speeds (30 June)	All schools by 2027
1.2e.4: Investigate opportunities to improve school bus services.		TBC		
1.2e.5: Explore dedicated active transport funding and/or education programmes for schools.		Scoping (alongside targets)	TBC	



Sub-action 1.2f: Equity – improve access and travel choice for the transport disadvantaged

In addition to poor environmental outcomes, the status quo is not providing safe, healthy, or affordable access to transport for many New Zealanders. For example, low-income households spend a larger share of their budget on transport – particularly on their cars. They also tend to live in areas with poorer transport choices. We must provide equitable access to clean, safe, and healthy transport options as part of the transition to a zero-emissions transport system. This includes ensuring our transport solutions, particularly public transport, are accessible to disabled people and other people with accessibility needs.

This sub-action includes three initiatives that are described in more detail in the following pages.

Initiatives

Initiative 1.2f.1: 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)

Initiative 1.2f.2: Investigate opportunities to improve access for people living in social housing through shared mobility schemes, such as car-share, carpool and bike/scooter schemes

Initiative 1.2f.3: Work with local government to make public transport more affordable, with a particular focus on low-income users

➤ **Low-income households spend a larger share of their budget on transport – particularly on their cars.**

Initiative 1.2f.1

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)

What are we doing?

As a first step, Te Manatū Waka will work with Waka Kotahi to scope this initiative. This includes ensuring equity is a key consideration in the development of the national VKT reduction plan and programmes (see Initiative 1.2a.3 on page 50), the public transport strategy (see Initiative 1.2b.1 on page 52) and walking and cycling plans (see Initiatives 1.2c.3 and 1.2c.4 on pages 60).

This includes considering how to:

- deliver public transport in low socio-economic areas, including trialling demand-responsive public transport services in areas that are lower density and where traditional public transport service are less viable due to lower patronage
- improve the safety, security, and connectivity of footpaths and crossings and improve the quantity, quality, and connectivity of cycleways in low-income areas.

These plans and programmes will guide future investment and decision making on public transport, walking, and cycling, and will be developed in consultation with local government.

Te Manatū Waka will also review the Total Mobility Scheme,³⁹ which is intended to complement public transport services and ensure people with impairments can meet their daily needs in a safe and dignified manner.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka (funding and policy), Waka Kotahi, local government (delivery)
- **Support:** Waka Kotahi
- **Key stakeholders:** Kāinga Ora, Te Manatū Whakahiato Ora Ministry of Social Development, welfare groups

Key milestones

- **Early 2023:** Scoping of initiative completed.
- **Timeframe to be confirmed:** Total Mobility Scheme review

For national VKT plan, public transport strategy, and walking and cycling plans – see timelines for each initiative.

39. <https://www.transport.govt.nz/area-of-interest/strategy-and-direction/total-mobility-scheme>.

Initiative 1.2f.2**Investigate opportunities to improve access for people living in social housing through shared mobility schemes, such as car-share, carpool, and bike/scooter schemes****What are we doing?**

Te Manatū Waka is working on a joint project with Ngāi Tahu Holdings to research incorporating shared transport options into new medium and high-density housing developments in a way that is attractive to residents and developers. The research will be analysed for relevance and transferability to social housing.

Alongside the results of the Ngāi Tahu project, Te Manatū Waka will analyse research from Kāinga Ora on transport challenges for social housing residents and any relevant finding from shared mobility pilots. This work may include collaborating with several stakeholders, including Kāinga Ora. The key deliverable will be a report with findings and recommendations on how to best support development of shared mobility, including for people in social housing.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Key stakeholders:** Kāinga Ora, HUD, local communities, social service providers, Waka Kotahi, local government, Māori

Key milestones

- **Mid 2024:** Report with recommendations completed

Initiative 1.2f.3**Work with local government to make public transport more affordable, with a particular focus on low-income users****What are we doing?**

In 2022, the Government committed to fund the nationwide roll-out of Community Connect and set aside \$98 million from the Climate Emergency Response Fund over 4 years.

\$98M

Committed to fund the nationwide roll-out of Community Connect

Waka Kotahi, MSD, and Te Manatū Waka are working with PTAs to implement Community Connect: a 50% concession on adult public transport fares for Community Services Card holders.

Community Connect is expected to improve transport equity by providing direct financial savings through lower public transport costs and improve access to social and economic opportunities. The concession is fully funded by the Crown, with \$98 million being provided over the next 4 years to PTAs. In improving the affordability of public transport for those who are most affected by transport costs, Community Connect is also a key part of our plan to reduce transport emissions, encouraging greater mode shift and supporting a just transition.

Te Manatū Waka will work with Waka Kotahi and MSD to monitor and evaluate Community Connect, to identify uptake of the concession, and to consider whether other population groups or other passenger transport services should be eligible for the concession. Te Manatū Waka will also consider other mechanisms for addressing affordability, such as fare structures.

Responsible agencies and key stakeholders/partners

- **Lead:** Te Manatū Waka (policy development), Waka Kotahi (design and implementation)
- **Support:** MSD, local government
- **Key stakeholders/partners:** PTAs, Ministry of Health, Māori, MSD, Community Service Card holders and other low-income public transport users, public transport operators

Key milestones

- **From 2022:** Waka Kotahi, Te Manatū Waka and MSD will work with PTAs to implement the concession. Pre-registration for smart cards loaded with the concession may start.
- **From February 2023:** Community Connect launched nationwide.
- **From 2025:** Evaluation of the concession, informed by ongoing monitoring. This could inform changes to the concession.



PART 3: THE PLAN IN DETAIL – ACTIONS, INITIATIVES, AND TIMINGS

Delivery timeline

Action 1.2: Support people to walk, cycle and use public transport

Sub-action 1.2f: Equity - Improve access and travel choice for the transport disadvantaged

	> 2022	> 2023	> 2024	> 2025
<p>1.2f.1: 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).</p>		<p>Scoping completed</p>	<p>TBC</p>	
<p>1.2f.2: Investigate opportunities to improve access for people living in social housing through shared mobility schemes, such as car-share, carpool, and bike/scooter schemes.</p>		<p>Investigation and research; collaborating with stakeholders</p>	<p>Final report delivered</p>	
<p>1.2f.3: Work with local government to make public transport more affordable, with a particular focus on low-income users.</p>		<p>Community connect launched nationwide in February 2023</p>	<p>Monitoring of concession uptake</p>	

Sub-action 1.2g: Rural areas – investigate the potential for public transport, walking and cycling in rural and provincial areas

Low/zero-emissions vehicles are likely to play a greater role in reducing transport emissions in rural and provincial areas than public transport, walking, and cycling. However, there are still opportunities to uplift and build low-emissions transport choices for these communities.

The rural areas public package will contribute to future planning and investment in public transport, walking, and cycling in rural and provincial areas, which is appropriately scaled and takes advantage of innovative approaches. Improving public transport, walking, and cycling in rural and provincial areas will reduce emissions, improve mobility for non-drivers, provide affordable transport choices for lower-income households, and support local economic development. Although walking, cycling, and public transport will serve only a small portion of total travel in rural areas, many of these trips are important. For example, they allow seniors and disabled people to access healthcare and shops and young people to reach schools and jobs, and support car-free tourism.

While it is important to reduce emissions in all parts of the country and there are broad benefits for rural communities in doing this, the overall level of change required will be less than in urban areas.

This sub-action includes two initiatives that are described in more detail in the following pages.

Initiatives

Initiative 1.2g.1: Investigate the potential for public transport, shared services, walking and cycling in rural and provincial areas, particularly for the transport disadvantaged

Initiative 1.2g.2: Investigate further opportunities to provide on-demand public transport in provincial towns, in light of positive signs from the MyWay trial in Timaru

Initiative 1.2g.1

Investigate the potential for public transport, shared services, walking and cycling in rural and provincial areas, particularly for the transport disadvantaged

What are we doing?

Working closely with other agencies, we will scope and undertake research to investigate the potential for better public transport to and between rural and provincial areas, support for community transport services (such as not-for-profit local transport solutions), street improvements that make it safer to walk and cycle, and active and shared low-emissions school travel options. How to better deliver services to reduce travel demand will also be considered. During the scoping phase of the research, we will align with the Decarbonising Transport Research Strategy.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi, MBIE, Manatū Ahu Matua Ministry for Primary Industries (MPI)
- **Key stakeholders:** Local government

Key milestones

- **End of 2025:** We will have the results of this research.

Initiative 1.2g.2

Investigate further opportunities to provide on-demand public transport in provincial towns, in light of positive signs from the MyWay trial in Timaru

What are we doing?

On-demand public transport services are being considered by PTAs to complement, supplement, or replace existing scheduled services. For example, they have been used in lower-demand areas that may find it difficult to sustain scheduled services.

The MyWay trial in Timaru and AT Local trials in Auckland have demonstrated that on-demand public transport services can support more-diverse travel patterns and different mobility and access needs than scheduled public transport. In some cases, on-demand services can also significantly increase patronage compared to a scheduled service. However, they are complex to establish and typically cost more to deliver than timetabled services.



PART 3: THE PLAN IN DETAIL – ACTIONS, INITIATIVES, AND TIMINGS

Through establishing the SPTF, the Government is establishing a clear framework for delivering on-demand public transport services. This includes:

- amendments to the Land Transport Management Act that will clarify the treatment of on-demand services and ensure flexibility around how they are planned, procured, and delivered
- developing operational policy and guidance around planning, procurement, and delivery of on-demand services. This will incorporate and build on the experiences from trials of on-demand public transport services.

Alongside and following the establishment of the SPTF, Waka Kotahi will work with PTAs to investigate further opportunities to provide on-demand public transport services in provincial towns. This will include using the guidance and new framework to identify scheduled public transport services that could be complemented, supplemented, or replaced by on-demand services.

Responsible agencies and key stakeholders/partners

Legislative process for the SPTF

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi
- **Key stakeholders:** PTAs, passenger service operators

Operational policy to implement the SPTF

- **Lead:** Waka Kotahi
- **Key stakeholders/partners:** PTAs, passenger service operators, Māori

Key milestones

- **Mid 2022:** Cabinet agreed to reforms through amending the Land Transport Management Act 2003 and to replace the PTOM with the SPTF.
- **Mid 2022 – late 2023:** Waka Kotahi develops operational policy to give effect to the SPTF.
- **Early 2023:** Bill to amend the Land Transport Management Act introduced.
- **2023 onwards:** Waka Kotahi works with PTAs to identify opportunities to provide on-demand services.

Delivery timeline

Action 1.2: Support people to walk, cycle and use public transport

Sub-action 1.2g: Rural areas - Investigate the potential for public transport, walking and cycling in rural and provincial areas

	> 2022	> 2023	> 2024	> 2025
1.2g.1: Investigate the potential for public transport, shared services, walking and cycling in rural and provincial areas, particularly for the transport disadvantaged.			Results of research – TBC	
1.2g.2: Investigate further opportunities to provide on-demand public transport in provincial towns, in light of positive signs from the MyWay trial in Timaru.	SPTF legislation introduced	SPTF implemented late 2023 onwards; identify opportunities to provide on-demand services		

Action 1.3: Enable congestion charging and investigate other pricing and demand management tools to reduce transport emissions

Pricing mechanisms are integral to reducing transport emissions alongside other demand management levers such as changes to land use and investment in public and active transport modes. Aotearoa New Zealand's main pricing tool for reducing emissions is the New Zealand Emissions Trading Scheme. Overseas evidence shows that congestion charging can encourage better use of current transport systems and avoid the need for expensive and carbon-intensive infrastructure investments. A broader range of pricing tools could be used to reduce emissions by encouraging the use of low-carbon fuels, discouraging the use of high CO₂ emitting vehicles, and supporting shifts to public transport and active modes.

This action includes four initiatives that are described in more detail in the following pages.

Initiatives

Initiative 1.3.1: Consider progressing legislative changes to enable congestion charging

Initiative 1.3.2: Investigate additional pricing tools to reduce transport emissions (including parking pricing, VKT pricing and low-emissions zones)

Initiative 1.3.3: Review the revenue system in response to longer-term changes in the way New Zealanders travel

Initiative 1.3.4: Explore a pilot Mobility as a Service project (MaaS)

Initiative 1.3.1

Consider progressing legislative changes to enable congestion charging⁴⁰

What are we doing?

In late-2022, Cabinet will consider whether to progress legislative changes to enable congestion charging in Aotearoa New Zealand., taking into account how best to align network efficiency objectives with emission reduction plan targets and objectives.

If Cabinet decides to progress legislation, then a Bill may be introduced in early 2023. Public engagement will occur at select committee stage if the Government opts to progress with a Bill.

If the Government decides to progress, it will work with Auckland Council to design a scheme. The Government will also engage with other councils at their request (such as Wellington) and investigate ways to mitigate possible adverse financial impacts of congestion charging on low-income households.

The Government will work with Auckland Council, Auckland Transport, and Waka Kotahi to design a detailed congestion charging scheme for Auckland, including setting out the area to be charged, the level of the charge and the times of the day that it will apply, building on the work completed through the Congestion Question project. Te Manatū Waka will support the work of Auckland Council, to ensure any scheme is consistent with what will be required in the legislation.

Responsible agencies and key stakeholders

Enabling congestion charging

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi
- **Key stakeholders:** Local government

Key milestones

- **Late-2022:** Cabinet will consider whether to progress legislation.
- **2023:** Bill introduced, if Cabinet decides to progress. The speed at which the Bill passes is dependent on decisions by the Government.
- **2025:** A congestion charging scheme in Auckland could go into effect at the same time that the City Rail Link begins operating.

40. The full description of this initiative in the ERP is: "Following the recent Inquiry of the Transport Select Committee, the Government is considering progressing legislative changes to enable congestion charging. If the Government decides to progress, it will work with Auckland Council to design a scheme, engage with other councils at their request (eg. Wellington) and investigate ways to mitigate possible adverse financial impacts of congestion charging on low-income households."



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Initiative 1.3.2

Investigate additional pricing tools to reduce transport emissions (including parking pricing, VKT pricing and low-emissions zones)

What are we doing?

Te Manatū Waka is currently scoping this work to determine the most effective combination of additional pricing tools (for example, parking pricing, VKT pricing, and low-emissions zones) to reduce emissions from land transport and is progressing some supporting research. This work programme will additionally investigate the equity impacts of combining different tools.

Te Manatū Waka is currently scoping the work programme into low-emissions zones for harmful health emissions and progressing some supporting research. This work will consider the potential effectiveness of enabling low-emissions zones in Aotearoa New Zealand (as a pricing measure and a regulation measure).

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi
- **Key stakeholders:** Local government

Key milestones

- **2024:** Complete the scoping phase of this work.

Initiative 1.3.3

Review the revenue system in response to longer-term changes in the way New Zealanders travel

What are we doing?

Sustainable land transport revenue is important for supporting increased investment in public transport services and active modes. This project will design a revenue system able to deliver transport that is used differently compared to today. This work will also consider the role of pricing in the future revenue system to reduce emissions.

We need to reconsider the revenue system in response to longer-term changes in the way New Zealanders will travel and in response to the shifting expectations about the purpose and function of the transport system. Decarbonisation will likely tilt the land transport investment profile away from roads, and the reliance on fuel taxes and road user charges (RUC) will become less sustainable and less equitable.

We will take a first principles approach to land transport revenue and the question of ‘who should pay for what and how?’ This includes engaging with people on what they think the purpose and outcomes of the land transport revenue system should be.

Following this will be a process to design future options for the revenue system that will include tools for raising revenue and consider how revenue, funding, and pricing options may be used together.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi
- **Key stakeholders:** Local government, the Treasury, Te Waihanga, Te Tari Taiwhenua Department of Internal Affairs, HUD, ACC, Māori

Key milestones

- **2022–2023:** Review revenue system and develop options over 12–18 months in phase one.
- **2024:** Public engagement and option refinement over a 3-year period.
- **2027:** Implementation of the revenue system over a 3-year period.

