



SUBMISSION:

HĪKINA TE KOHUPARA

Engineering New Zealand (formerly IPENZ) is New Zealand’s professional home for engineers. We are New Zealand’s strongest and most influential voice on engineering issues, with more than 20,000 members who want to help shape the public policy agenda and engineer better lives for New Zealanders.

Thank you for the opportunity to provide comment on the Ministry of Transport (MOT)’s *Hīkina te Kohupara – Kia mauri ora ai te iwi, Transport Emissions: Pathways to Net Zero by 2050* (Hīkina te Kohupara).

Engineering New Zealand supports the [Climate Change Response \(Zero Carbon\) Bill 2019](#) and the inclusion of climate change as a strategic priority in the Government Policy Statement – Land Transport 2021 (GPS – LT). As noted in our submission on the [GPS – LT](#), we are particularly supportive of the focus on better travel options, including mass transport, and the inclusion of rail. We also commended the focus on wellbeing, enhancing the liveability of spaces, and the use of best practice evidence-based decision making on road safety.

These points are reflected in this submission. Our submission is high-level and reinforces what we hear from our members. MOT has provided a series of questions for submitters to respond to. This submission will not address each of these questions, instead we have focused on a few key questions and the overall direction of Hīkina te Kohupara.

WE SUPPORT HĪKINA TE KOHUPARA

We support Hīkina te Kohupara’s overall system-wide approach to reducing transport emissions. In particular, we support the inclusion of mode-shift, shared mobility, mass-transit, and rail as solutions to ‘avoid’ and ‘shift’ transport emissions. These measures also offer significant co-benefits towards improving well-being and liveability of spaces. Additionally, we support the use of best practice evidence-based decision making in selecting pathways.

WE SUPPORT THE PRINCIPLES IN HĪKINA TE KOHUPARA

Q1: Do you support the principles in Hīkina te Kohupara? Are there any other considerations that should be reflected in the principles?

MOT’s document lists the following principles:

- Principle 1: The transport sector will play a lead role in meeting our 2050 net zero carbon target
- Principle 2: We need to focus on moving to a zero carbon transport system, rather than offsetting emissions
- Principle 3: We need to take a strategic approach to reducing transport emissions
- Principle 4: Co-ordinated action is required across the transport system to avoid and reduce emissions
- Principle 5: To ensure a Just Transition we need to manage the impacts and maximise the opportunities brought about by changes to the transport system
- Principle 6: We need to forge a path to zero transport emissions by 2050, while recognising that there is not one way to get there
- Principle 7: Innovation and technologies will play an important role in reducing emissions, but people are the key to our future

We support the above principles and have the following recommendations and comments.

Principle 1

The need to reduce transport emissions goes beyond our requirement to meet targets and commitments. We must minimise our impacts on the climate. It is our view that this should be reflected in principle 1. New Zealand's per capita transport emissions are the fifth highest in the OECD, and we need to make significant changes in this area. We therefore recommend principle 1 be amended to read “the transport sector will play a lead role in meeting our 2050 net zero carbon target and *minimising our impact on the climate*”.

Principle 2

We recommend principle 2 be strengthened to include adaptation. This ensures our strategic priority to mitigate emissions aligns with our need to adapt to our changing climate. We therefore recommend principle 2 be amended to read “we need to focus on moving to a zero carbon transport system, rather than offsetting emissions, and *we need to ensure this transport system appropriately adapts to our changing climate*”. We do not want our endeavours to minimise transport emissions to result in maladaptation.

Principles 4-7

Principle 4 outlines our need to coordinate action. It is our view that this principle should be strengthened to recognise the role of Government in leading coordinated action, whether that is action to ensure a Just Transition (principle 5) or to enable innovation and technology (principle 7). While we agree there are many paths to carbon neutrality (principle 6), leadership is needed to navigate the path ahead. Government leadership is needed to actively seek out and prioritise solutions that benefit communities already experiencing social and economic disadvantage. This approach is more effective than mitigating the negative impacts of solutions that do not centre the needs of these communities. To this end, we are pleased to see the inclusion of universal design principles in the document as a practical example. The Government is best positioned to coordinate the structural and system level changes that facilitate equity, innovation, technology and behavioural change. We therefore recommend principle 4 read “Co-ordinated action is required across the transport system to avoid and reduce emissions. *This coordination will be led by the Government.*”

WE SUPPORT THE GOVERNMENT'S ROLE IN REDUCING TRANSPORT EMISSIONS

Q2: Is the Government's role in reducing transport emissions clear? Are there other levers the Government could use to reduce transport emissions?

As above, it is our view that the Government's role can be more explicitly stated in the priorities outlined. We support the Government's role in clearly prioritising the structure and system-level solutions that enable technology and behaviour change. We support the inclusion of the overlapping levers in the land-use and urban development sectors, and their potential to enable increased mode-shift and mass-transit.

Wherever possible we encourage clarity on roles and responsibilities, particularly where there is significant overlap between sectors and ministries (for example land planning, urban development).

