

Submission to:

Ministry for the Environment

on:

The Emission Reduction Plan

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About VIA

The Imported Motor Vehicle Industry Association Incorporated ("VIA") is the business association that represents the interests of the wider trade involved in importing, preparing, wholesaling, and retailing used vehicles imported from Japan, UK, and other jurisdictions.

Our members include importers, wholesalers, Japanese auction companies and exporters, shipping companies, inspection agencies, KSDPs¹, ports companies, compliance shops and service providers to the trade, as well as retailers.

We provide legal and technical advice to the trade, and liaise closely with the relevant government departments, including New Zealand Transport Agency, Ministry of Transport, NZ Customs Service, Ministry for Primary Industries (MPI), Ministry of Consumer Affairs, Commerce Commission, EECA, MfE etc.

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¹ KSDP - key service delivery partner, organisations that are contracted or appointed by the Transport Agency to delivery regulatory products or services and who have sufficient market share and/or are of sufficient size and standing within an industry segment to be able to represent and influence the customer expectation of that industry segment.

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Executive Summary

VIA supports the transition to a low-to-no emitting economy and environment and therefore supports in principle the changes necessary to get there. That said, we felt there was an entire section missing from the discussion document. We acknowledge that the proposed first order changes might each be useful in accomplishing the goal, but even collectively it "feels" like tinkering and a squandering of potential.

We feel what is missing is the second order changes that will be necessary.

In fact, in most cases, it feels like government has simply put a "carbon savings" number on projects they were planning to do anyway. There appears to be dubious double counting of savings, with many of the proposed initiatives having an obvious bleed effect on the savings of other proposed solutions.

For instance, if the plan is to electrify the fleet, how then will congestion charging reduce emissions? Our success in the former nullified the savings from the latter.

We are also dismayed by the continued lack of prioritising an equitable transition. Most, if not all, of the proposed schemes will be regressive, negatively impacting lower socioeconomic groups the worst. The development of the "Equitable Transition Strategy" needs to be prioritised, and, when making this effort, the status quo should not be considered the baseline, change – even change that initially seems negative -- is always an opportunity to improve outcomes.

If a policy will increase inequitable outcomes, it is a poor policy and should be categorically discarded. The hope that some future policy will mitigate that inequity later is the same line of thinking that created the situation we are now trying to extract ourselves from.

Equity is an important consideration for VIA because many of our members come from, belong to, have relationships with, and/or cater specifically to lower-socioeconomic groups.

VIA would like to positively highlight the recognition by the government that it is important to work with the private sector to find solutions but would also like to warn government that businesses cannot voluntarily make the change. It is simply not how the economy, or the private sector, works.

Government is the only entity that can put the solution in place to fix this problem and responsibility for doing this cannot be deferred. Business can be part of the solution, but it needs government to have the courage to make the hard choices necessary to ensure businesses can assist while maintaining a fair market.

VIA also appreciates the government's acknowledgement of the need to promote behaviour change; token that the acknowledgement might be. Behaviour change and education are the biggest parts of the puzzle, not the smallest; this includes combating misinformation.

Another major component that is missing from the current proposal is a powerful story. We need a vision of the future that is hopeful, not dystopian; and we need a clear path on how to get there.

The public needs to be part of the solution, not because they are the problem. Blaming the public for their current choices is unfair in a world where marketers have the capability of using the best technology, the best data, and military-grade techniques to shape public opinion on goods and services. Rather, public needs to be supportive of the goal and the effort, so government has the courage to make the hard decisions that will be necessary.

A direct response to questions in the Emission Reduction Plan

The following section responds directly to the questions asked in the discussion document. In general, it does follow our general belief that the "correct way to reduce emissions" as stated by the Productivity Commission, is to charge the emitter. This is consistent with our understanding of how both economies and natural justice should work.

Unfortunately, this does not seem to be the approach the government is suggesting, at least not equally across industries.

VIA also recognises that the Emission Reduction Plan as proposed is very high-level and we have responded in kind. More detailed explanations of the points we make are available in specific submissions we have made elsewhere, such as our response on the Clean Car Programme, or at request.

Our responses to these questions can be more easily understood in light of our preferred solution for decarbonising the economy and environment, a brief description can be read in Appendix A. We have also included a response to government's request for promises of more change from the private sector which can be found in Appendix B.

"Transition pathway"

1. The Emissions Reduction Plan should be guided by a set of principles, and the ones put forward are the correct ones. We do have concerns, however, that many of the policies presented already demonstrate a failure to adhere to those principles.

For instance, many of the proposed policies and "actions already committed to" acknowledge that they will negatively impact equity. Relying upon the hope of future policies to address problems created by these solutions is a poor strategy.