Initiative 1.3.4

Explore a pilot Mobility as a Service project

What are we doing?

Mobility as a Service (MaaS) is a term describing the application of the ‘as a Service’ concept to mobility and transport options. Trials of MaaS platforms have occurred across the world. The trials have exemplified that a well-planned and fully featured platform has significant potential to improve transport outcomes for users, leading to a shift towards greater use of public transport and active modes along with a lower reliance on personal vehicles. MaaS has a credible potential to begin shaping transport users’ transport choices to align with wider social goals such as emissions reductions, lowering congestion, and addressing inequality.

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A New Zealand pilot could determine how effectively MaaS could shape transport outcomes including encouraging mode shift.

This pilot could include:

- subscription services and packages, allowing open access to a range of services via a single monthly payment
- incentives to encourage the use of low-emissions or active modes, especially during peak travel times
- new types of public transport services such as on-demand public transport
- integration with smart-city infrastructure
- shaping behaviour and choices through greater transparency of the environmental impacts of users' transport choices
- creating a mobility marketplace, reducing barriers to entry, and allowing small local operators to compete against incumbent international operators.

Waka Kotahi has commissioned research on incentives within a MaaS system in New Zealand to be completed in Mid 2023. This research will include a thorough review of MaaS systems worldwide and will inform our further work on MaaS, including any future trials. We will continue to work with Waka Kotahi to shape our ongoing MaaS work programme.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi
- **Key stakeholders:** Local government

Key milestones

- **Mid 2023:** Waka Kotahi MaaS research completed and future direction of MaaS work programme decided.
- **2025:** Pilot to be explored.

Delivery timeline

Action 1.3: Enable congestion charging and investigate other pricing and demand management tools to reduce transport emissions

	> 2022	> 2023	> 2024	> 2025
1.3.1: Consider progressing legislative changes to enable congestion charging.		Decision on congestion charging	Legislation progressed (TBC)	Auckland scheme designed, developed and potentially implemented (tbc); other councils engaged
1.3.2: Investigate additional pricing tools to reduce transport emissions (including parking pricing, VKT pricing and low-emissions zones).		Scoping, incl. legislative changes needed and equity considerations		
1.3.3: Review the revenue system in response to longer-term changes in the way New Zealanders travel.		Develop revenue system options	Public and political engagement	
1.3.4: Explore a pilot Mobility as a Service project (MaaS).		Research completed and work programme decided		TBC – decisions depending on research results; possible pilot explored



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Action 1.4: Require roadway expansion and investment in new highways to be consistent with transport targets

New highways and road expansion projects are sometimes needed to support urban and housing development and the efficient movement of freight, but they can increase emissions by inducing more private vehicle travel. Further investment that expands roads and highways needs to be consistent with transport targets and, where possible, avoid inducing further travel by private vehicles.

This action ensures that future road investments are consistent with climate change targets. In the medium term, fewer new roads will be built that induce further travel by private vehicles.

Initiatives

Initiative 1.4: Establish a high threshold for new investments to expand roads, including new highway projects, if the expansion is inconsistent with emissions-related objectives.

Initiative 1.4

Establish a high threshold for new investments to expand roads, including new highway projects, if the expansion is inconsistent with emissions-related objectives

What are we doing?

We are developing a threshold for new road investments being considered for transport funding from central government that might be inconsistent with emissions-reduction objectives.

To do this we will:

- work with HUD and Kāinga Ora to understand thresholds that might continue to support housing supply and support a shift to low-emissions urban development patterns
- work with Waka Kotahi to understand existing tools and methodologies in place to assess emissions impacts of road projects at a project, programme, and regional or system level
- determine when and where a threshold should be applied
- develop a threshold for new investments to expand new roads, including highway projects, that could increase emissions to be eligible for funding consideration
- work with Waka Kotahi to ensure that the threshold can be and is applied for new investments to expand roads, including new highway projects, if the expansion is inconsistent with emissions-related objectives.



Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** HUD, Waka Kotahi
- **Key stakeholders:** The Treasury, local government, Kāinga Ora, transport agencies

Key milestones

- **Early 2023:** Draft threshold for use of the NLTF will be included in the draft GPS to be released for consultation early in 2023.
- **1 July 2024:** Threshold covering the use of the NLTF will be set by the next Government Policy Statement (GPS) that will come into force on 1 July 2024.
- **2023–24:** Guidance for other sources of central government funding will be developed during 2023–24 and set by 2025.

➤ Further investment that expands roads and highways needs to be consistent with transport targets and, where possible, avoid inducing further travel by private vehicles

Delivery timeline**Action 1.4: Require roadway expansion and investment in new highways to be consistent with transport targets**

	➤ 2022	➤ 2023	➤ 2024	2025
1.4: Establish a high threshold for new investments to expand roads, including new highway projects, if the expansion is inconsistent with emissions-related objectives.		Threshold developed and set in GPS 2024 for NLTF Guidance developed and set for other sources of Central Government funding		



Action 1.5: Embed nature-based solutions as part of our response to reducing transport emissions and improving climate adaptation and biodiversity outcomes

Te Mana o te Taiao – Aotearoa New Zealand Biodiversity Strategy 2020 defines nature-based solutions as solutions that “are inspired and supported by nature, cost-effective and simultaneously provide environmental, social and economic benefits and help build resilience”.⁴¹

For transport, opportunities to apply nature-based solutions at a local, regional, and national scale can reduce transport emissions and improve climate adaptation as well as biodiversity outcomes. This includes:

- spatial planning for sustainable land use, development, and infrastructure provision, which identifies appropriate areas for production, development, and conservation/regeneration
- urban design that integrates functional green spaces into multi-modal transport infrastructure developments to make places more attractive for urban living, walking, and cycling (which supports mode shift and emissions reductions) and to create shading to make streets and buildings cooler in summer
- incorporating the use of functional ‘green infrastructure’ (trees, vegetation, and parks) and ‘blue infrastructure’ (wetlands and floodplains) to reduce the impacts of stormwater runoff, protect transport infrastructure from natural hazards and the impacts of climate change, and improve biodiversity
- protecting valuable ecological habitats and species from damage and disruption when transport infrastructure is being constructed and maintained and from ongoing impacts when infrastructure is used (air pollution, noise pollution, stormwater runoff, light pollution etc.).

In the long term, nature-based solutions are expected to sequester carbon while improving climate adaptation and biodiversity outcomes.

This action includes two initiatives that are described in more detail in the following pages. These initiatives support adaptation and are included in the national adaptation plan as Action 8.7.⁴²

Initiatives

Initiative 1.5.1: Consider the role of nature-based solutions in reducing transport emissions and contributing to other benefits

Initiative 1.5.2: 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

Initiative 1.5.1

Consider the role of nature-based solutions in reducing transport emissions and contributing to other benefits

What are we doing?

Working with Waka Kotahi, HUD, and other agencies doing related work, Te Manatū Waka is going to review current best practices for incorporating nature-based solutions in spatial planning, urban design, and transport infrastructure development and maintenance. Te Manatū Waka will then undertake targeted engagement with key stakeholders, including local and regional councils, Māori, and others, to explore the role of nature-based solutions in the transport system. This will help to identify knowledge gaps, barriers, and opportunities for using nature-based solutions to reduce transport emissions and contribute to other benefits.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi
- **Key stakeholders:** MfE, Te Papa Atawhai Department of Conservation (DOC), local government

41. Te Papa Atawhai | Department of Conservation, 2020, *Te Mana o te Taiao – Aotearoa New Zealand Biodiversity Strategy 2020*, p62.

42. Aotearoa New Zealand’s first national adaptation plan, 2022, Chapter 5 Adaptation options including managed retreat – Action 5.16: Identify options to increase the integration of nature-based solutions into urban form and Chapter 8 Infrastructure – Action 8.7: Embed nature-based solutions as part of the response to reducing transport emissions and improving climate adaptation and biodiversity outcomes.

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Key milestones

- **Late 2023:** Review current best practice use of nature-based solutions in transport
- **Early 2024:** Engage with key stakeholders on nature-based solutions in transport
- **Late 2024:** Produce report documenting current practices, opportunities and barriers for use of nature-based solutions.

Initiative 1.5.2

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

What are we doing?

Parallel to and following the above initiative, the Government will embed nature-based solutions in transport policy statements, long-term strategies,

and other expectation-setting documents. These would feed into appropriate investment settings to support nature-based solutions. Through the above background research and engagement groundwork, strategies to overcome the barriers will be identified and policy solutions proposed if needed.

Responsible agencies and key stakeholders/partners

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi
- **Key stakeholders/partners:** MfE, DOC, local government, Māori

Key milestones

- **From late 2024 and ongoing:** Implement policy changes and programmes needed to enhance the use of nature-based solutions, as identified as part of Initiative 1.5.1.

Delivery timeline

Action 1.5: Embed nature-based solutions as part of our response to reducing transport emissions and improving climate adaptation and biodiversity outcomes

	> 2022	> 2023	> 2024	> 2025
1.5.1: Consider the role of nature-based solutions in reducing transport emissions and contributing to other benefits.			Initial research and review En-gage-ment	Report completed
1.5.2: 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.				Embed policy solutions identified in report (1.5.1)



Focus area 2: Rapidly adopt low-emissions vehicles

Focus area 2 includes three initial actions that are described in more detail in the following pages.

Actions for Focus area 2

Action 2.1: Accelerate the uptake of low-emission vehicles

Action 2.2: Make low-emissions vehicles more accessible for low-income and transport-disadvantaged New Zealanders

Action 2.3: Support the rollout of EV charging infrastructure

Action 2.1: Accelerate the uptake of low-emission vehicles

The Government has already implemented the Clean Vehicle Standard and the Clean Vehicle Discount scheme. This is a significant step towards decarbonising our light vehicles, especially those entering the fleet. The Clean Vehicle Standard will increase the quantity and variety of low/zero-emissions vehicles supplied to Aotearoa New Zealand. The Clean Vehicle Discount is already encouraging consumers to purchase low/zero-emissions vehicles.

In addition, the Government has committed to further actions to accelerate the uptake of safe, low/zero-emissions vehicles. This includes measures to avoid New Zealand becoming a dumping ground for high-emitting vehicles, tackling the highest-emitting vehicles entering our fleet, and investigating opportunities to support other types of low-emissions light vehicles.

We urgently need more safe, low/zero-emissions vehicles in Aotearoa New Zealand and for more New Zealanders to choose to purchase such vehicles. It is important to have the quantity and range of vehicles to meet consumer demand

as we make a move to gradually phase out internal combustion engine vehicles in the domestic market.

This action includes seven initiatives, which are described in more detail in the following pages.

Initiatives

Initiative 2.1.1: Continue to incentivise the uptake of low- and zero-emissions vehicles through the Clean Vehicle Discount and consider the future of the road user charge exemption for light vehicles beyond 2024

Initiative 2.1.2: Implement the Clean Vehicle Standard to increase the quantity and variety of low- and zero-emissions vehicles supplied to Aotearoa

Initiative 2.1.3: 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

Initiative 2.1.4: Set a maximum CO₂ limit or penalties for individual light internal combustion engine vehicle imports to tackle the highest-emitting vehicles

Initiative 2.1.5: Establish whether the Clean Vehicle Discount can be extended to other vehicle classes

Initiative 2.1.6: Investigate how the tax system can support clean transport options to ensure low-emissions transport options are not disadvantaged

Initiative 2.1.7: Determine whether legislative barriers preventing the use of some types of light low-emissions vehicles can be reduced without unduly compromising safety objectives

Initiative 2.1.1

Continue to incentivise the uptake of low- and zero-emissions vehicles through the Clean Vehicle Discount and consider the future of the Road User Charge exemption for light vehicles beyond 2024

What are we doing?

The Government introduced the Clean Vehicle Discount scheme in July 2021. The scheme places a charge on high-emitting vehicles at the point of first registration in Aotearoa New Zealand to disincentivise their purchase. Revenue from those charges is used to fund significant rebates on low/zero-emissions vehicles to encourage their uptake. Charges and rebates will be regularly calibrated to ensure the policy is financially self-sustaining. It is now a requirement on motor vehicle dealers to clearly show the CO₂ emissions and any rebate or charge that applies on a vehicle for sale.

The RUC exemption for light EVs has recently been extended to 31 March 2024, continuing its contribution to supporting the uptake of EVs. Continuing the exemption is intended to avoid decreases in EV uptake, which has been evidenced overseas.

In the first half of 2022, the Government publicly consulted on the future of RUC exemptions for EVs beyond 2024.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka (policy development – review pricing and other policy settings of the Clean Vehicle Discount), Waka Kotahi (implementation – administer the Clean Vehicle Discount and RUC transactions)
- **Key stakeholders:** Motor vehicle industry

Key milestones

- **2022:** The Clean Vehicle Discount scheme is now operational. Rebate and charge levels will first be reviewed in 2023 and will be monitored and updated every 1–2 years.
- **End of 2021:** The RUC exemption was extended out to March 2024.

Initiative 2.1.2

Implement the Clean Vehicle Standard to increase the quantity and variety of low- and zero-emissions vehicles supplied to Aotearoa New Zealand

What are we doing?

In 2022, the Government introduced the Clean Vehicle Standard. This will increase the quantity and variety of low/zero-emissions vehicles supplied to Aotearoa New Zealand. From 2023, vehicle importers will be given CO₂ targets to meet that strengthen on an annual basis.

Find out more about the clean vehicle programme, including the annual CO₂ targets imposed on vehicle importers, on the Te Manatū Waka website: <https://www.transport.govt.nz/area-of-interest/environment-and-climate-change/clean-cars>.

To guide the market between now and 2034, the CO₂ targets imposed on vehicle importers under the Clean Vehicle Standard would progressively reduce annually until this reaches 0 grams in 2035.

A review of CO₂ targets is legislated to commence in 2024. This review will consider how the targets impact CO₂ reductions, vehicle safety, affordability, and availability of vehicles. The review will also compare our targets against the ambition shown by other countries. It could also review whether importers need to sell a minimum percentage of zero-emissions vehicles in the future, which is an approach employed internationally.⁴³

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka (policy development, including providing advice to Ministers on future targets and reviewing targets and policy settings), Waka Kotahi (implementation)
- **Key stakeholders:** Motor vehicle industry

Key milestones

- **2023:** Legislated targets commence.
- **2024:** Legislated review of targets.

43. For more information on this review, see: <https://www.legislation.govt.nz/act/public/2022/0002/latest/whole.html#LMS536334>.



Initiative 2.1.3

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 New Zealand becoming a dumping ground for high-emitting vehicles

What are we doing?

Almost all vehicles driven on our roads need to be zero emissions before 2050 to reach our national net zero carbon target. We also have a Road to Zero target to reduce deaths and injuries on our roads by 40% by 2030. Given vehicles are scrapped at 19 years of age on average domestically, only vehicles that support both our net-zero and Road to Zero targets should be added to our fleet from the early 2030s.

The Climate Change Commission recommends a phase-out date of no later than 2035, and if possible 2030, on light vehicles with internal combustion engines being imported, manufactured, or assembled in Aotearoa New Zealand. Post 2030, it is expected that there will be a wide range of models available across a spectrum of price points to meet the varied requirements of New Zealanders. The Government will continue to monitor this and respond to changes in the market, if needed.

Importers could be subject to gradually increased standards that limit the maximum CO₂ of a given imported vehicle and be required to import a minimum percentage of zero-emissions vehicles. In addition, the Government is considering setting thresholds after which only very low-emissions and then zero-emissions light vehicles can be imported in the 2030s.