Q3: What more should Government do to encourage and support transport innovation that supports emissions reductions?

Government policy, legislation and investment influences innovation. An example of this in the transport space is the unintended consequences of focusing on mitigating congestion (an explicit goal in the Resource Management Act and associated Integrated Transport Assessments). This has a perverse outcome whereby streets associated with new development are built with excess capacity in an attempt to mitigate congestion.¹ By expanding capacity for cars, the impact is inevitably more traffic, and usually therefore, more congestion.

We recommend a shift away from a congestion reduction model in the goals and language of the transport system to 'reducing unnecessary traffic in communities'. Likewise, resource management outcomes should promote reducing traffic, rather than mitigating congestion.

WE SUPPORT THEME 1: CHANGING THE WAY WE TRAVEL

Q4: Do you think we have listed the most important actions the Government could take to better integrate transport, land use and urban development to reduce transport emissions? Which of these possible actions do you think should be prioritised?

We strongly support theme 1: changing the way we travel. In particular, we welcome the focus on integrating land-use, urban development and transport planning. We also commend the inclusion of quality compact, mixed-use urban development and universal design principles. Ongoing development can be used to transform our streets to make walking and cycling easier, thereby improving access to public transport, and improving the efficiency of *all* transport modes (including necessary car travel) through the reduction in unnecessary trips.

As noted in our submission on the GPS – LT 2021, we support the acceleration of transportation mode-shift and would like to see bold methods for achieving this. We agree local government, business and

¹ Thorwaldson, L. (2020, March 11). *LoS-LESS PLANNING: VKT for EQUITABLE OUTCOMES* [Paper]. Transportation Conference: Equity in Transportation, Christchurch Town Hall. <https://az659834.vo.msecnd.net/eventsairaeuprod/production-hardening-public/1ac44a82e0404be58a1c2c4eb9e78c9b>

Thorwaldson, L. (2020, March 11). *LoS-LESS PLANNING: VKT for EQUITABLE OUTCOMES* [Presentation]. Transportation Conference: Equity in Transportation, Christchurch Town Hall. <https://az659834.vo.msecnd.net/eventsairaeuprod/production-hardening-public/8cc0018e551f4ea3bc001538654ce9e0>

communities will all need to play a part, but that Government should take a strong lead using regulatory tools and investment to influence travel demand and transport choices. From our GPS – LT submission:

“We support the Government’s focus on positioning public transport, walking and cycling as attractive transport options. To that end we support, in principle, the raising of revenue from fuel excise duty and equivalent road user charges to appropriately reflect to the true cost of road use and to drive urban change. To effectively achieve good outcomes for all New Zealanders, we consider the use of smart road pricing must be balanced by the availability of alternative transport options.”

We are encouraged by the future-focused and pre-emptive nature of this theme, demonstrated in the focus on the largest and fastest-growing cities alongside the inclusion of smaller cities and towns as areas of potential growth.

WE STRONGLY SUPPORT PATHWAYS ONE AND FOUR

Q13: Given the four potential pathways identified in Hīkina te Kohupara, each of which require many levers and policies to be achieved, which pathway to you think Aotearoa should follow to reduce transport emissions?

In Hīkina te Kohupara, MOT notes that:

“The pathways with more emphasis on ‘avoid’ and ‘shift’, such as Pathway 1 and 4 are more effective at reducing emissions. Avoiding activities that produce emissions is, on balance, a more effective strategy than minimizing the emissions from those activities.”

We strongly support this statement and the prioritisation of best practice evidence-based decision making. Traffic, road, and civil engineers and traffic planners need to be given objectives and allowed to propose the best way forward together without the politicisation of transport projects.

We support the use of the ‘avoid’, ‘shift’, and ‘improve’ framework. We need to make it a priority to reduce the need to travel through system efficiency (avoid) and expansion and maintenance of environmental options for trip efficiency (shift). ‘Avoid’ and ‘shift’ initiatives support a holistic, proactive and future-focused approach to climate change mitigation and adaptation. This approach, using the structural and system-based levers at the Government’s disposal, will enable the scale of change required.

CONCLUSION

As outlined in this submission, we support the direction the Ministry of Transport has set through *Hīkina te Kohupara – Kia mauri ora ai te iwi Transport Emissions: Pathways to Net Zero by 2050*. We support the principles, themes and pathways outlined in Hīkina te Kohupara, particularly theme 1 and pathways 1 and 4 that prioritise avoid and shift mechanisms and take a holistic and proactive approach to reducing transport transmissions. Alongside reducing emissions, theme 1 (changing the way we travel), has significant potential co-benefits for wellbeing and liveability, and through increased social cohesion and resilience can form an important part of climate change adaptation.

We look forward to the work of the Ministry of Transport, and other agencies, to reducing emissions. Engineers are at the forefront of the work needed to drive change and innovation in New Zealand’s transport sector. As such, we would value the opportunity to be involved in the ongoing conversation. If we can be of additional support, please do not hesitate to be in contact.