Unfortunately, for many of the policies and "actions already committed to", there has never been opportunity to consult on alternatives, even though other options and strategies that do not increase inequity are being explored or implemented overseas.

VIA would like to see an additional principle outline a preference for encouraging necessary transitions through rewarding adopters as opposed to penalising people until they make the transition.

VIA would also like to see a general guiding principle stating that any emission reduction plan must fulfil the required emissions reductions. We attended most of the briefing meetings and were told in every one that the current plan does not. That being the case, a strong argument can be made that it is not even worth considering.

VIA would recommend the government clarify that their desire to "enable further private sector action" means that they hope to work with businesses to identify other things government can do, and not that they hope to abdicate responsibility to the private sector. The latter option would illustrate a failure in understanding of the capabilities of the private sector.

Businesses can contribute to the effort to decarbonise, but their sole responsibility is the fiduciary duty to the chain of transacting other people's money that is the economy.

If government wants the private sector to prioritise decarbonisation, either the situation needs to change to make decarbonisation a fiduciary necessity or significant changes need to be made to government regulations expanding the scope of default business priorities to include the environment. This latter option would create an opportunity to add other priorities that might not directly address emissions, but will be important during the transition, such as employee welfare.

Government is the only entity that can make the necessary change to reducing emissions, be it through a partnership with the private sector or by creating rules by which the private sector must act.

3. The most important thing government can do to promote electrification in our industry is to increase the cost discrepancy between using electricity and using fossil fuels. This difference would need to be clearly telegraphed into the future, so it can influence behaviours.

The obvious way to accomplish this is a tax on fossil fuels, creating a gradually increasing floor on the price of fuels. We would argue however, that there is a solution that would be less regressive, if not outright progressive.

Government should plan to increase electricity generation significantly beyond current demand. Plentiful electricity would drive down prices, rewarding those who have transitioned away from fossil fuels, encouraging further electrification (across all industries), and making electricity generally cheaper for the average New Zealander users.

Excess energy produced would need to be absorbed by a sink. Good sink options include filling a battery such as Lake Onslow, the production of green hydrogen, and/or direct carbon sequestration from the atmosphere.

It is also worth noting that businesses across the world are look for a way to achieve their carbon neutral promises. Access to plentiful electricity that already meets that requirement would attract those businesses and be a significant boon to the New Zealand economy and job market, potentially even shifting our export profile away from agriculture. This would allow us to make some of the other necessary changes.

We highlight several other potential measures in Appendix A.

- 4. The emissions reduction plan can promote nature-based solutions that positively affect climate and biodiversity by prioritising the regeneration and protection of native ecosystems (including forests, but not exclusively so).
- 5. VIA will continue to stay engaged with government to foster a constructive working relationship.

- 6. Improvements in home construction, such as requiring more insulation, aimed to reduce emission would also improve our ability to adapt to the effects of climate change. Increases in canopy cover through better forestry techniques would also assist in both mitigation and adaptation.
- 7. Other changes, such as increasing the use of biofuels or e-fuels, could lead to short-term savings in emissions, but will delay the necessary transition, prolong the use of internal combustion engines, and reduce long-term effectiveness of emission reduction strategies.

"Working with our Tiriti partners"

- 8. Not applicable, but VIA supports the recognition of Māori perspectives.
- 9. VIA agrees that building strategies that consider the particular experiences and needs of the Māori economy and Māori will benefit all New Zealanders.
- 10. Not applicable, but VIA would be able to better consider Māori perspectives in our recommendations if we had access to a library of references to that effect.
- 11. Not applicable, but accurate and evolving emissions profiles of segments of the population would be useful in designing relevant policies and KPIs.
- 12. No comment.

"Making an equitable transition"

- 13. VIA does agree with stated objectives of the Equitable Transitions Strategy, but it is insufficient. It comes too late to influence policies and "actions already committed to", many unfair policies and actions that already promise to increase inequity.
 - At this point, the Equity Transitions Strategy will be less focused on trying to assure policies have equitable outcomes and more on finding ways to combat the inequity created by the policies and "actions already committed to".
- 14. An Equitable Transition Strategy should be developed prior to implementation of policies and "actions already committed to". The purpose of the strategy should be to pre-empt the possibility of inequity by defining an allowable limit on the regressivity of any policy.
- 15. VIA recommends that the government develop a strategy of consultation that allows the public and private sector to submit comments and preference for a variety of solutions.
 - VIA suspects that a lack of imagination, ambition, or courage is already leading to policies and "actions already committed to" that will have a relatively low efficacy and low public approval compared to other options that could have been explored.
- 16. The government should promote household electrification by taking the necessary steps to make electricity abundant, secure, green, and cheap.