We will also engage further on an appropriate timeline for any phase-out of importation of internal combustion engine heavy road vehicles, noting that several countries, including Aotearoa New Zealand, and several manufacturers, have signed a global statement at COP26 to work towards all medium and heavy vehicle sales being zero-emissions vehicles from 2040. Refer to Initiative 3.1.3, which considers accelerating the decarbonisation of trucks.

This proposal is in line with the plans of other major economies. Find out more about internal combustion engine phase-out, and a global overview of targets on the International Council on Clean Transportation's website: <https://theicct.org/ice-phase-outs>.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi
- **Key stakeholders:** Motor vehicle industry, electricity and fuels sectors

Key milestones

- **Mid 2023:** Further consideration of policy decisions on approach to phasing out light internal combustion engine vehicle imports.

Initiative 2.1.4

Set a maximum CO₂ limit or penalties for individual light internal combustion engine vehicle imports to tackle the highest emitting vehicles

What are we doing?

The Government will consider setting a maximum vehicle CO₂ limit that would operate as a grams CO₂ per kilometre threshold above which vehicles could not be imported or setting very high penalties for these types of vehicles as part of the Clean Vehicle Discount.

This initiative will complement the Clean Vehicle Standard and the Clean Vehicle Discount in accelerating the move to a low-emissions vehicle fleet. Its specific role is to address the gaps that the Clean Vehicle Standard and Clean Vehicle Discount cannot respond to:

- The Clean Vehicle Standard cannot prevent vehicles that do egregious climate harm from entering the fleet as it does not apply to individual vehicles. The Clean Vehicle Standard works by lowering the average vehicle emissions of the fleet of vehicles coming in. It allows the emissions of very high-emitting vehicles to be offset by low-emissions vehicles.
- The highest-emitting vehicles tend to be luxury vehicles and large utes and vans that cost more than the average vehicle. Compared to most vehicle buyers, purchasers of luxury vehicles are less price sensitive. This reduced sensitivity will mute the impact of the Clean Vehicle Discount's

fees and any penalties passed on from the Clean Vehicle Standard.

This initiative is important because the highest-emitting vehicles tend to be driven more. Generally, these vehicles have large engines. People drive large-engine vehicles more than vehicles with smaller engines. In 2019, cars and SUVs greater than 3,000 cc were, on average, driven 11,506km. Vehicles between 1,600cc and 1,999cc were, on average, driven 8,826km.

As well, the elevated level of climate harm from every new high-emitting vehicle entering our fleet will be locked in for around two decades. Having more of these vehicles in our fleet will limit our ability to meet our 2030 and 2050 emissions targets.

Te Manatū Waka is undertaking further work to identify the most appropriate mechanisms and any necessary exemptions regime, drawing on international experience. The Government will consider advice on the most appropriate mechanisms in 2023.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi
- **Key stakeholders:** Motor vehicle industry

Key milestones

- **Early 2023:** Government decision on introducing new mechanisms to tackle highest emitting vehicles.
- **2024–2028:** New requirements on high emissions phased in for new and used light vehicles.

Initiative 2.1.5

Establish whether the Clean Vehicle Discount can be extended to other vehicle classes

What are we doing?

The Clean Vehicle Discount currently applies to light vehicles such as cars, vans, and utes but does not include motorcycles, mopeds, ATVs, or trucks and buses nor other types of vehicles such as quadricycles. These excluded vehicle types are estimated to be responsible for a little over a quarter of road transport carbon emissions (of which almost all is from buses and trucks).

Other vehicle segments such as road registered motorbikes and heavy vehicles (further detailed in Focus area 3) will be investigated and may be added into the Clean Vehicle Discount scheme or parallel mechanisms over the first emissions reduction plan budget period, subject to the outcome of initial review and subsequent funding.

Any potential support for the uptake of safe, low/zero-emissions heavy vehicles will also be in line with Initiative 3.1.3 (on page 96).

Responsible agencies and key stakeholders

Policy design

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi
- **Key stakeholders:** Motor vehicle industry

Key milestones

- **2022:** Initial high-level review of policy options.
- **2023–2024:** Review and Government consideration of policy options.

Initiative 2.1.6

Investigate how the tax system could support clean transport options to ensure low-emissions transport options are not disadvantaged

What are we doing?

Aspects of the current tax system may be creating incentives that could be working against reducing transport emissions. We have reviewed aspects of the tax system to ensure low-emissions transport options are not disadvantaged.⁴⁴

This review included:

- consideration of whether employer-provided public transport should be exempt from fringe benefit tax (FBT) given that the current FBT exemption of on-premises car parking may drive employees towards a less environmentally friendly outcome
- the FBT treatment of work-related vehicles, in particular the definition of such vehicles.

Legislation proposing an FBT exemption for public transport has been introduced but has still to be enacted. The success of implementation and uptake will depend to a large extent on the availability of low compliance effort and cost arrangements between employers and public transport operators.

44. While this initiative is included under Focus area 2, it is also relevant to Focus area 1 as it supports the uptake of public transport.



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Work on reviewing the FBT definition of work-related vehicles has been awaiting the outcome of Te Tari Taake Inland Revenue (IRD) fringe benefit tax: regulatory stewardship review. That review has been published,⁴⁵ and consideration can now be given to areas of the FBT rules such as the definition of work-related vehicle. A risk is that the review of the definition is given a lesser priority. If a change to the definition of work-related vehicle is recommended, this will be subject to public engagement.

Responsible agencies and key stakeholders

- **Lead:** IRD
- **Key stakeholders:** Te Manatū Waka, Waka Kotahi

Key milestones

- **2022:** Legislation proposing an FBT exemption for public transport was introduced and is likely to be enacted by April 2023.

This initiative also aligns with work being progressed through Road to Zero. Through this, the Government will review the broader vehicle standards regulatory framework to consider appropriate system design, international harmonisation, and how Aotearoa New Zealand's vehicle entry requirements can more efficiently keep pace with new vehicle features.

Responsible agencies

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi

Key milestones

- **2023:** Initial research commenced.
- **2024:** The review is to be completed by 2024 and will include the progression of decisions on legislation change if such a change is required. The commencement date is to be determined after the project is scoped.

Initiative 2.1.7

Determine whether legislative barriers preventing the use of some types of light low-emissions vehicles can be reduced without unduly comprising safety objectives

What are we doing?

Globally, there are different types of light low-emissions vehicles that might be suitable for short-distance, low-speed use. However, our existing regulatory frameworks do not permit their current domestic use.

This work will determine if there are legislative barriers to the use of some types of low-emissions vehicles in Aotearoa New Zealand. It will consider if allowing these vehicles into the national fleet can be achieved without unduly compromising our safety or other objectives. This work could include making amendments to the Land Transport Act 1998 and land transport rules.



45. Te Tari Taake | Inland Revenue, 2022, Fringe benefit tax: regulatory stewardship review.

Delivery timeline

Action 2.1: Accelerate the uptake of low-emissions vehicles

	> 2022	> 2023	> 2024	> 2025
2.1.1: 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.	Discount commenced; RUC exemption extended	Rebates reviewed every 1-2 years		
2.1.2: Implement the Clean Vehicle Standard to increase the quantity and variety of low- and zero-emissions vehicles supplied to Aotearoa.		Targets commence	Targets reviewed	
2.1.3: 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.		Consider policy approach and decisions		
2.1.4: Set a maximum CO ₂ limit or penalties for individual light internal combustion engine vehicle imports to tackle the highest emitting vehicles.		Policy decisions	TBC – new requirements on high emissions phased in	
2.1.5: Establish whether the Clean Vehicle Discount can be extended to other vehicle classes.	Initial review	Review and government consideration of policy options		
2.1.6: Investigate how the tax system could support clean transport options to ensure low-emissions transport options are not disadvantaged.	Review completed	TBC – legislation changes		
2.1.7: Determine whether legislative barriers preventing the use of some types of light low-emissions vehicles can be reduced without unduly comprising safety objectives.		Initial research commenced	Review and policy decision by end of 2024	



Action 2.2: Make low-emissions vehicles more accessible for low-income and transport-disadvantaged New Zealanders

Compared to other income groups, low-income New Zealanders face significant barriers in moving away from high-emitting vehicles, and this is a risk to transport decarbonisation. This disparity arises from affordability constraints, a lack of suitable low-emissions vehicles, and limited or no access to alternative low-emissions transport options.

Although the Clean Vehicle Discount seeks to increase the affordability of low-emissions vehicles, these vehicles remain unaffordable to many lower-income New Zealanders, even with rebates. The Government must further help lower-income and transport-disadvantaged New Zealanders move away from high-emitting vehicles, including by making safe, low-emissions vehicles more accessible.

➤ **Low-income New Zealanders face significant barriers in moving away from high-emitting vehicles, and this is a risk to transport decarbonisation.**

The Government has committed to trialling a vehicle scrap-and-replace scheme (the Clean Car Upgrade) and a social leasing scheme to make safe, low-emissions vehicles more affordable for low-income households. These types of initiatives will help to ensure that all New Zealanders get the benefits of cleaner, safer vehicles.

As well as helping to create an equitable transition, the social leasing and Clean Car Upgrade schemes will have the co-benefits of emissions reductions and improvements in vehicle safety. They will raise public awareness of the type of transport changes all New Zealanders need to make as part of Aotearoa New Zealand's contribution to limiting climate change and reducing serious road trauma.

By helping low-income New Zealanders switch to low-emissions transport, it will:

- shield households on lower incomes from expected increases in motoring costs as fuel prices increase with the rising cost of carbon and the introduction of biofuels
- improve the ability of households on lower incomes to access employment and education and to participate in society
- provide a pathway out of the poor-quality vehicle cycle
- reduce transport emissions and increase the safety of vehicles on our roads.

Initiatives

Initiative 2.2.1: Support social leasing schemes to make access to cleaner vehicles affordable for low-income households

Initiative 2.2.2: Implement an equity-oriented vehicle scrap-and-replace-scheme trial (now referred to as the Clean Car Upgrade) to make cleaner vehicles and low-emissions alternatives affordable for low-income households

Initiative 2.2.3: Investigate whether further targeted support is required to make low-emissions vehicles more accessible and affordable for other disadvantaged groups and communities

Initiative 2.2.1**Support social leasing schemes to make access to cleaner vehicles affordable for low-income households****What are we doing?**

Through the Climate Emergency Response Fund in Budget 2022, the Government has committed funding to trial, with a view to establish, social leasing schemes of safe, low/zero-emissions vehicles for households on low incomes. Participants will pay an affordable weekly set fee to cover running costs (except fuel and charging), maintenance, WoF, insurance, and scheme administration.

Households on low incomes who participate in the trial will lease a safe, low-emissions vehicle from a community supplier for the duration of the trial. The trial will be designed and implemented with partner community groups similar to the model being piloted for Waka Āronui.⁴⁶

For the trial, the Government support will, with any additional contributors, ensure the availability of the vehicles, administration and operation expenses, and evaluation of the initiative following the trial. This evaluation will assess the extent to which participants are likely to opt for social leasing over vehicle ownership as well as any improvements that would make leasing more attractive to people.

Any decisions on a full rollout will be determined after the conclusion of a full evaluation and any modification to improve the scheme.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka (policy development such as eligibility), Waka Kotahi (scheme design and implementation – administer contracting with suppliers and community partners)
- **Support:** MBIE, Kāinga Ora, MSD
- **Key stakeholders:** Local government, community groups, Māori

Key milestones

- **February 2023:** Social leasing trials approved by Cabinet.
- **Early 2023:** Trial commences in at least one location.
- **2024–25:** Trial concludes (trial duration yet to be confirmed). Full evaluation takes place and report back to Ministers on success (or otherwise) of social leasing and recommendations on a future rollout.

Initiative 2.2.2**Implement an equity-oriented vehicle scrap-and-replace scheme (now referred to as the Clean Car Upgrade) to make cleaner vehicles and low-emissions alternatives affordable for low-income households****What are we doing?**

As part of Budget 2022, the Government committed \$569 million of the Climate Emergency Response Fund to support low-income households to shift to low-emissions alternatives when ‘scrapping’ a vehicle. The Clean Car Upgrade will use a vehicle scrap-and-replace scheme to target financial assistance to low-income and moderate-income New Zealanders. Participants will be supported to scrap their high-emitting vehicles and replace them with low-emissions transport, such as low-emissions vehicles, bikes, e-bikes, public transport, low-emissions car-share and vehicle leasing.

To encourage people to opt for low-emissions alternatives, the level of financial assistance received for these choices will be the same as that received for an EV. This would enable households to scrap their vehicle and meet their transport needs through, for example, purchasing a couple of e-bikes and using the remainder of their assistance for public transport. Other replacement vehicles subsidised through the Clean Car Upgrade such as plug-in hybrid EVs will receive lower levels of assistance.

The trial will commence in April 2023 in at least one of the trial locations of Auckland, Christchurch, and Tairāwhiti. These locations will allow the Clean Car Upgrade to be tested in a variety of settings. The trial will be open to people who live in one of the trial locations, meet the income requirements, and have an eligible vehicle to be scrapped. The Upgrade is being trialled in several locations in order to inform Ministers’ decisions to expand it nationally.

Waka Kotahi is responsible for establishing the trial. Prior to the trial commencing, Waka Kotahi is engaging with representatives of low-income communities, vehicle dealer and scrappage industries, public transport providers, and other low-emissions transport providers. The purpose of the engagement is to test some key aspects of the Clean Car Upgrade, streamline processes, and develop necessary checks and balances. Pre-trial engagement will also identify ways of ensuring

46. A social leasing trial called Waka Aronui, is already underway in South Auckland. This trial was established by a number of stakeholders, including the Manukau Urban Māori Authority (MUMA), Ākina Foundation, Toyota New Zealand, Auckland Council, Tindall Foundation, MBIE, and Waka Kotahi.



PART 3: THE PLAN IN DETAIL – ACTIONS, INITIATIVES, AND TIMINGS

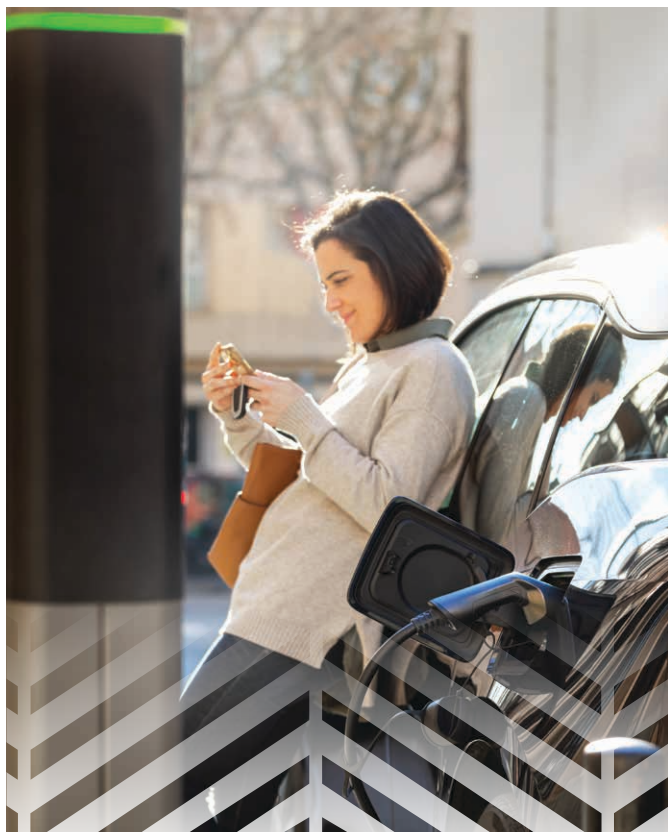
high uptake among lower-income communities, especially Māori and Pasifika.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka (policy development and evaluation – eligibility and income thresholds, design principles, trial locations), Waka Kotahi (scheme design and implementation – building systems and engaging in contracts to administer the trials)
- **Support:** MBIE, Kāinga Ora, MSD
- **Key stakeholders:** Vehicle and scrappage industries, Māori and Pacific communities in the trial locations

Key milestones

- **November 2022:** Cabinet approval of broad programme design and to delegate final design aspects to Minister of Transport.
- **February 2023:** Final decisions on remaining design aspects.
- **April 2023:** Trials commence in at least one location, including evaluation as the trials take place.
- **TBC following trial completion and evaluation:** Government considers the results of the evaluation and makes decisions on the future of the Clean Car Upgrade.