That said, this question potentially illustrates a real disconnect or bias between government and reality. While households can and should reduce their emissions, making them the priority is essentially victim blaming. Households account for less than 10% of New Zealand's emissions, yet we are asking how to reduce their emissions, not the small number of companies that produce over 75% of emissions. In fact, many of those high polluting companies receive subsidies for their emissions in the form of free allocations.

It is going to be extremely difficult to incentivise the public or even smaller businesses to make sacrifices when these mega polluters are given literal free reign.

17. There is a common misperception that we are moving into a time of transition, a temporary period of unprecedented change. The truth is the rate of change is increasing; we are locked into a future of inevitable technological, social, and ecological change.

These changes are all interlinked and will continue to compound for the foreseeable future. We need to develop a system of welfare; a system designed to provide a safety net and promote the development of small businesses.

To illustrate, another change that is quickly approaching is the automation revolution. If we can build robots to replace unskilled labour, it will not do any good to train those displaced workers for another relatively unskilled job. It will not be long before those are replaced as well. How long can that cycle be maintained before the rate of retraining can no longer keep up with the rate of automation?

If we are to provide support for workers in threat of displacement, we need to start thinking about "outside-the-box" solutions. The focus on solving this problem with "minimal disruption" is just a demonstration of our extension neglect.

- 18. VIA supports what is proposed.
- 19. As mentioned previously, VIA recommends a model of encouragement based upon rewarding early adopters. Possible rewards could include tax or direct financial benefits. As has been done with other programmes, this could be paid for by those businesses that do not make the transition.
- 20. VIA is very concerned about the policies and "actions already committed to". Our concern is a lack of ambition, courage, and responsibility displayed by these policies, specifically as it applies to inequity. The government appears to be hiding the magnitude of the transition that will need to occur, we are uncertain if it because of denial, misunderstanding, or a belief that a magical solution will present itself in the future. None of these are acceptable rationales.

Government has put forward a smorgasbord of mismatched policies that will by its own admission be insufficient and regressive. This was caveated with a stated intent of figuring out how to mitigate the inequity it will be causing. The fact they did this without first putting forward for discussion policies that would not have been regressive in nature illustrates a set

of priorities that are out of step with its own stated goals, principles, and strategies and the likely preference of the majority of stakeholders, including the New Zealand public.

There is a very real risk, whether intentional or a result of systemic forces, that the actual goal, principle, and strategy is to maintain the status quo for a minority of large industries for as long as possible while forcing the rest of New Zealand Inc. to pay for it.

If the goals, principles, and strategies found in the Emission Reduction Plan discussion document is an accurate portrayal of the government's position, then VIA recommends that before proceeding on policies and "actions already committed to", government open a public discussion on other options that will not lead to a reduction in equity. This would confirm that the public prefers regressive policies to the alternatives.

"Government accountability and coordination"

- 21. All monitoring, reporting, and other measures need to be made available via open data to allow third party modelling and accountability.
- 22. VIA supports the exploration of new problem solving and coordination strategies to find what works best.
- 23. No comment.

"Funding and financing"

- 24. The failure of government policy to require or incentivise investment away from fossil fuels.
- 25. No comment due to lack of expertise.
- 26. The government should invest in alternative industries that might be able to supplement our primary exports.
- 27. No comment.

"Emissions pricing"

- 28. No comment.
- 29. No comment.
- 30. No comment.
- 31. No comment.
- 32. The artificially low price of carbon is out of touch with its impact, especially since it only covers the first 100 years of the impact, neglecting (in the case of CO₂) its long-term effect on the atmosphere of up to 1000 years. It is doubtful in that our progeny living in 100 years will be thankful for the profits systems like this helped maintain today.

The ETS in its current form is a poor solution for reducing emissions, especially when those biggest emitters are given more free allocation then they use, likely allowing them to trade or sell it on for profit.

VIA recommends government explore alternatives such as bottom-up approaches to the solution. Government's inability to hold major corporations to account can be addressed by removing the issue all together with a universal carbon tax on goods.

Equity issues created by carbon taxes can be mitigated by converting the tax into a dividend as outlined in the policy paper: The Carbon Dividend: Europe's Winning Card².

"Planning"

- 33. VIA recommends increased partnerships between New Zealand-based academic research institutes and local and national government to identify additional opportunities for emissions reductions across sectors and make decisions.
- 34. Government can work with existing partners within communities. Government could start with public areas found in most towns, such as schools. If it could be made safe to walk/cycle to every school in New Zealand, it would have many benefits, including: reducing traffic in peak school pickup times, giving communities' a seed of a walkable area that they can continue to grow, and teaching children that walking/cycling is a valid mode of transport.
- 35. No comment.