Initiative 2.2.3

Investigate whether further targeted support is required to make low-emissions vehicles more accessible and affordable for other disadvantaged groups and communities

What are we doing?

The Clean Vehicle Discount has already supported some New Zealanders to purchase low/zero-emissions vehicles in Aotearoa New Zealand. The trials of the Clean Car Upgrade and social leasing schemes will test ways to make safe, low/zero-emissions vehicles more accessible for even more New Zealanders, and findings from the trials will inform decisions about any national roll out.

In late 2023, a review of the Clean Car Programme will be completed. This will take into account equity through considering if the fees and charges are appropriate, the impact of these fees and charges, and the nature of ongoing demand for high-emissions vehicles.

There will also be evaluations undertaken of the Clean Car Upgrade and social leasing trials as the trials progress and as they conclude. This will consider the extent to which participants are likely to opt for social leasing over vehicle ownership or low-emissions alternatives as well as any improvements that would make leasing and the Clean Car Upgrade more attractive to people.

In addition to these reviews, Te Manatū Waka will complete an investigation into whether further targeted support may be required to make low-emissions vehicles more accessible and affordable for disadvantaged groups and communities. This will involve engagement with communities that are affected to discuss what might be needed.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Key stakeholders:** Waka Kotahi, MSD, Ministry of Health, Te Tari Mō Ngā Take Hauātanga Office for Disability Issues

Key milestones

- **2023:** Review of the Clean Vehicle Discount completed.
- **TBC:** Initial evaluation of the Clean Car Upgrade and social leasing trials will be completed. A further full evaluation will take place on success (or otherwise) of social leasing and recommendations on a future rollout. Timing will depend on the trial lengths.

Delivery timeline

Action 2.2: Make low-emissions vehicles more accessible for low-income and transport-disadvantaged New Zealanders

	> 2022	> 2023	> 2024	> 2025
2.2.1: Support social leasing schemes to make access to cleaner vehicles affordable for low-income households.			Trial (length TBC) Evaluation	Report back on evaluation; consider future status
2.2.2: Implement an equity-oriented vehicle scrap-and-replace scheme to make cleaner vehicles and low-emissions alternatives affordable for low-income households.			Trial Evaluation	Government considers evaluation and desirability of national-level rollout
2.2.3: Investigate whether further targeted support is required to make low-emissions vehicles more accessible and affordable for other disadvantaged groups and communities.			Review of Clean Vehicle Discount completed	Investigation dependent on CCU and social leasing evaluations

Action 2.3: Support the rollout of EV charging infrastructure

As the quantity of low/zero-emissions vehicles increase in Aotearoa New Zealand, we also need to put the infrastructure in place to support and further encourage their use. While there is a growing network of EV chargers in New Zealand, there is not convenient and secure charging available to support mass uptake.

The uptake of EVs is heavily reliant on a well-developed national public EV charging network over the next decade. Charging infrastructure needs to be accessible, affordable, convenient, secure, and reliable for everyone to ensure an equitable transition. Improved EV charging infrastructure coverage and services will support increased EV uptake and usage levels by reducing barriers to EV uptake, resulting in lower transport emissions.

The Government will soon publish a long-term EV charging strategy for consultation, which sets out the Government's vision and policy objectives for EV charging. In addition, the Government has established a cross-agency work programme to support the rollout of EV charging infrastructure and committed to review the Electricity (Safety) Regulations 2010 to cover the safety needs associated with charging EVs.

This action includes three initiatives that are described in more detail in the following pages.



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Initiatives

Initiative 2.3.1: Continue to develop an EV-charging infrastructure work programme to coordinate policy, investment and engagement with stakeholders

Initiative 2.3.2: 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

Initiative 2.3.3: Review the Electricity (Safety) Regulations 2010 to cover the safety needs associated with charging EVs

Initiative 2.3.1

Continue to develop an EV-charging infrastructure work programme to coordinate policy, investment and engagement with stakeholders.

What are we doing?

The Government has established a cross-agency EV charging infrastructure work programme covering both public and private charging infrastructure. This structure will coordinate work on EV charging currently under way by government while also helping to identify where further policy action may be needed to address key EV charging barriers and gaps. A coordinated platform will streamline government investment and engagement on EV charging with key stakeholders.

The programme is led by a group of core central government agencies coordinated by Te Manatū Waka, with membership from MBIE, Waka Kotahi, and Te Tari Tiaki Pūngao Energy Efficiency and Conservation Authority (EECA). This core interagency working group has been responsible for developing the Government's vision and long-term strategy to guide the expansion of our national EV charging infrastructure system.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** Core agency working group: MBIE, Waka Kotahi, EECA
- **Subgroup agencies:** Te Mana Hiko Electricity Authority, Mahi Haumarua Aotearoa WorkSafe New Zealand, Commerce Commission, HUD
- **Key stakeholders:** EV charging and technology providers, electricity/energy sector (including electricity retailers, electricity distribution businesses, and electricity generators), motor vehicle industry, fuel suppliers

Key milestones

- This working group was established in 2021/2022, therefore this initiative has been completed. The policy, investment, and engagement led by this working group will be ongoing.

Initiative 2.3.2

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.

What are we doing?

A long-term EV charging infrastructure strategy will soon be published for consultation that sets out the Government's vision and policy objectives around EV charging. The strategy provides agencies, local government, and the private sector with a clear sense of the Government's purpose and direction. It sets clear roles and responsibilities to ensure the Government's long-term strategic policy objectives are signalled early to key stakeholders and the public.

This strategy sets the overarching vision for Aotearoa New Zealand's EV charging infrastructure to support the transition to and use of low-emissions transport by being accessible, affordable, convenient, secure, and reliable for all. It takes a holistic, systems-oriented approach, including:

- both public and private charging infrastructure and charging considerations (residential off-street and home, residential on-street and/or hub, journey and destination charging)
- a focus on charging for light EVs while accommodating for and recognising areas where other vehicle modes and zero-emissions energy sources may fall within scope such as commercial heavy trucks, hydrogen and micro-mobility
- a commitment to all New Zealanders (existing and future users of light EVs) to support an equitable transition.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka, MBIE
- **Support:** Core agency working group: Waka Kotahi, EECA
- **Key stakeholders:** EV charging and technology providers, electricity/energy sector (including electricity retailers, electricity distribution businesses, and electricity generators), motor vehicle industry, fuel suppliers

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Key milestones

- **Early 2023:** The draft EV charging strategy will be published for consultation.

Initiative 2.3.3**Review the Electricity (Safety) Regulations 2010 to cover the safety needs associated with charging EVs.****What are we doing?**

MBIE and WorkSafe will need to evaluate how the Electricity (Safety) Regulations 2010 can best enable EV uptake, with support from the interagency EV charging infrastructure working group. This may include investigating new regulations for corporate-owned EVs while simultaneously encouraging employees to use fleet EVs.

MBIE is currently proposing to progress a substantial update of standards cited in the

Electricity (Safety) Regulations 2010 that (if agreed to by the Minister of Energy and Resources) will include introduction of 20 standards to the regulations to provide certainty and strengthen the safety aspects of EV charging infrastructure. These standards related to 14 different aspects of EV safety, including plugs and sockets, conductive charging systems, electrical connections, AC and DC charging equipment (including stations), power supply, and wireless power transfer.

Responsible agencies and key stakeholders

- **Lead:** MBIE, WorkSafe
- **Support:** Te Manatū Waka
- **Key stakeholders:** Waka Kotahi, EECA, Electricity Authority, EV charging and technology providers, PTAs, public transport operators

Key milestones

- Timing of this review is contingent on MBIE's regulatory work programme and prioritisation.

Delivery timeline**Action 2.3: Support the rollout of EV charging infrastructure**

	> 2022	> 2023	> 2024	> 2025
2.3.1: Continue to develop an EV-charging infrastructure work programme to coordinate policy, investment and engagement with stakeholders.		Cross-agency group established	Ongoing engagement, policy development and investment	
2.3.2: 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.		Draft strategy published for consultation	TBC – implementation	
2.3.3: Review the Electricity (Safety) Regulations 2010 to cover the safety needs of charging EVs.			Led by MBIE and Worksafe. Timing is dependent on their work programmes	



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

Focus area 3 includes five initial actions that are described in more detail in the following pages.

Actions for Focus area 3

Action 3.1: Support the decarbonisation of freight

Action 3.2: Accelerate the decarbonisation of the public transport bus fleet

Action 3.3: Work to decarbonise aviation

Action 3.4: Progress the decarbonisation of maritime transport

Action 3.5: Implement the Sustainable Biofuels Obligation

Action 3.1: Support the decarbonisation of freight

Decarbonising the freight sector will be challenging and will require consideration of the entire freight transport system supporting our supply chain. Freight and logistics encompass everything involved in the movement of goods, from the largest trucks on our roads to local deliveries as well as freight carried by trains, ships, and planes.

The Government is developing a freight and supply chain strategy to take a long-term system-wide view of the freight transport system underpinning our supply chain. This strategy will be key to providing a better understanding of the system and how we can decarbonise while also improving our productivity and resilience.

Rail and coastal shipping, being lower emissions modes of transport, will both play key roles in supporting the decarbonisation of the freight system. The Government has committed to implementing the Rail Plan and provided support for coastal shipping through the GPS on Land

Transport 2021 activity class. This will help to ensure we have capacity to support more freight travelling via those lower-emissions modes.

The vast majority of freight is moved by vehicles on our roads. We know that, in order to meet our targets, we will need to transition to zero-emissions vehicles. This will be challenging given the limited global supply, high capital costs, and new infrastructure associated with zero-emissions heavy vehicles. We are investigating what policies we need in the immediate term to help support that transition.

We also need to explore what opportunities there are in the immediate term to improve the fuel efficiency of our heavy vehicles and reduce the emissions intensity of our existing fleet while we are transitioning to zero-emissions vehicles.

Initiatives

Initiative 3.1.1: 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

Initiative 3.1.2: Continue to implement the New Zealand Rail Plan and support coastal shipping

Initiative 3.1.3: Provide funding to support the freight sector to purchase zero- and low-emissions trucks

Initiative 3.1.4: Establish a freight decarbonisation unit to help decarbonise the freight sector through regulation and investment policy

Initiative 3.1.5: Evaluate options to:

- improve the efficiency of heavy vehicles
- regulate heavy vehicles imports to reduce emissions

- support infrastructure development for green fuels and fast charging for heavy vehicles
- reduce emissions from heavy vehicles operated or procured through government activities

Initiative 3.1.6: 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

Initiative 3.1.7: Consider the implementation timing of Euro VI standard for heavy vehicles

Initiative 3.1.1

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

What are we doing?

Te Manatū Waka is developing the freight and supply chain strategy in collaboration with Māori, central and local government, and industry. It will set out system-wide actions that need to happen across the sector to achieve our decarbonisation, resilience, productivity, and wellbeing outcomes.

This includes exploring longer-term options for decarbonising freight modes, identifying quick wins, exploring ways to encourage greater mode shift to rail and coastal shipping, and improving intermodal links. The strategy will build on work being progressed in the first emissions budget period and set the pathway for what actions we should take in the second and third budget periods.

Formal consultation on an issues paper took place in April 2022. Targeted stakeholder engagement has been ongoing through the strategy development, and another round of formal consultation is expected on a draft strategy in 2023.

This initiative will also support adaptation and is included in the national adaptation plan as Action 10.1⁴⁷

Responsible agencies and key stakeholders/partners

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi, Nō te Rere Moana Aotearoa Maritime NZ
- **Key stakeholders:** This will be developed through engagement with Treaty partners, central and local government and a broad range of industry stakeholders, and other government departments.

Key milestones

- **Mid 2023:** The strategy will be consulted on and published, with further investigation and implementation following.

Initiative 3.1.2

Continue to implement the New Zealand Rail Plan and support coastal shipping

What are we doing?

New Zealand Rail Plan

The Government released the New Zealand Rail Plan in April 2021, which outlines the Government's vision and investment priorities for rail and the significant changes needed to strengthen rail in the transport system. This will enable a better service offering to freight customers, supporting increased rail freight volumes and support growing demand for metropolitan rail services in Auckland and Wellington.

In addition, the Crown has invested in a programme of intergenerational replacement of locomotives, wagons, shunts, and interisland ferries and modernisation of maintenance facilities reaching end of life. To date, since 2017, over \$8 billion has been allocated to interisland ferry replacement, replacement of ageing rolling stock, and significant network investment and renewals.

Find out more about the New Zealand Rail Plan on Te Manatū Waka website: <https://www.transport.govt.nz/area-of-interest/infrastructure-and-investment/the-new-zealand-rail-plan/>

This initiative will also support adaptation and is included in the National Adaptation Plan as Action 8.5.⁴⁸

47. Aotearoa New Zealand's first national adaptation plan, 2022, Chapter 10, Economy and financial System – Action 10.1: Deliver the New Zealand Freight and Supply Chain strategy.

48. Chapter 8, Infrastructure – Action 8.5: Progress the Rail Network Investment Programme.



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Coastal shipping

The Government is committed to strengthening New Zealand's coastal shipping sector, as a carbon-efficient transport mode that can help to decarbonise the freight sector. Alongside mode shift to rail, it will form an important part of decarbonising the freight sector. This includes \$30 million of investment being made by Waka Kotahi in the coastal shipping sector through the coastal shipping activity class as part of the 2021–24 National Land Transport Programme. The role of coastal shipping will also be considered in the national freight and supply chain strategy (see page 95).

Find out more about coastal shipping on the Waka Kotahi website: <https://www.nzta.govt.nz/planning-and-investment/national-land-transport-programme/2021-24-nltp/activity-classes/coastal-shipping>

Responsible agencies and key stakeholders

- **Lead:** Implementation of the Rail Plan: KiwiRail, Waka Kotahi, the Treasury (as monitor of KiwiRail and shareholders' representative).
- Waka Kotahi is responsible for investing in the coastal shipping sector through the coastal shipping activity class in the 2021–24 National Land Transport Programme.
- **Key stakeholders:** New Zealand Shipping Federation, New Zealand Ports

Key milestones

- **2021–31:** Rail Plan implementation (10-year investment programme).
- **2021–2024:** Funding for coastal shipping activities.

Initiative 3.1.3

Provide funding to support the freight sector to purchase zero- and low-emissions trucks

What are we doing?

Low/zero emissions trucks, being at the early stages of development, currently come at much higher capital cost than their diesel equivalents.

To date, the Government has been supporting co-funding for demonstration projects for low-emissions heavy freight projects through the Low Emission Transport Fund (LETF). That includes bespoke-built trucks ranging from 4–20t in early

funding rounds of the Low Emission Vehicles Contestable Fund in addition to demonstration projects of medium (4t) and heavy vehicles (29t) with battery swap technology. EECA also supported some of the first hydrogen fuel cell trucks to be tested in New Zealand.

As part of Budget 2022, the Government committed an additional \$15 million of the Climate Emergency Response Fund for projects that demonstrate low-emissions freight technologies, fuels, services, infrastructure, innovations, and business models through the existing LETF in 2023/24 delivered by EECA. EECA will develop the criteria for this funding this year.

We acknowledge that some technologies have been successfully demonstrated, and we are now seeing wide-scale commercialisation of some of these vehicles that are no longer eligible for demonstration co-funding through the LETF. The Government will consider what financial support can be provided to purchasers to encourage wider uptake of safe, zero-emissions trucks, including whether they could be added to the Clean Vehicle Discount scheme (see Action 2.1).

Responsible agencies key stakeholders

- **Lead:** Te Manatū Waka, EECA (as the agency delivering the LETF)
- **Support:** Waka Kotahi
- **Key stakeholders:** Freight sector

Key milestones

- **2023–24:** LETF funding round on demonstration of low-emissions freight solutions will open and all funding will be allocated by end of June 2024.
- **2023–24:** The Government will consider options to provide further financial support for purchasing safe, zero-emissions trucks.

Initiative 3.1.4

Establish a freight decarbonisation unit to help decarbonise the freight sector through regulation and investment policy.

What are we doing?

Te Manatū Waka has established a freight decarbonisation unit. This unit will work predominantly on progressing regulatory and investment work to decarbonise the freight sector. Some of the initial work the unit will focus on is outlined in the below initiative.

PART 3: THE PLAN IN DETAIL – ACTIONS, INITIATIVES, AND TIMINGS

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi
- **Key stakeholders:** MBIE, EECA, freight sector

Key milestones

- **Late 2022:** Freight decarbonisation unit established.

Initiative 3.1.5

Evaluate options to: improve the efficiency of heavy vehicles; regulate heavy vehicle imports to reduce emissions; support infrastructure development for green fuels and fast charging for heavy vehicles; reduce emissions from heavy vehicles operated or procured through government activities

What are we doing?

Te Manatū Waka (the freight decarbonisation unit) is working with partner agencies and key stakeholders over 2022–23 to evaluate and identify the most appropriate policies to reduce emissions from our heavy vehicle fleet. This includes evaluating options to:

- improve the efficiency of heavy vehicles
- regulate heavy vehicle imports to reduce emissions
- support infrastructure development for green fuels and fast charging for heavy vehicles
- reduce emissions from heavy vehicles procured through government activities.

Work to evaluate options across these areas, develop detailed policy and the implementation will take place over the next 4 years (2022–25).

Te Manatū Waka commissioned an initial investigation into policies to accelerate zero-emissions heavy vehicle uptake – see *Policies to incentivise the uptake of zero-emission trucks*.

In addition, the Government will consider what further financial assistance might be required to support the uptake of safe, low/zero-emissions heavy vehicles (see earlier initiative on page 95).

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** EECA, Waka Kotahi, MBIE, New Zealand Government Procurement, MfE
- **Key stakeholders:** Freight sector

Key milestones

- **2022–23:** The EV-charging infrastructure strategy will consider infrastructure needs for charging heavy vehicles
- **2023–24:** Officials will consider options to regulate heavy vehicle imports to reduce emissions.

Initiative 3.1.6

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

What are we doing?

Heavy EVs have been exempted from paying RUC since 2016 to incentivise their uptake. This is primarily due to the limited availability of zero-emissions heavy vehicles and supporting recharging and refuelling infrastructure. Extending the RUC exemption past 2025 may increase its effectiveness in promoting heavy EV uptake by increasing the period over which it is a benefit. (The high upfront cost and long working life of heavy EVs mean that relatively short exemptions from RUC do not materially affect the economics of purchasing and operating heavy EVs.) Waka Kotahi recently confirmed that legally green hydrogen vehicles fit into scope of this exemption as currently written in the Act. The heavy EV RUC exemption currently expires on 31 December 2025.

Te Manatū Waka consulted in early 2022 on a wide range of changes that could be made to make the RUC system to ensure it is fit for the future. This consultation included looking at the following:

- Whether to amend the purpose of the RUC Act to allow externalities such as climate change emissions or other harms such as air pollution to be considered when setting RUC rates. (It currently allows for exemptions, which are currently in place, but doesn't allow for changes to the way RUC operates to price for emissions.)
- Whether to extend the current RUC exemptions for heavy vehicles.
- Whether to allow for reduced RUC rates for trailers towed by exempted heavy vehicles, as heavy trailers towed by trucks are also subject to RUC separately. An exemption for trailers would further assist with the economics of the use of low-carbon fuels in the largest vehicles used on our roads.



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Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi
- **Key stakeholders:** EECA, freight sector

Key milestones

- **2022:** Te Manatū Waka to report back to Minister with advice on options.

Initiative 3.1.7

Consider the implementation timing of Euro VI standard for heavy vehicles

What are we doing?

Transitioning to the Euro 6/VI standard is important for reducing noxious pollutants such as nitrogen oxides, carbon monoxide, and particulate matter, which are harmful to human health. It will also have an impact on GHG emissions. Nitrogen oxides have a strong impact on human health and have been linked to asthma prevalence, respiratory illness, and premature death.

The Government has agreed to implement the Euro 6 standard for newly imported light vehicles in coming years. The Minister of Transport has

recently engaged with industry on timeframes for implementing Euro 6/VI standards for light and heavy vehicles. Requiring Euro VI for heavy trucks would reduce nitrogen oxide. Additionally, the most recent emissions standards tend to be more fuel efficient than their Euro V counterparts as they possess newer engine technology.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi
- **Key stakeholders:** Vehicle importers, freight sector, community organisations representing people affected by air pollution (people with respiratory diseases, Māori, older people)

Key milestones

- **2022:** Officials to develop options for public consultation to implement the Euro 6/VI standard for light and heavy vehicles.
- **2023:** Land Transport Rule: Vehicle Exhaust Emissions 2007 will be updated to reflect implementation decisions made.



Delivery timeline

Action 3.1: Support the decarbonisation of freight

	> 2022	> 2023	> 2024	> 2025
3.1.1: Develop a national freight and supply chain strategy with industry.	Strategy developed	Consul- tation	Strategy pub- lished	TBC – implementation
3.1.2: Continue to implement the New Zealand Rail Plan and support coastal shipping.	Coastal shipping funded 2021-24	Rail plan implementation		
3.1.3: Provide funding to support the freight sector to purchase zero- and low-emissions trucks.		Projects co-funded through EECA low emission transport fund	Options for further support considered	
3.1.4: Establish a freight decarbonisation unit to help decarbonise the freight sector through regulation and investment policy.		FDU estab- lished		
3.1.5: Evaluate options to: improve the efficiency of heavy vehicles, regulate heavy vehicle imports to reduce emissions, support infrastructure development for green fuels and fast charging for heavy vehicles, and reduce emissions from heavy vehicles operated or procured through government activities.			Work to evaluate options across these areas, develop and implement policies	
3.1.6: 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.	Early consul- tation	Advice	TBC – potential legislative changes	
3.1.7: Consider the implementation timing of Euro VI standard for heavy vehicles.	Develop option for consultation to implement Euro VI	Land transport rule finalised in 2023	TBC – Euro VI standards in place	



Action 3.2: Accelerate the decarbonisation of the public transport bus fleet

Public transport vehicles are largely diesel powered, which contributes to GHG emissions and other air pollutants harmful to public health. Cleaner buses are an important part of the system-wide move to cleaner transport and to reaching our emissions targets.

Decarbonising the bus fleet is increasingly important as more people are encouraged to travel by bus. Cleaner buses will not only reduce emissions – they will improve air quality and amenity in our towns and cities.

While Focus area 1 prioritises initiatives that shift people from vehicles to other forms of sustainable transport (including buses) or reducing the need to travel, initiatives under Action 3.2 consider how cleaner buses are an important part of the system-wide move to cleaner transport.

We estimate that around 300 kilotonnes of CO₂ equivalent emissions are emitted by all heavy buses (with a gross vehicle mass over 3.5t) in 2018 and 2019. This represents 2% of total road emissions. Public transport buses accounted for roughly half of this (1% of road emissions). Although a small amount when compared to the emissions from the light vehicle fleet, this is still an important part of our transition to net zero as more people switch to public transport.

Zero-emissions buses cost more than equivalent diesel buses and require additional investment in depots for charging or refuelling infrastructure. In some cases, the power supply to bus depots also needs to be upgraded, requiring further investment. The Government is supporting PTAs to invest in clean buses and related infrastructure to accelerate decarbonisation of the bus fleet and realise emissions reductions sooner.

Initiatives

Initiative 3.2.1: 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

Initiative 3.2.2: Identify and remove barriers to decarbonising the public transport bus fleet through the PTOM review

Initiative 3.2.1

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

What are we doing?

Amendments to the Requirements for Urban Buses (RUB) in February 2022 gave effect to the 2025 zero-emissions bus mandate. The RUB sets the minimum standards that all urban buses used to deliver public transport contracts must meet. The RUB amendments mean that, from 1 July 2025, for PTAs to receive funding from the NLTF for public transport bus services, buses entering the public transport fleet will need to be zero-emissions.

Through Budget 2022, the Government committed \$137 million over 12 years. This funding will be administered by Waka Kotahi and will support PTAs to progress decarbonisation initiatives. The Government will formalise the target of decarbonising the public transport bus fleet by 2035 through the GPS on Land Transport.

Responsible agencies and key stakeholders

- **Leads:** Te Manatū Waka (formalise the target of decarbonising the public transport bus fleet by 2035 through the GPS on Land Transport 2024),
- Waka Kotahi (administer the funding over the next 12 years to PTAs to progress decarbonisation initiatives)
- **Key stakeholders:** PTAs, public transport operators

PART 3: THE PLAN IN DETAIL – ACTIONS, INITIATIVES, AND TIMINGS

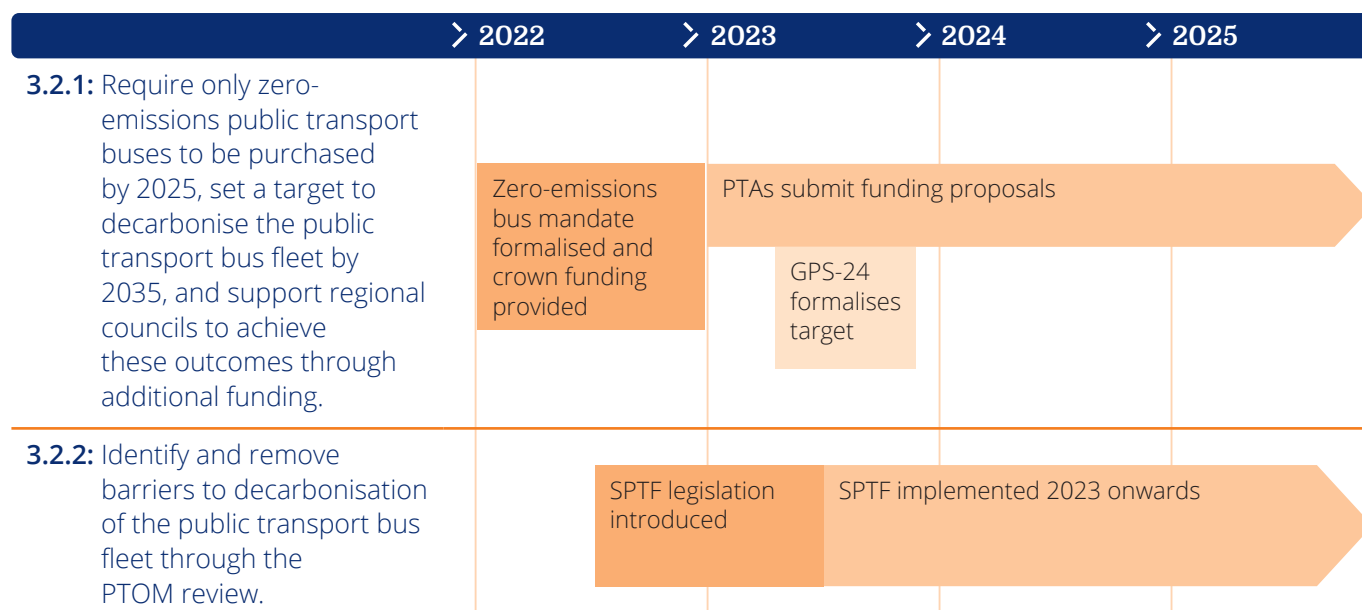
Key milestones

- **February 2022:** The zero-emissions bus mandate was formalised through amendments to the Requirements for Urban Buses.
- **May 2022:** Crown funding to support PTAs to decarbonise the bus fleet was provided as part of Budget 2022.
- The funding agreement to draw down this funding is being finalised, after which PTAs will be able to submit proposals for funding.
- **July 2023:** GPS on Land Transport 2024 published, which will formalise the target of decarbonising the public transport bus fleet by 2035.

Initiative 3.2.2**Identify and remove barriers to decarbonising the public transport bus fleet through the PTOM review****What are we doing?**

The Government is reforming the planning, procurement, and delivery of public transport services by introducing and passing legislation to replace the PTOM with the SPTF.

Waka Kotahi is developing operational policy that implements the SPTF, which will then be reflected in the future planning, procurement, and delivery of services by PTAs.

Delivery timeline**Action 3.2: Accelerate the decarbonisation of the public transport bus fleet**

The PTOM review found that the key policy and legislative change necessary to support decarbonising the bus fleet was to enable different asset ownership arrangements. This is a key focus of the SPTF reforms.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka (legislative changes), Waka Kotahi (developing operational policy and delivery)
- **Key stakeholders:** Local government authorities, public transport operators

Key milestones

- **Mid 2022:** Final policy advice on the PTOM review provided to the Minister of Transport.
- **Mid 2022:** Cabinet agreed to reforms through amending the Land Transport Management Act 2003 and to replace the PTOM with the SPTF.
- **2022–2023:** Waka Kotahi develops operational policy to give effect to the SPTF.
- **Early 2023:** Bill to amend the Land Transport Management Act introduced.
- **2023 onwards:** PTAs implement the SPTF through planning, procurement, and delivery of public transport services.



Action 3.3: Work to decarbonise aviation

Air travel has a role in moving people and freight to domestic and international destinations. In many cases, air travel is a core mode for intercity and interregional travel. This means improving its sustainability is critical alongside improving alternatives to interregional air travel in some places.

We know that decarbonising aviation is one of the biggest challenges across the global economy. Reducing air travel will be challenging, and subsequently efforts must be made to make domestic and international aviation greener. Aotearoa New Zealand is an isolated country where air travel is an essential mode for intercity and interregional travel, but it is a high-emissions mode, with carbon emissions estimated to be in the magnitude of 1Mt per annum.

The technological requirements to provide the power to propel aircraft the distances required far exceed those for equivalent land-based transport. Aviation's role is not easily replaced by other modes of travel. Additionally, a projected increase in passenger numbers and the need for global coordination mean that decarbonisation will require a consistent, long-term effort from the Government and industry, both domestically and internationally.

There is a strong commitment in Aotearoa New Zealand aviation to reduce emissions but still significant room for improvement. Ambitious targets are required for moving aviation to net zero. This will set a clear intention of how we want future investment and development to occur.

While cleaner aviation technologies are in the early stages of development, there are opportunities to reduce emissions by using sustainable aviation fuel (SAF). If its commercial viability is confirmed, the domestic production of SAF will increase and a SAF mandate will lead to the uptake of SAF in domestic jet fuel supply, resulting in lower emissions from aviation fuel.

Initiatives

Initiative 3.3.1: Develop and set specific targets for decarbonising domestic aviation in line with 2050 targets

Initiative 3.3.2: Establish a public-private leadership body focused on decarbonising aviation, including operational efficiencies, infrastructure improvements, and frameworks to encourage research, development and innovation in sustainable aviation

Initiative 3.3.3: Implement a sustainable aviation fuel (SAF) mandate

Initiative 3.3.1

Develop and set specific targets for decarbonising domestic aviation in line with 2050 targets.

What are we doing?