"Research, science, and innovation"

- 36. A carbon-neutral New Zealand will require significant electrification. Systems designed to manage that network could be significantly enhanced through further R&D.
- 37. No comment.
- 38. New Zealand has a unique opportunity to lure high tech business and industries, potentially including manufacturing, to New Zealand with abundant and cheap zero-emissions electricity.

If New Zealand can seize this opportunity and generate enough electricity, then we can become a global leader in the production of green hydrogen, potentially the "oil" of the future. Most excitingly however, as an early mover in this area, is the opportunity to lead the world in this technology and as a supplier.

New Zealand has an opportunity to position itself as a supplier of green hydrogen, by looking to Norway's use of fossil fuels to support their economy and welfare system.

39. Abundant and cheap green electricity will draw or grow zero-to-low emissions businesses.

² The Carbon Dividend: Europe's Winning Card | Institut Montaigne

- 40. Other topics for R&D funding include:
 - Large-scale geological batteries (such as Lake Onslow)
 - Intelligent grid balancing, especially in light of a rise in distributed power generation
 - Distributed power generation
 - Production, storage, transportation and use of green hydrogen
 - Carbon capture and sequestration
 - Electrification of industrial systems (such as boilers)
 - Improved materials extraction from end-of-life goods
 - Alternative protein sources
 - Circular economy
 - Embodied artificial intelligence
 - Cellular agriculture
 - Desalination (abundant clean electricity could also solve water scarcity. Water is another commodity that will gain value as the effects of global warming increase)
 - Perhaps most importantly, those fields or areas not yet identified
- 41. "Disruption", while now a cliché, is the new normal and we need to accept and adapt to that fact. The world will continue to change at an increasing rate over time and the large corporations of yesterday should be allowed to die in order for newer businesses and their innovative ideas, goods, and/or services to emerge.

What is clearly evident in this discussion document is a bias in favour of the existing system.

There is more to supporting research, science, and innovation than throwing money at startups or giving tax breaks to big businesses that claim they are doing it.

"Behaviour change – empowering action"

- 42. Industry would take greater action on climate change if they were rewarded for doing so or mandated to do so. As currently proposed, they will do the minimum necessary to avoid the worst of the lash.
- 43. We will follow government mandates and regulations, but admittedly there are players in our industry that distrust the governments intentions, this might be a matter of ideological differences, but it does illustrate that New Zealand is not immune to the trends we are seeing overseas, of societies fracturing into extremes.
- 44. Misinformation will be a major challenge in any "evidence-based" transition but is also a risk to the general welfare of the public. Government should consider separately exploring ways to combat this.

"Moving Aotearoa to a circular economy"

45. Unfortunately, without domestic manufacturing, we will always be at a loss to influence the design and construction of goods. It should be possible, however, with enough investment to improve our ability to pull raw materials from amalgamated waste and end of life goods. It is

likely that the near future will see the circular economy and bioeconomy collide to provide new biologically based recycling and resource extraction processes.

Abundant, cheap, green energy will go far in enabling this capability.

- 46. Bioeconomy refers to a subset of the greater economy focused on the use of specialised organisms in the production and/or end-of-life processing of goods, including other biological goods. There is significant potential for using organisms for all sorts of purposes, ranging from cellular agriculture to organisms that can leech useful materials from waste.
- 47. A resource strategy should begin with a phasing out of single use products and/or an end-of-life processing levy applied at the start of a product's life. As our end-of-life processing is improved, the levy can decrease. This will drive up investment in research and development of products that are cheaper to process at end-of-life. This will also reward early adopters by making their products more competitive through a lower entry levy.
- 48. The uses outlined in the discussion document are exciting. Government should work with New Zealand-based academic research organisations to explore future opportunities.
- 49. The biggest barrier to a circular economy is misinformation and an economic shift that changes the focus of the economy from exploitation to guardianship or responsible management. Many New Zealand-based businesses are not familiar with the idea of taking responsibility for the impacts of their goods or services once it leaves their store and they will balk at being forced to shift their perspective.
 - This is so much the case, that there are political ideologies in New Zealand aimed almost exclusively at protecting businesses from their responsibilities by ensuring it is placed exclusively on the consumer in the name of "personal responsibility".
- 50. The general strategy outlined in #47 should be applied across all industries, and the advice in #48 should allow more informed priorities.
- 51. VIA has recommended in its recent submission on the Clean Car Programme that the programme be extended to include a "scrappage scheme" for helping improve the characteristics of the New Zealand car fleet. The proposed scrappage scheme is specifically designed to promote the early development of relationships and business models that will be necessary for a future circular economy. VIA recommends this be strongly considered.

"Transport"

52. Yes, although VIA wishes to put a point forward for consideration. We are currently in the grip of a pandemic. The next one is only a matter of "when", not "if". Personal vehicles have been a lifeline during this pandemic, and many companies' health and safety plans require workers to come to work via personal vehicle if at all possible.

VIA would like the government to consider how it would have been possible to create bubbles or any meaningful isolation at all if essential workers and people who had essential needs, like

groceries, were limited to sharing public transport and did not have the option of a private, personal vehicles.

VIA welcomes discussion of policies that might reduce the size of the New Zealand fleet but would recommend a lower limit on possible reductions to no less than one car per household.

This said, VIA supports improved public transport and travel options and sees no conflict between this and a lower limit of one vehicle per household.

53. Yes, as possible based upon available supply. VIA is dubious that sufficient EV supply will be available prior to the early 2030s to comprise a significant fraction of the vehicles being imported, much less replace a large portion of the fleet.

Until zero emission vehicles can be sourced in sufficient quantity, hybrids and other ultra-low emission vehicles will serve as a transitionary step.

Within possibility, VIA's members are committed to achieve the government's goal.

- 54. Yes.
- 55. Yes.
- 56. VIA supports mandating EVs when sufficient supply of EVs are available. We do not think this will occur prior to 2035.

As stated in our submission to the Clean Car Programme:

"New Zealand has no domestic manufacturing and the Clean Car Programme in itself likely does not supply the quantum of subsidies necessary to entice foreign manufacturers to prioritise EVs for New Zealand. New Zealand importers will need to compete with the rest of the non-manufacturing world for the limited supply of zero-emissions vehicles manufactured for other jurisdictions that make it on to the open market.

[...]

The global volume of zero emission vehicles manufactured is also a poor representation of what New Zealand can access. There are fewer significant right-hand drive (RHD) markets internationally and New Zealand will be dependent solely on the production of vehicles for those markets"

Once sufficient RHD EVs are being produced, new car importers will need to compete with the other more wealthy and influential jurisdictions (i.e., UK, Australia, and Japan) for the supply of new vehicles and used car importers will need to wait for the 2nd generation of mass produced EVs to begin replacing the first in those major RHD jurisdictions before prices lower to a point New Zealanders can afford.

Neither type of importer expects to be able to source a significant supply of EVs by 2030 and volumes necessary to start replacing the fleet will likely not be available until 2035.

57. VIA would like to draw attention to the fact that while research out of the EU, US, and other major jurisdictions with domestic manufacturing pointed to transport as the "low hanging fruit", New Zealand is not the EU, US, or other major jurisdictions with domestic manufacturing. That research was advice for their domestic policies, not a guidebook for the entire world at once.

The choice for New Zealand to follow the same path as those other jurisdictions puts us into direct competition for the limited number of EVs that will be produced - EVs that those more wealthy and influential jurisdictions have already convinced manufacturers to supply to them.

If New Zealand expects to sail the course it has plotted, then this is the challenge it must overcome. We must figure out how to convince the manufacturers to funnel a total of 1.3 million EVs (30% of the fleet) away from the other RHD markets they have been promised for, namely the UK, Japan, and Australia. We have 12 years to accomplish this. We also need to figure out how to steal 200,000+ EVs a year from those same jurisdictions, either before the vehicles are sold into the fleet or after, in less than 8 years.

The jurisdictions we are discussing robbing have domestic manufacturing, higher incomes, and more international influence. VIA will welcome further discussion with government on how much the New Zealand public is prepared to spend to reroute those EVs.

Using the term theft might seem hyperbolic, and in some ways it is because we are not actually looking at performing illegal acts, but those major jurisdictions who have made similar goals and promises to the public will be expecting suppliers to provide those EVs to them.

All of this discussion is assuming the existing shortage of computer chips, cobalt, magnesium, and other resources is resolved in time for OEMs to start manufacturing EVs in any volume at all.

There is also a geopolitical risk from locking New Zealand into a path that can only be fulfilled by challenging our traditional trade or political partners or embracing new ones to the deficit of those traditional ones.

"Energy and industry"

- 58. VIA recommends a rapid expansion in the production of green electricity with the goal of making electricity cheap and abundant, including (but not exclusively so):
 - Encourage distributed electricity generation by requiring distributors to pay market
 rates for electricity contributed back to the grid and rewriting regulations to not only
 allow but encourage small power generators that produce electricity through zero
 emission sources such as solar and wind.
 - Partner with Iwis and local communities to develop hydroelectric plant(s) on the West Coast. One of the expected impacts of global warming will be increased rain on the West Coast, we will either need to address that as an annual issue as floods

destroy infrastructure, or we can pre-empt that risk by setting up ways to managing the expected increase in volume of water. If we are to manage it, then we might as well produce electricity to the benefit of both local communities and the nation.