The Government will develop and set specific targets for decarbonising domestic aviation in line with Aotearoa New Zealand's climate targets. This work will be scoped and developed in 2023. Engagement with industry will be needed to develop appropriate targets.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** Te Mana Rererangi Tūmatanui o Aotearoa Civil Aviation Authority
- **Key stakeholders:** MfE, MBIE, Tourism New Zealand, key industry partners

Key milestones

The proposed timeline of this is as follows:

- **First half of 2023:** Scoping, development, and engagement with industry, agencies, and other stakeholders.
- **Second half of 2023:** Development of policy advice, including research and analysis, and set targets.

Initiative 3.3.2

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

What are we doing?

The Government has established a leadership body called Sustainable Aviation Aotearoa, which is a partnership between industry and government to bring together officials and stakeholders with the aim of delivering sustainable aviation outcomes. This will include lowering emissions from domestic and international flights through operational and infrastructure improvements, driving the ambitious delivery of new technologies, and seeking innovative ways to cut aviation emissions.

Sustainable Aviation Aotearoa will identify policies and regulatory settings needed to support reducing aviation emissions in line with achieving the new aviation targets and the agreed International Civil Aviation Organization long-term aspirational goal. The formation of this group would be similar to the UK's Jet Zero Council within an Aotearoa New Zealand context and undertake the function of a policy reference group.

Sustainable Aviation Aotearoa will advise on:

- policy and regulatory settings which may need to be reviewed and developed to ensure an environment that enables and supports aviation emissions reductions
- importation, production and use of SAF
- zero-emissions aircraft use and deployment
- operational efficiencies.

Sustainable Aviation Aotearoa will identify policies and regulatory settings needed to support reducing aviation emissions

Responsible agencies and key stakeholders

- **Leads:** Te Manatū Waka, MBIE
- **Support:** Civil Aviation Authority
- **Key stakeholders:** MfE, Scion Research, Tourism New Zealand, key private sector organisations across aviation, energy, research, and sustainability sectors

Key milestones

- This initiative has been completed. The public-private leadership body Sustainable Aviation Aotearoa was formalised and first met in November 2022.

Initiative 3.3.3

Implement a sustainable aviation fuel mandate.

What are we doing?

We will implement a SAF mandate. Following Cabinet confirmation of the Sustainable Biofuels Obligation, MBIE and Te Manatū Waka will develop the proposed settings for a SAF-specific mandate once the findings of the joint Air New Zealand and MBIE SAF feasibility study are available. This feasibility study is in train and looks at the potential for domestic SAF production, with initial findings expected in July 2022.

We expect public engagement to occur after Cabinet review the initial proposed settings. However, initial engagement with key stakeholders will occur in the lead-up to ensure proactive consultation and feedback into the initial design phase.

Responsible agencies and key stakeholders

- **Leads:** Te Manatū Waka, MBIE (develop policy options for Cabinet consideration)
- **Support:** Civil Aviation Authority
- **Key stakeholders:** Local aviation bodies such as Air New Zealand and other domestic airline carriers/fuel suppliers

Key milestones

- **2023:** Policy recommendations on the high-level design of SAF mandate to be developed for Cabinet's consideration.
- **TBC:** Ministers and Cabinet consider a discussion document on the proposed settings for a SAF-specific mandate.



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Delivery timeline

Action 3.3: Work to decarbonise aviation

	> 2022	> 2023	> 2024	> 2025
3.3.1: Develop and set specific targets for decarbonising domestic aviation in line with 2050 targets		Scoping and engagement	Policy advice and set targets	
3.3.2: 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.		Leadership body established		
3.3.3: Implement a sustainable aviation fuel (SAF) mandate.		Policy rec on SAF mandate	TBC – implementation	



Action 3.4: Progress the decarbonisation of maritime transport

The maritime sector encompasses recreational craft through to fishing vessels,⁴⁹ cruise ships, and the ships that serve as the backbone of international trade. Maritime transport is responsible for approximately 3% of New Zealand’s domestic emissions. However, much of New Zealand’s seaborne cargo movements are delivered by international ships currently outside New Zealand’s carbon accounting. International shipping accounts for approximately 3% of global emissions, which are being addressed through the International Maritime Organization (IMO). Despite these small proportions, Aotearoa New Zealand must act now to start the process of decarbonising maritime transport. Over time, maritime emissions will make up a larger percentage of New Zealand’s transport emissions profile as other transport modes are decarbonised and some freight is shifted from road to coastal shipping.

Aotearoa New Zealand is geographically isolated from its main international markets and relies almost exclusively on international shipping for trade. Almost all our exports by volume and approximately 80% of imports by value are transported by sea. Maintaining resilient supply chains in the face of change to consumer sentiments and actions by trade partners to account for embedded emissions requires New Zealand to be at the forefront of shipping decarbonisation.

Shipping is an emissions-efficient transport mode already attractive for short-term reductions in the carbon intensity of domestic supply chains. However, domestic maritime emissions need to be reduced in line with or ahead of international norms to support the value of New Zealand’s trade through zero-carbon supply chains.

In the short term, implementing Annex VI of the International Convention for the Prevention of Pollution from Ships (MARPOL)⁵⁰ will lead to

improvements in the energy efficiency of and emissions from New Zealand-flagged ships and foreign ships operating in our waters. In the longer term, the national action plan and supporting activities will help the sector to decarbonise.

Our international obligations will drive emissions reductions for the maritime sector. Aotearoa New Zealand has made international commitments to decarbonise shipping through the Paris Agreement and the IMO strategy on the reduction of GHG emissions from ships and will need to take action in line with those commitments. MARPOL Annex VI will also commit New Zealand to implementing future GHG measures (such as market-based measures) agreed at the IMO for Aotearoa New Zealand-flagged ships and foreign ships operating in our waters. Additionally, by 2024, the Climate Change Commission will provide the Government advice on the inclusion of international maritime emissions within future emissions budgets.

Initiatives

Initiative 3.4.1: Develop a national action plan to reduce commercial and recreational maritime emissions

Initiative 3.4.2: Set new targets for maritime emissions, including:

- supporting the uptake of zero-emissions small passenger, coastal fishing and recreational vessels
- all new large passenger, cargo, and offshore fishing vessels to meet highest carbon-intensity reduction, as set by the International Maritime Organization, by 2035

Initiative 3.4.3: Undertake research to advance the development and uptake of alternative low- and zero-carbon fuels for shipping in Aotearoa and developing safety and environmental standards for their use

Initiative 3.4.4: 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

49. Recreational boating is considered a residential leisure activity and so fuel use is allocated to the residential category in New Zealand’s GHG inventory.

50. MARPOL Annex VI is an international agreement to address harmful emissions and climate change impacts from shipping which New Zealand signed up to on 26 May 2022.



Initiative 3.4.1

Develop a national action plan to reduce commercial and recreational maritime emissions

What are we doing?

Te Manatū Waka and Maritime NZ will prepare a national action plan to reduce maritime emissions in line with international and domestic decarbonisation ambitions. The plan will serve as the overarching framework that will enable us to meet the commitments made in the first ERP.

The national action plan will be completed in two stages:

- A high-level plan will be developed, based on the IMO National Action Plan template,⁵¹ outlining New Zealand's ambitions and intentions. New Zealand intends to submit this plan to the IMO by mid to late 2023.
- Following that, a more detailed plan will be developed, outlining the specific actions Aotearoa New Zealand will take to decarbonise maritime transport, which may include:
 - improving domestic institutional and regulatory arrangements for the effective implementation of existing IMO instruments
 - developing activities to further enhance the energy efficiency of ships (see Initiative 3.4.2 below)
 - initiating research and advancing the uptake of alternative low-carbon and zero-carbon fuels (see Initiative 3.4.3 below)
 - accelerating port emissions-reduction activities
 - fostering capacity building, awareness raising, and regional cooperation
 - facilitating the development of infrastructure for green shipping, for example, provision of onshore power at ports.

The detailed action plan will be developed in close cooperation with the maritime sector (shipping operators, ports, exporters, marine industry, and others). It is anticipated to be a mix of legislative amendments, incentive programmes, infrastructure investment, sector engagement, and voluntary measures. It will pull together and draw from existing work streams and/or programmes across government such as the freight and supply chain strategy, the Maritime Transport Act review, port infrastructure and border systems work,

work on the development of new regulatory frameworks for low-carbon maritime technologies, and various work streams related to freight electrification and the development of alternative low/zero-carbon fuels.

Responsible agencies and key stakeholders

- **Leads:** Te Manatū Waka, Maritime NZ
- **Support:** Manatū Aorere New Zealand Ministry of Foreign Affairs and Trade (MFAT), MPI, EECA
- **Key stakeholders:** Shipping industry, fuel industry, ports

Key milestones

- **2022 to mid 2023:** Assess resourcing needs to develop a national action plan.
- **Mid to late 2023:** Submit high-level aspects of the national action plan to the IMO to show New Zealand's intent.
- **Mid 2023 to 2025:** Develop detailed national action plan.
- **By 2025:** Publish detailed national action plan.

Initiative 3.4.2

Set new targets for maritime, including: supporting the uptake of zero-emissions small passenger, coastal fishing and recreational vessels; all new large passenger, cargo, and offshore fishing vessels to meet highest carbon intensity reduction, as set by the International Maritime Organization, by 2035

What are we doing?

These targets will be among the targets set in the national action plan. They are based on the IMO's initial GHG reduction strategy,⁵² which provides a pathway for shipping to achieve net-zero emissions by 2050. The strategy is currently being reviewed by IMO Member States, and so these targets may be updated (but not lowered) through the national action planning process, depending on the outcome of IMO negotiations.

The IMO has agreed a short-term measure whereby many ships 5,000GT and over will have a carbon intensity rating from A (good) to E (bad). The requirement is implemented under MARPOL Annex VI, to which Aotearoa New Zealand has recently become party.

Ships that are given a D or E rating need to have an improvement plan in place to reduce carbon intensity to reach a C rating. Over time,

51. IMO, National Action Plans.

52. IMO, 2018, *Initial IMO Strategy on Reduction of GHG Emissions from Ships*.

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the criteria for the ratings will change in line with the IMO emissions-reduction strategy, which will require ships to continually reduce emissions to reach a satisfactory rating. Given the lead time for commissioning and building new ships, it is important they are designed for a decreasing tolerance of GHG emissions.

The development of a detailed action plan will help to identify the actions that will be necessary to meet these targets.

Responsible agency/s and key stakeholders

- **Leads:** Te Manatū Waka, Maritime NZ
- **Support:** MFAT, MPI, EECA
- **Key stakeholders:** Shipping industry, fuel industry

Key milestones

- **By 2025:** Targets will be set under the maritime national action plan.
- **2026:** The IMO will review the short-term measure (carbon intensity standards) and consequently New Zealand will review the targets in the maritime national action plan.

Initiative 3.4.3**Undertake research to advance the development and uptake of alternative low- and zero-carbon fuels for shipping in Aotearoa and develop safety and environmental standards for their use****What are we doing?**

A number of alternative low/zero-carbon fuels and technologies are being developed for use in maritime transport. Each fuel has strengths and weaknesses in terms of energy density, cost, and environmental impact. They also present varying safety and environmental risks, which existing controls, designed for fossil fuels, may not appropriately manage.

In some cases, these new technologies are here now and operating in limited contexts or on the very near horizon. In other instances, we still know comparatively little about these fuels and technologies. There is a rising level of interest in further expanding the use of these low-carbon technologies and others such as wing-in-ground craft or use of alternative fuels such as green methanol on major supply chains.

Alongside investments in infrastructure such as charging, achieving a reduction in maritime related

emissions will only be possible if the maritime sector continues to invest in these innovations and has the certainty to do so.

Currently, the regulatory framework for maritime vessels and fuels (including things like the response to spills) are based on oil. We have supported some operators to develop and operate low carbon technologies by finding temporary ways around the rules – for example, battery electric ferries in Wellington and Auckland have been given exemptions to operate commercially.

To ensure the safe and environmentally friendly use of these new technologies, we will begin work to modernise regulatory frameworks so that they provide for the safe operation of new technologies and so the sector has enough certainty about the rules to proceed. Further research into risks and controls will be needed to develop regulations and enable their uptake in New Zealand. Following completion of that research, safety and environmental standards can be developed along with suitable response frameworks to deal with spills and other incidents.

Responsible agencies and key stakeholders

- **Leads:** Te Manatū Waka, Maritime NZ
- **Support:** MFAT, MPI, MBIE
- **Key stakeholders:** Shipping industry, fuel industry

Key milestones

- **2023–2025:**
 - Review/gap analysis of existing research to support development of rules, standards, and response capability for longer-term fuels and technologies we know comparatively little about.
 - Pursue various options for undertaking research to address the identified gaps (such as through APEC or domestic research programmes).
 - Scope and initiate work to develop safety and environmental standards for alternative fuels.
- **By end of 2025:** Research undertaken.
- **2026 onwards:** Work to develop safety and environmental standards for alternative fuels continues.

Further milestones will also be identified once the research is scoped.



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Initiative 3.4.4

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

What are we doing?

Aotearoa New Zealand will work with other like-minded countries operating ports on key shipping trade routes for its exports and imports to decarbonise these routes. These 'green shipping corridors' would be low/zero-carbon from end to end, including both land-side infrastructure and vessels. This sort of approach is already envisaged under the Clydebank Declaration,⁵³ which seeks to establish zero-emissions shipping on six key trade routes by 2025 with more to follow by 2030.

Timeframes to establish green shipping corridors will vary depending on country and route, but at least 2 years should be allowed for to negotiate an agreement and then begin implementation. This work could include taking coordinated infrastructure investments or other measures such as incentives or requirements to use alternative fuels.

Green corridors will provide resilience to Aotearoa New Zealand's supply chain as shipping transitions to zero-carbon technologies because market access is increasingly likely to be dependent on carbon emissions controls. Green corridors will allow Aotearoa New Zealand to:

- maintain the marketing advantage of low/zero-carbon credentials, avoiding additional costs of landing product in market such as carbon tariffs on ships or goods based on voyage emissions
- support an equitable transition through enabling low/zero-carbon Pacific supply chains
- benefit from a regionally consistent approach.

Te Manatū Waka has commissioned a literature review on what conditions need to be put in place domestically for Aotearoa New Zealand to establish green shipping corridors on key trade routes by 2035.

This work will be further progressed through the development of a national freight and supply chain strategy and development of the national action plan to reduce commercial and recreational maritime emissions.

We will also begin discussions with like-minded countries on what steps will be needed to

establish low/zero-carbon shipping on key trade routes (green shipping corridors) by 2035. Australia, the UK, and the US were all also signatories to the Clydebank Declaration. There is also an opportunity to engage on possibilities with our Pacific neighbours.

Responsible agencies and key stakeholders

- **Leads:** Te Manatū Waka, Maritime NZ
- **Support:** MFAT, MPI, MBIE
- **Key stakeholders:** Shipping industry

Key milestones

- **Ongoing:** Engage with other Clydebank Declaration signatories and other like-minded countries to share learnings on and assess interest in establishing green shipping corridors.
- **2022:** Initial research completed and COP27 announcements on Clydebank Declaration progress.
- **By 2035:** Conditions are in place in Aotearoa New Zealand to allow low/zero-carbon shipping on key trade routes.



53. COP26 Declaration: Clydebank Declaration for Green Shipping Corridors.

Delivery timeline

Action 3.4: Progress the decarbonisation of maritime transport

	> 2022	> 2023	> 2024	> 2025
3.4.1: Develop a national action plan to reduce commercial and recreational maritime emissions.		Assess resourcing needs	Develop high level and detailed national action plan Submit high-level plan to IMO	Publish national action plan
3.4.2: Set new targets for maritime, including supporting the uptake of zero-emissions small passenger, coastal fishing and recreational vessels, and all new large passenger, cargo, and offshore fishing vessels to meet highest carbon intensity reduction, as set by the International Maritime Organization, by 2035.				Targets set under national action plan
3.4.3: Undertake research to advance the development and uptake of alternative low- and zero-carbon fuels for shipping in Aotearoa and develop safety and environmental standards for their use.			GAP analysis; pursue priority research options; and scope/develop safety standards	Research completed
3.4.4: 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.	Initial research complete	Engage with signatories to establish green shipping corridors		



Action 3.5: Implement the Sustainable Biofuels Obligation

In 2021, the Government introduced the Sustainable Biofuels Obligation to help overcome the cost and risk barriers to sustainable biofuels uptake. Sustainable biofuels are a renewable, low-emissions fuel source that can be used immediately to reduce our transport emissions.

This initiative will help increase the use of sustainable biofuels across the domestic transport sector. In doing so, it will guarantee a level of annual transport emissions reductions, thus contributing to our net zero by 2050 emissions target. It will also guarantee a level of demand for sustainable transport biofuels, which in turn could stimulate investment in domestic biofuels production.

Initiatives

Initiative 3.5: 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 in neat form).

The Sustainable Biofuels Obligation will help increase the use of sustainable biofuels across the domestic transport sector.

Initiative 3.5

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 in neat form)

What are we doing?

This initiative will introduce a Sustainable Biofuels Obligation (the Obligation) to help overcome the cost and risk barriers to facing biofuels uptake in Aotearoa New Zealand.

The Obligation will require fuel suppliers that purchase or import fuel for use in Aotearoa New Zealand to reduce the total emissions of the liquid transport fuels they sell by a set percentage each year. Fuel suppliers will do this by blending biofuels into some or potentially all of the fuels they sell. Both domestically produced and imported biofuels can be used to meet the percentage reduction, subject to their meeting set sustainability criteria.

The Obligation will come into effect from 1 April 2024. The Obligation will apply to liquid transport fuels (excluding aviation fuels). Annual emissions intensity reduction percentage targets are set at 2.4% in 2024, increasing to 3.5% in 2025 and 4.1% in 2026. Provisional targets for outyears will be subject to review in 2024 and 2029 and can be adjusted from 2026 onwards.

As the Obligation is based on a GHG reduction, there is capacity for the Obligation to be expanded to include other low-emissions fuels over time (electricity, hydrogen, e-fuels).

Responsible agencies and key stakeholders

- **Lead:** MBIE is leading the legislative process and implementation for the Biofuels bill and regulations
- **Support:** Te Manatū Waka, Te Mana Rauhi Taiao Environmental Protection Authority, MPI
- **Key stakeholders:** Fuel suppliers

Key milestones

- **Late 2022:** Legislation introduced to the house and select committee process to follow.
- **Mid 2023:** Bill and regulations enacted.
- **Mid 2024:** Remainder of Bill and regulations comes into effect.
- **2025:** Review of Obligation (after 1 year in operation).

Delivery timeline

Action 3.5: Implement the Sustainable Biofuels Obligation

	➤ 2022	➤ 2023	➤ 2024	➤ 2025
<p>3.5: 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).</p>				
		<p>Legislation introduced</p>	<p>Bill enacted, regulations made. Obligation into effect 1 April 2024</p>	<p>Review of obligation</p>





Focus area 4: Cross-cutting measures to contribute to the delivery of a low-emissions transport system

Focus area 4 has one initial action that will be described in more detail in the following pages.

Actions for Focus area 4

Action 4: Support cross-cutting and enabling measures that contribute to the delivery of a low-emissions transport system

Action 4: Support cross-cutting and enabling measures that contribute to the delivery of a low-emissions transport system

Initiatives

Initiative 4.1: Ensure the next Government Policy Statement on Land Transport guides investment consistent with the emissions reduction plan

Initiative 4.2: Develop a strong evidence base to inform transport decarbonisation and an equitable transition and to ensure actions taken are effective within the Aotearoa context

Initiative 4.3: Embed long-term transport planning to give greater confidence that Aotearoa is on track to eliminate emissions and achieve other goals

Initiative 4.4: Provide people and businesses with information and education to support behaviour change as we transition to a low-carbon economy

Initiative 4.5: Develop the skills and capability required to transition to a low-emissions transport system and support an equitable transition

Initiative 4.1

Ensure the next Government Policy Statement on Land Transport guides investment consistent with the emissions reduction plan

What are we doing?

The GPS on Land Transport guides how NLTF should be spent and therefore is also responsible for ensuring its investment is consistent with the ERP.

For the development of GPS 2024, Te Manatū Waka is considering the following areas to ensure the GPS guides investment in a way that is consistent with the ERP whilst also achieving wider objectives for the land transport systems

- **Strategic priorities:** Supporting the objective of emissions reduction will be a key priority for investment in GPS 2024.
- **Activity classes:** Te Manatū Waka will consider the design the activity classes will support and be consistent with the ERP in the development of GPS 2024.
- **Monitoring and evaluation:** Te Manatū Waka will test and apply, where appropriate, its transport sector monitoring framework to improve selection of GPS monitoring indicators considering the role of the GPS in supporting the transport targets, including through the development of measures/indicators to better link inputs, activity progress, outputs, impacts, and targets.

Public engagement on the draft GPS 2024 is planned for early 2023.

The publication of the final GPS 2024 will be in mid 2023 to allow time for guidance to be considered in Regional Land Transport Plans and the National Land Transport Plan.

An annual dashboard that monitors the progress of existing GPSs is released every year.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi
- **Key stakeholders:** Local government, KiwiRail

Key milestones

- **2022 (throughout):** Development of GPS 2024.
- **Early 2023:** Public engagement on the draft GPS 2024.
- **July 2023:** Publication of final GPS 2024 to allow time for guidance to be considered in Regional Land Transport Plans and the National Land Transport Plan.
- **July 2024:** GPS 2024 comes into effect.

Initiative 4.2

Develop a strong evidence base to inform transport decarbonisation and an equitable transition and ensure actions taken are effective within the Aotearoa context

What are we doing?

Collaborating across agencies to develop a strong evidence base: we are investing in expanding the transport evidence base to support cross-sector initiatives that inform an equitable transition to a zero-carbon transport system to ensure policies, interventions, and activities are effective in the Aotearoa New Zealand context. A better understanding of travel accessibility, preferences, and behaviour across all user groups and modes will aid the development, assessment, and modelling of future policies. The evidence base will support the monitoring and evaluation of the future state to understand the impact of policies, including the use of behavioural measures and insights.

Developing a Transport Climate Research plan:

work has commenced to develop a transport climate research strategy (Decarbonising Transport Research Strategy) to enable the identification and prioritisation of knowledge gaps for the implementation, monitoring, and evaluation of ERP1 and the development of ERP2. The research strategy will be aligned with and build on the Transport Evidence Base Strategy.

Developing a monitoring framework and an evaluation plan:

work has commenced to develop a consistent and fit-for-purpose monitoring framework to ensure consistent reporting, monitoring, and subsequent evaluation of policies/activities.





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Expanding tools for assessing interventions: research has commenced to understand how best to:

- achieve behaviour change through the Behaviour Change Framework
- treat uncertainty on both costs and effects
- analyse and account for the distributive impacts of initiatives
- assess inter-related projects, issues, and/or programmes.

Responsible agencies and key stakeholders

Lead: Te Manatū Waka (leading the Decarbonising Transport Research Strategy and other strategic research), Waka Kotahi (invest in sector-specific research projects to support the development of the transport evidence base)

Support: Transport agencies and the wider public sector will support the Decarbonising Transport Research Strategy.

Key stakeholders: Local government, Interagency Climate Change Data and Modelling Group, universities

Key milestones

While work is still being scoped to develop a sector-wide view of the Decarbonising Transport Research Strategy, work has already commenced to fill important information and evidence gaps. Listed below are some research projects currently under way:

- **Late 2022:** Te Manatū Waka led the Domestic Transport Costs and Charges research projects, including primary study on costing methodologies and a snapshot of estimates for 2018/19, transport costs and distributive effects, transport costs and the economy, and transport elasticities.
- **Mid to late 2023:** Te Manatū Waka will develop and finalise the Decarbonising Transport Research Strategy.
- **Mid 2023:** Waka Kotahi will complete various research projects, including on climate change interventions to reduce carbon and GHGs, establishing the costs of essential transport, approaches to freight mode shift, and determining the carbon footprint of horizontal and large-scale vertical infrastructure in New Zealand.

Initiative 4.3

Embed long-term transport planning to give greater confidence that Aotearoa is on track to eliminate emissions and achieve other goals

What are we doing?

Te Manatū Waka is using the Generational Investment Approach (GIA) to guide planning through to 30–50 years out. The GIA supports better investment and intervention advice that considers sector-wide impacts, reveals interdependencies and sequencing, builds a portfolio of choices to manage over time, and includes more-sophisticated analysis tools. The GIA is new and still building its tool set but is already working within Te Manatū Waka and with partner agencies.

This involves setting a longer-term transport planning horizon that considers cross-sector issues and opportunities, identifying where and when decisions must be made, alternative pathways, trade-offs, and sequencing of different investment and policy options. This approach will provide certainty as well as a degree of adaptability in the decision-making process. This will give greater confidence that we're on a path to eliminate emissions and achieve other goals in the face of complexity and uncertainty.

The GIA works collaboratively with partner agencies to ensure a long-term, joined-up planning approach. This includes supporting transport mezzanine strategies, major cross-sector programmes and activities of work, sector-wide and cross-sector policy shifts, and more.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** Local government, Waka Kotahi
- **Key stakeholders:** Waka Kotahi, KiwiRail, HUD

Key milestones

- **From 2022:** There will be embedded involvement and input of GIA processes, tools, and thinking across Te Manatū Waka and the wider transport sector, including on major projects, programmes, and cross-sector work.

Initiative 4.4**Provide people and businesses with information and education to support behaviour change as we transition to a low- carbon economy****What are we doing?**

Transport will be one of the first areas to make significant changes to reduce emissions. This will affect our people, communities, and businesses nationwide.

Three elements have been identified that describe what an individual needs for them to perform a desired behaviour. An individual must have the capability to change, the opportunity to change, and the motivation to change or perform the desired behaviour over their current behaviour.

As outlined in the Behaviour Change Framework, behaviour change requires action at all levels of the system. Many of the other actions in this plan focus on institutional factors and infrastructure factors. This action focuses on socio-cultural factors.

Over the next few years, the Government will:

- work across sectors to ensure consistent messages and actions

- build public awareness of the positive benefits of a low-emissions transport system.

Funding should be devoted to developing behaviour insights to inform what interventions are needed to encourage change, including information, awareness, and behaviour change campaigns.

In delivering activities that support change, we will:

- consider the kinds of national and local leadership and community engagement required to support change and build social licence, particularly for difficult but highly effective interventions such as street reallocation
- use research and analysis to understand how to best encourage behavioural shifts and identify and pilot interventions to support effective implementation of the ERP initiatives.

Responsible agencies

- **Lead:** Te Manatū Waka
- **Support:** Waka Kotahi, EECA, local government.

Key milestones:

- **Late 2023:** Information and education material developed.





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Initiative 4.5

Develop the skills and capability required to transition to a low-emissions transport system and support an equitable transition

What are we doing?

We need to ensure the right skills and capability are in place across the transport sector (central government, local government, Māori, communities, suppliers, and infrastructure supply chains) to support the transition. We will scope research to better understand what capability and capacity building will be needed, including but not limited to:

- integrated land-use and transport planning, spatial planning, and long-term multimodal network planning to reduce light fleet VKT at a scale not currently required
- multimodal network integration (active mode integration with shared modes, intermodal integration for freight)
- network reshaping and network optimisation using network management and technology tools

➤ **We need to ensure the right skills and capability are in place across the transport sector to support the transition.**

- behavioural insights expertise to help us understand how and why people within a community or setting behave the way that they do
- design and delivery of a substantial increase in multimodal infrastructure, including nationally significant public transport and walking and cycling networks
- domestic and global industry and market expertise to better understand global trends, market forces, and their impact on the choices made by individuals and businesses
- enabling the transitioning to lower-emissions infrastructure construction, maintenance, operations, renewals, and end-of-life disposal
- technologies for network management, customer information, integrated ticketing, integrated payment systems, MaaS, congestion charging and network pricing.

There are also challenges facing the transport sector related to accessing the materials and labour needed to deliver changes to transport infrastructure and services.

We will investigate any barriers the transport sector faces accessing the materials and labour needed to deliver the transition and consider what Government can do to address them.

Responsible agencies and key stakeholders

- **Lead:** Te Manatū Waka
- **Support:** HUD, Waka Kotahi, other relevant agencies such as Kāinga Ora and MBIE.
- **Key stakeholders:** Local government

Key milestones

- **By 2025:** We will have scoped and commissioned research.

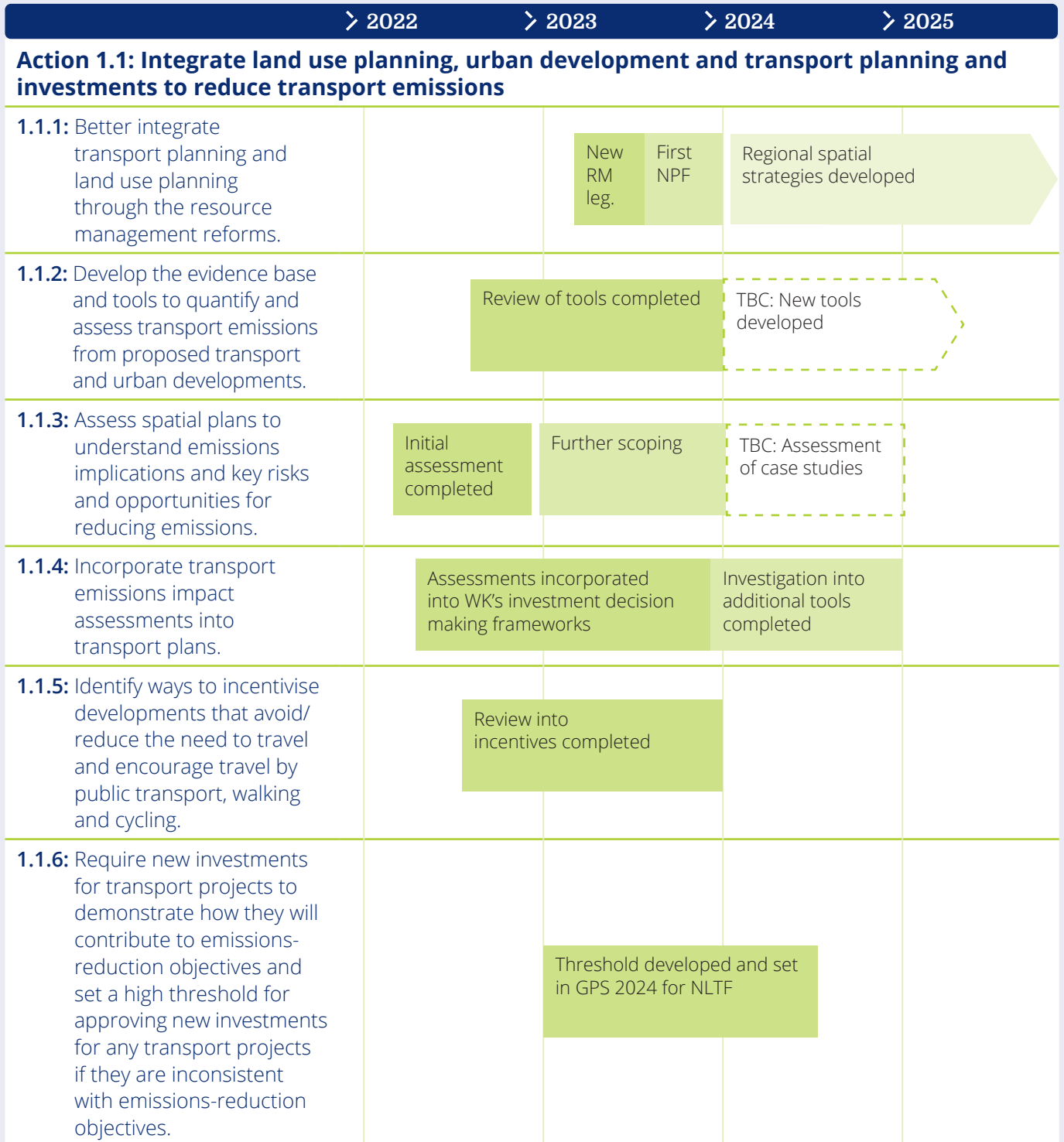
Delivery timeline

Action 4: Support cross-cutting and enabling measures that contribute to the delivery of a low-emissions transport system