Producing an overabundance of electricity will require sinks to absorb the excess electricity from the grid. This is an opportunity and VIA recommends these be planned for and built alongside the production systems. Ideas could include:

- A large geological battery such as Lake Onslow
- Hydrogen production
- Desalination
- Atmospheric carbon capture
- 59. A clear and coherent plan about how the New Zealand of 2050 will already be able to generate enough electricity/power to replace all current sources is needed to signal a pathway for transition. The focus of this plan should be social benefit, tell us how the average New Zealander will benefit in a tangible way.
- 60. The production of abundant, cheap, green electricity is the most important thing government can do to enable everything else being explored now or in the future to address emissions. The government needs to treat this like the emergency it is.
- 61. Abundant, cheap, green electricity should be pared with a carbon tax on fossil fuels that creates a floor on the price of those fossil fuels. The carbon tax should increase over time and that increase should be clearly telegraphed to the public. This is all that is necessary to incentivise full electrification.
- 62. Similar to how the transport industry has been addressed so far, the industry sector (and every other sector) should be given strict mandates on electricity generation that increase annually. Those who meet the mandates get a subsidy paid for by those who do not. A deadline in the late-2030s should be set where fossil fuels burning products should be banned from new use.
- 63. No comment.
- 64. The requirements of the proposed Energy and Emissions Reporting scheme should be as inclusive as plausible.
- 65. No comment.
- 66. No comment.
- 67. No comment.
- 68. VIA recommends that the same strategy used on the car industry be applied to other industries; early industry adopters be subsidized by penalising late adopters from 2023. Government should provide support to academic research institutes for R&D into low emission fuels. Government should partner with those academic research institutes to explore

opportunities for a publicly owned entity to generate green hydrogen from our abundant cheap green electricity and model the social welfare benefits on Norway's welfare benefits from fossil fuels.

69. First VIA would like to reiterate our major point, abundant, cheap, green electricity is the most important thing that can be provided to motivate the electrification of every industry.

That said, VIA is concerned that the complexity of programmes being developed is a feature designed to allow obfuscation, not a consequence of the complexity of the problem at hand. There is a very simple solution that was promoted by the Productivity Commission and VIA seconds their recommendation. Most of this complex series of parallel policies should be replaced with a simple carbon tax. The resources that would go into managing the behemoth(s) that is being proposed could instead go into ensuring all products accurately reflect their negative externalities in their pricing.

Accurately knowing the social cost of goods is the purpose of much of this work. The only apparent difference between a carbon tax and the Emission Reduction Plan as outlined is the latter allows government to pick winners and losers.

"Building and construction"

- 70. VIA agrees with the Commission
- 71. Government needs to assure an abundant and cheap supply of green electricity is available.
- 72. Government needs to assure an abundant and cheap supply of green electricity is available. Once this occurs, the problem should largely fix itself as buyers will demand electrified utilities. Government should, however, implement mandates as soon as possible without putting people at risk.
- 73. Again, government needs to assure an abundant and cheap supply of green electricity is available. Once this occurs, the problem should largely fix itself as buyers will demand electrified utilities. The problem is that fossil fuels are cheaper than electricity. This cannot and should not remain the case.
- 74. Yes, if the changes are mandated prior to government assuring an abundant supply of cheap green electricity, it will drive up the cost of goods and houses. Similar to an EV, the biggest challenge in buying a house is the upfront cost, driving that cost up will put the houses out of reach of more people.
- 75. No comment other than to say that abundant, cheap, green electricity will benefit all New Zealanders.
- 76. VIA supports the effort to raise awareness of consumers and industry but would point out that nothing in being aware changes a business's bottom line nor the amount a consumer is willing or able to spend for a building. A solution with greater efficacy would be to make low emissions buildings cheaper than high emitting ones. This does not need to be an upfront difference, but it does need to stark and certain.

VIA reiterates its earlier recommendation that a carbon tax be put on all goods as appropriate, including fossil fuels. That carbon tax should create a floor on the price of the good and should increase over time. That increase needs to be telegraphed very publicly.

77.	Government should develop grants aimed at New Zealand-based academic research institutes
	working in this area.

- 78. No comment.
- 79. Again, government needs to assure an abundant and cheap supply of green electricity is available. Once this occurs, the problem should largely fix itself as buyers will demand electrified utilities. The problem is that fossil fuels are cheaper than electricity. This cannot and should not remain the case.
- 80. No comment.
- 81. Mandate minimal thermal performance standards.
- 82. No comment.

"Agriculture"

- 83. No comment.
- 84. No comment.
- 85. No comment.
- 86. No comment.
- 87. No comment.
- 88. No comment.

"Waste"

- 89. Yes.
- 90. Education is always a positive approach but solving the problem will require solutions. In this case, we need to assure less organic waste is produced or more efficient desirable disposal mechanisms are available.
- 91. No comment.
- 92. Yes.