	> 2022	> 2023	> 2024	> 2025
4.1: Ensure the next Government Policy Statement on Land Transport (GPS-LT) guides investment consistent with the emissions reduction plan.	Development of GPS 2024	Public engagement	GPS published; comes into effect mid-2024	
4.2: Develop a strong evidence base to inform transport decarbonisation and an equitable transition and ensure actions taken are effective within the Aotearoa context.		DTCC research projects	DTRS published	Implementation
4.3: Embed long-term transport planning to give greater confidence that Aotearoa is on track to eliminate emissions and achieve other goals.	Ongoing			
4.4: Provide people and businesses with information and education to support behaviour change as we transition to a low-carbon economy.		Information and education material developed		
4.5: Develop the skills and capability required to transition to a low-emissions transport system and support an equitable transition.			Scoped and commissioned research	

PART 3: THE PLAN IN DETAIL – ACTIONS, INITIATIVES, AND TIMINGS

Summary delivery timeline



PART 3: THE PLAN IN DETAIL – ACTIONS, INITIATIVES, AND TIMINGS

	> 2022	> 2023	> 2024	> 2025
Action 1.2: Support people to walk, cycle and use public transport				
Sub-action 1.2a: Planning - Design programmes to reduce total light fleet VKT in our largest cities				
1.2a.1: Set sub-national VKT reduction targets for Aotearoa New Zealand's major urban areas (Tiers 1 and 2) by Mid-2023.		Targets set mid-2023		
1.2a.2: 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.	Engagement, plan developed and published	Tbc: implementation		
1.2a.3: 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.		Tier 1 plans developed and agreed	Tbc: implementation	
			Tier 2 plans developed and agreed	Tbc: implementation
Sub-action 1.2b: Public transport – improve the reach, frequency and quality of public transport				
1.2b.1: Deliver a national public transport strategy.		Scoping	Strategy developed and published	
1.2b.2: Complete a review of the Public Transport Operating Model (PTOM).	PTOM Review completed	Operational policy development and legislative changes	PTAs implement SPTF	
1.2b.3: Deliver major public transport service and infrastructure improvements in Auckland, Wellington and Christchurch.	Planned improvements as part of ATAP, LGWM and Greater Christchurch Partnership			
1.2b.4: Deliver nationally integrated ticketing for public transport.	Programme commenced	Public engagement and customer testing	Canterbury Launch	Further implementation

PART 3: THE PLAN IN DETAIL – ACTIONS, INITIATIVES, AND TIMINGS

	➤ 2022	➤ 2023	➤ 2024	➤ 2025
1.2b.5: Support a major uplift in all urban bus networks nationwide, including by improving bus driver terms and conditions.	Initial improvements to driver wages	Further improvements to driver wages (subject to funding)	Other initiatives to support recruitment and retention (subject to funding)	
1.2b.6: Consider improvements to, and new opportunities for, interregional public transport services.	Scoping	TBC – in line with 1.2b.1		
1.2b.7: Identify and consider addressing barriers to integrating public transport with active and micro-mobility modes and networks.	Scoping	TBC – in line with 1.2b.1		
Sub-action 1.2c: Walking and cycling - Deliver a step-change in cycling and walking rates				
1.2c.1: Substantially improve infrastructure for walking and cycling.	NLTF and NZ upgrade walking and cycling investments			
		Transport choices engagement and implementation		
1.2c.2: Support initiatives to increase the uptake of e-bikes.	Options considered by government	TBC		
1.2c.3: Deliver a national plan to significantly increase the safety and attractiveness of cycling and micro-mobility.		National plan developed and published	Implementation	
1.2c.4: Deliver a national plan to significantly increase the safety and attractiveness of walking.		National plan developed and published	Implementation	
1.2c.5: Provide support for local government to develop network plans for walking and cycling.	TBC – Key milestones determined as VKT reduction programmes are developed			
1.2c.6: Implement Accessible Streets proposals nationwide to support safe walking, cycling/scootering and other active modes.	Policy development and legislative changes	Information and education campaign	Stage 1 & 2 rules in force (staggered)	

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	➤ 2022	➤ 2023	➤ 2024	➤ 2025
Sub-action 1.2d: Reshaping streets - Accelerate widespread street changes to support public transport, active travel and placemaking				
1.2d.1: Incentivise local government to quickly deliver bike/scooter networks, dedicated bus lanes and walking improvements by reallocating street space (including during street renewals).		GPS 2024 role considered	GPS 24 consultation Options considered Transport choices implemented	
1.2d.2: Consider regulatory changes to make it simpler and quicker to make street changes.	Proposed reg changes developed	Public consultation	Finalise proposed reg changes	
1.2d.3: Scale up Waka Kotahi's existing Innovating Streets for People programme to rapidly trial street changes.	Implementation			
Sub-action 1.2e: School travel - Make school travel greener and healthier				
1.2e.1: Set targets for active travel to and from schools and work with councils and schools to implement active transport plans around schools.		Scoping	TBC	
1.2e.2: Improve walking and cycling infrastructure to and along school routes, in schools, and in surrounding neighbourhoods.			Transport choices	
1.2e.3: Implement the Tackling Unsafe Speeds programme to ensure safer speed limits around schools.	Support for the RCAS to implement the speed rule	Speed management process planning	40% of schools at safe speeds (30 June)	All schools by 2027
1.2e.4: Investigate opportunities to improve school bus services.		TBC		
1.2e.5: Explore dedicated active transport funding and/or education programmes for schools.		Scoping (alongside targets)	TBC	

PART 3: THE PLAN IN DETAIL – ACTIONS, INITIATIVES, AND TIMINGS

	➤ 2022	➤ 2023	➤ 2024	➤ 2025
Sub-action 1.2f: Equity - Improve access and travel choice for the transport disadvantaged				
1.2f.1: 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).		Scoping completed	TBC	
1.2f.2: 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 and research; collaborating with stakeholders		Final report delivered
1.2f.3: Work with local government to make public transport more affordable, with a particular focus on low-income users.		Community connect launched nationwide in February 2023	Monitoring of concession uptake	
Sub-action 1.2g: Rural areas - Investigate the potential for public transport, walking and cycling in rural and provincial areas				
1.2g.1: Investigate the potential for public transport, shared services, walking and cycling in rural and provincial areas, particularly for the transport disadvantaged.			Results of research – TBC	
1.2g.2: Investigate further opportunities to provide on-demand public transport in provincial towns, in light of positive signs from the MyWay trial in Timaru.	SPTF legislation introduced	SPTF implemented late 2023 onwards; identify opportunities to provide on-demand services		

PART 3: THE PLAN IN DETAIL – ACTIONS, INITIATIVES, AND TIMINGS

	➤ 2022	➤ 2023	➤ 2024	➤ 2025
Action 1.3: Enable congestion charging and investigate other pricing and demand management tools to reduce transport emissions				
1.3.1: Consider progressing legislative changes to enable congestion charging.		Decision on congestion charging	Legislation progressed (TBC)	Auckland scheme designed, developed and potentially implemented (tbc); other councils engaged
1.3.2: Investigate additional pricing tools to reduce transport emissions (including parking pricing, VKT pricing and low-emissions zones).		Scoping, incl. legislative changes needed and equity considerations		
1.3.3: Review the revenue system in response to longer-term changes in the way New Zealanders travel.			Develop revenue system options	Public and political engagement
1.3.4: Explore a pilot Mobility as a Service project (MaaS).		Research completed and work programme decided		TBC – decisions depending on research results; possible pilot explored
Action 1.4: Require roadway expansion and investment in new highways to be consistent with transport targets				
1.4: Establish a high threshold for new investments to expand roads, including new highway projects, if the expansion is inconsistent with emissions-related objectives.			Threshold developed and set in GPS 2024 for NLTF Guidance developed and set for other sources of Central Government funding	
Action 1.5: Embed nature-based solutions as part of our response to reducing transport emissions and improving climate adaptation and biodiversity outcomes				
1.5.1: Consider the role of nature-based solutions in reducing transport emissions and contributing to other benefits.			Initial research and review	En-gage-ment Report completed
1.5.2: 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.				Embed policy solutions identified in report (1.5.1)

PART 3: THE PLAN IN DETAIL – ACTIONS, INITIATIVES, AND TIMINGS

	➤ 2022	➤ 2023	➤ 2024	➤ 2025
Action 2.1: Accelerate the uptake of low-emissions vehicles				
2.1.1: 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.		Discount commenced; RUC exemption extended	Rebates reviewed every 1-2 years	
2.1.2: Implement the Clean Vehicle Standard to increase the quantity and variety of low- and zero-emissions vehicles supplied to Aotearoa.		Targets commence	Targets reviewed	
2.1.3: 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.		Consider policy approach and decisions		
2.1.4: Set a maximum CO ₂ limit or penalties for individual light internal combustion engine vehicle imports to tackle the highest emitting vehicles.		Policy decisions	TBC – new requirements on high emissions phased in	
2.1.5: Establish whether the Clean Vehicle Discount can be extended to other vehicle classes.	Initial review	Review and government consideration of policy options		
2.1.6: Investigate how the tax system could support clean transport options to ensure low-emissions transport options are not disadvantaged.	Review completed	TBC – legislation changes		
2.1.7: Determine whether legislative barriers preventing the use of some types of light low-emissions vehicles can be reduced without unduly comprising safety objectives.		Initial research commenced	Review and policy decision by end of 2024	

PART 3: THE PLAN IN DETAIL – ACTIONS, INITIATIVES, AND TIMINGS

	➤ 2022	➤ 2023	➤ 2024	➤ 2025
Action 2.2: Make low-emissions vehicles more accessible for low-income and transport-disadvantaged New Zealanders				
2.2.1: Support social leasing schemes to make access to cleaner vehicles affordable for low-income households.			Trial (length TBC) Evaluation	Report back on evaluation; consider future status
2.2.2: Implement an equity-oriented vehicle scrap-and-replace scheme to make cleaner vehicles and low-emissions alternatives affordable for low-income households.			Trial Evaluation	Government considers evaluation and desirability of national-level rollout
2.2.3: Investigate whether further targeted support is required to make low-emissions vehicles more accessible and affordable for other disadvantaged groups and communities.			Review of Clean Vehicle Discount completed	Investigation dependent on CCU and social leasing evaluations
Action 2.3: Support the rollout of EV charging infrastructure				
2.3.1: Continue to develop an EV-charging infrastructure work programme to coordinate policy, investment and engagement with stakeholders.		Cross-agency group established	Ongoing engagement, policy development and investment	
2.3.2: 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.			Draft strategy published for consultation	TBC – implementation
2.3.3: Review the Electricity (Safety) Regulations 2010 to cover the safety needs of charging EVs.			Led by MBIE and Worksafe. Timing is dependent on their work programmes	

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	➤ 2022	➤ 2023	➤ 2024	➤ 2025
Action 3.1: Support the decarbonisation of freight				
3.1.1: Develop a national freight and supply chain strategy with industry.	Strategy developed	Consul- tation	Strategy pub- lished	TBC – implementation
3.1.2: Continue to implement the New Zealand Rail Plan and support coastal shipping.	Coastal shipping funded 2021-24		Rail plan implementation	
3.1.3: Provide funding to support the freight sector to purchase zero- and low-emissions trucks.	Projects co-funded through EECA low emission transport fund		Options for further support considered	
3.1.4: Establish a freight decarbonisation unit to help decarbonise the freight sector through regulation and investment policy.	FDU estab- lished			
3.1.5: Evaluate options to: improve the efficiency of heavy vehicles, regulate heavy vehicle imports to reduce emissions, support infrastructure development for green fuels and fast charging for heavy vehicles, and reduce emissions from heavy vehicles operated or procured through government activities.	Work to evaluate options across these areas, develop and implement policies			
3.1.6: 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.	Early consul- tation	Advice	TBC – potential legislative changes	
3.1.7: Consider the implementation timing of Euro VI standard for heavy vehicles.	Develop option for consultation to implement Euro VI	Land transport rule finalised in 2023	TBC – Euro VI standards in place	

PART 3: THE PLAN IN DETAIL – ACTIONS, INITIATIVES, AND TIMINGS

	➤ 2022	➤ 2023	➤ 2024	➤ 2025
Action 3.2: Accelerate the decarbonisation of the public transport bus fleet				
3.2.1: 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.	Zero-emissions bus mandate formalised and crown funding provided	PTAs submit funding proposals GPS-24 formalises target		
3.2.2: Identify and remove barriers to decarbonisation of the public transport bus fleet through the PTOM review.		SPTF legislation introduced	SPTF implemented 2023 onwards	
Action 3.3: Work to decarbonise aviation				
3.3.1: Develop and set specific targets for decarbonising domestic aviation in line with 2050 targets		Scoping and engagement	Policy advice and set targets	
3.3.2: 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.		Leadership body established		
3.3.3: Implement a sustainable aviation fuel (SAF) mandate.		Policy rec on SAF mandate	TBC – implementation	

PART 3: THE PLAN IN DETAIL – ACTIONS, INITIATIVES, AND TIMINGS

	➤ 2022	➤ 2023	➤ 2024	➤ 2025
Action 3.4: Progress the decarbonisation of maritime transport				
3.4.1: Develop a national action plan to reduce commercial and recreational maritime emissions.		Assess resourcing needs	Develop high level and detailed national action plan Submit high-level plan to IMO	Publish national action plan
3.4.2: Set new targets for maritime, including supporting the uptake of zero-emissions small passenger, coastal fishing and recreational vessels, and all new large passenger, cargo, and offshore fishing vessels to meet highest carbon intensity reduction, as set by the International Maritime Organization, by 2035.				Targets set under national action plan
3.4.3: Undertake research to advance the development and uptake of alternative low- and zero-carbon fuels for shipping in Aotearoa and develop safety and environmental standards for their use.			GAP analysis; pursue priority research options; and scope/develop safety standards	Research completed
3.4.4: 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.	Initial research complete	Engage with signatories to establish green shipping corridors		
Action 3.5: Implement the Sustainable Biofuels Obligation				
3.5: 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).		Legislation introduced	Bill enacted, regulations made. Obligation into effect 1 April 2024	Review of obligation

PART 3: THE PLAN IN DETAIL – ACTIONS, INITIATIVES, AND TIMINGS

	➤ 2022	➤ 2023	➤ 2024	➤ 2025
Action 4: Support cross-cutting and enabling measures that contribute to the delivery of a low-emissions transport system				
4.1: Ensure the next Government Policy Statement on Land Transport (GPS-LT) guides investment consistent with the emissions reduction plan.		Development of GPS 2024	Public engagement	GPS published; comes into effect mid-2024
4.2: Develop a strong evidence base to inform transport decarbonisation and an equitable transition and ensure actions taken are effective within the Aotearoa context.		DTCC research projects	DTRS published	Implementation
4.3: Embed long-term transport planning to give greater confidence that Aotearoa is on track to eliminate emissions and achieve other goals.	Ongoing			
4.4: Provide people and businesses with information and education to support behaviour change as we transition to a low-carbon economy.			Information and education material developed	
4.5: Develop the skills and capability required to transition to a low-emissions transport system and support an equitable transition.				Scoped and commissioned research



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AND LEADING



KAITIAKITANGA
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