- 93. Yes, if alternative more desirable disposal mechanisms are made available or the goods that could not be disposed of were banned. 94. No comment. 95. Yes. 96. Yes. 97. Yes. 98. No comment. 99. No comment. "F-gases" 100. New Zealand is subject to the design decisions of OEMs but could explore policies that mandate specific products or products from jurisdictions that have already mandated a phase down. 101. In the next decade, our industry will be importing EVs almost exclusively. Those vehicles will likely have the newer and greener options already. 102. New Zealand Inc has a commitment to reduce the use of high-global warming potential HFC under the Kigali Amendment. We would be remiss if we continued to choose the more harmful solution. 103. This should be required assuming compatibility, avoided if not. A better approach for existing equipment that is not compatible would be to reclaim, re-refine, and reuse. 104. New Zealand is currently dependent upon the design choices of overseas OEMs. 105. Improved building and home design should lead to decreased cooling and hence reduced refrigerants used. "Forestry" 106. Yes. Our ambition will need to exceed carbon neutral if we want to avoid the worst of the problem we are trying to avoid. We need to look to forestry even if all other sectors of the economy over-deliver reductions. 107. No comment.
- to pay the low emitters. Government needs to stop subsidising the largest emitters. Make them pay for their emissions and use the funds collected to reward those who are removing carbon from the atmosphere.

108. There is a general strategy that has been used across industry sectors, levy the high emitters

In the case of native forests, however, the goal should not be to simply grow trees, it should be to rejuvenate native ecosystems with multiple species and ages of trees. This approach will lead to two-to-four times more carbon capture and resilience.³

- 109. New Zealand should move to encouraging continuous canopy harvesting of native forests for the reason mentioned in our response to #108. In this model, periodic harvesting of some trees will actually strengthen the ecosystem.
- 110. Yes.
- 111. No comment.
- 112. Ecosystems are much more resilient to disease and pests than "forests". Government should consider the facts from our response to #108.
- 113. No comment.
- 114. No comment.

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³ Neighbourhood interactions drive overyielding in mixed-species tree communities | Nature Communications

Appendix A: What is missing from the plan?

Enabling teamwork by removing the guesswork

We need vision and a plan for the future that is so clear, so transparent, that there will be little question about GHG emitting technology falling to cleaner alternatives. If companies can see exactly what year their product, or a product they use, will become unviable, they will have the certainty to find a different investment. This will allow us as a nation to co-op that economic machinery to help shape public opinion.

VIA recommends that government start with options. Give the public a series of options for the future. Not options on how we get there, but on what we want life to look like in 2050. The "Emission Reduction Plan" states that life will be very different, but it does not tell us how.

Once an option is selected, then government can do what it will takes to get there knowing that the public has already approved the transition and the emissions schedule is already set. Government can develop a programme designed to educate and inform, both the public and business on what changes will be necessary and at what date.

Government should also look to gamify the transition, allowing the public, where possible, to find the solutions that work for them, while rewarding early adopters.

The cost of not having vision in a change setting is unquantifiable. It is not only the lost productivity and squandered energy that cannot be recouped, but it is poison to the culture. A government that does not connect with the public or with businesses during times of change will be seen as untrustworthy. It is a natural inclination to distrust what one does not know.

There are three options when pushing change, the threat of force, intellectual argument, and/or inspiration. The current approach, as outlined in the Emission Reduction Plan, promises significant use of force justified by intellectual argument.

Facts and figures are wonderful tools, but they are not a communications strategy.

There is no inspiration. In fact, we would highlight the lack of clear communications or understanding about the size of the necessary change. It feels as if government is trying to hide the efforts by obfuscating the costs to consumers and by not requiring anything that will be too onerous. Both of which are contrary to what needs to happen to change public behaviour and push businesses to invest in other areas.

A simple example, people still buy big petrol vehicles because they assume the price of petrol tomorrow will remain unchanged. How can this be the case if the need to decarbonise is an emergency?

Hiding the efforts in little fixes, does not feel cohesive and sometimes feels outright contradictory, disingenuous, or even duplicitous. From the perspective of the public, it will be difficult to connect the effect of a forced change with the rationale, especially in a time of declining trust in public institutions. The government of the day will be left fighting a continual rear guard action to misinformation.

We need one cohesive strategy

In order to get public support, the government needs to provide a concrete strategy and one clear cohesive plan that will allow everyone to not only see the benefit, but their place within it.

VIA's recommendations for a strategy aligns with the recommendations of numerous government agencies, including the Productivity Commission. Most importantly, it follows a simple understanding of economic principles and natural justice.

- 1) Have the courage to develop a New Zealand-based unique approach if we deem it will be better for New Zealanders, more conducive to fulfilling our vision, and/or fairer overall.
- 2) Phase in a meaningful price for GHG emissions that includes the costs of all known negative externalities.
- 3) Require GHG emitters to pay for their emissions.
- 4) End or phase out all subsidies, including pricing of GHGs that currently only include a fraction of their expected impact (i.e., the current system only prices the first 100 years impact of CO₂, even though it can have an effect for up to 1000 years). If subsidies are deemed to be necessary, then the opportunity should be open to all and the applications/justifications for each approved subsidy should be public and transparent. Include a transparent schedule for reducing the subsidy over time.
- 5) Remove unfair pan-industry economic effects. The justification for feebates in the Clean Car Discount is taxing undesirable vehicles to make desirables ones more affordable, what is the justification for taxing some emitting industries and subsidising others? Should taxed industries assume they are undesirable?
- 6) Provide abundant and cheap emission-free electricity.
- 7) Provide ubiquitous fast internet connectivity.
- 8) Growth metrics, such as GDP, need to be deprioritised in favour of segmented well-being and happiness metrics aimed at both the public and the private sector. If we meet or exceed our carbon-neutral requirements and New Zealanders are both happier and better off, yet our GDP is less than it could otherwise be, shouldn't we consider that progress and success?

What a vision could look like

The government has stated that, "Our economy and society will look very different in 2050." But how? Will it be better or worse? Should we simply expect the dystopia we seem to be trending towards?

We need a vision of the future that will give the public hope that things might improve. This is contrary to the impression we are getting from daily news and contrary to the latest socioeconomic findings, such as those that suggest the expected quality of life for children borne today will be significantly less than their parents for the first time in recorded history^{4,5}. There is nothing that prompts one to think this trend will change in the near future.

A positive, ambitious, but achievable vision will be the most powerful way to motivate a shift in behaviour.

⁴ <u>Today's children face tough prospects of being better off than their parents, Stanford researchers find | Stanford News</u>

⁵ Millennials earn 20% less than boomers—despite being better educated (cnbc.com)

VIA recommends a vision that highlights increased general welfare, happiness and opportunity, not the mandates that get us there. Yes, we can talk about the increased costs of some goods, but that needs to be followed by the recognition that cheaper and cleaner options will also be available.

A sample vision

A brief example of a positive, yet ambitious "plan" for the transition that has a progressive effect on equity would start with abundant, secure, cheap, and ubiquitous green electricity. The earlier this is done, the greater impact it will have. Among the impacts will be improved equity by reducing the cost of electricity to all. Abundant, cheap, emission free electricity would lead to the development of new exports, reducing our reliance on agriculture.

This could be accomplished by proceed with Lake Onslow project and taking steps to produce a large excess of power.

It would involve a change in our energy strategy. We currently balance the network by having a high percentage of renewable power generation supplemented by on demand capability, usually a fossil fuel of some sort.

New Zealand should take a different approach. We should generate an over-abundance of green electricity, then balance the network by sending the excess to publicly owned projects that act as a power sink. Examples of potential sinks (and we would recommend them all in parallel) include: a geological battery such as Lake Onslow, the production of green hydrogen, or the development of carbon capture systems which are possible, but energy expensive and currently inefficient, perfect for use as an energy sink.

With these publicly-owned sinks in active use, we would have unique opportunities for partnerships with our academic research institutions that would position New Zealand to be a world leader in these areas, having active, functioning projects to work on, research and improve.

These projects would also provide direct public benefits, including cheap and abundant energy, a local supply of green hydrogen, and a way to reduce our national footprint through carbon capture technology. If developed sufficiently, all three of these could provide positive additions the New Zealand's export portfolio.

New Zealand could become a net exporter of green hydrogen, potentially the oil of the future and through carbon capture technology, New Zealand Inc could eventually make income by charging other counties to help them meet their decarbonisation requirements.

These programmes, being publicly owned, should be set up similar to how Norway setup its petroleum activities, focusing its contributions to economic growth and to the financing its welfare state.

Of course, we understand it is easy to simply state we should produce more power, quite another to figure out where and how. One idea would be based upon the predicted impacts of climate change on New Zealand, the expectation of increased rain on the west coast of the South Island.

We could partner with Iwis and local communities to make the west coast the powerhouse of NZ with a series of large hydroelectric projects. The rains will come, we can either wait to clean up the floods each year, or it can control and harnessed it to the benefit of NZ and those local communities.

Electricity is a basic utility and making it as cheap and ubiquitous as possible is a benefit to the vast majority of New Zealanders. It is a vision the average New Zealander can get behind and support

because they can imagine the direct benefit to themselves. It also incentivises New Zealanders to make the move away from fossil fuels and toward electrified solutions – leading to a culture shift.

There are other things that we can improve to the benefit of all that will also have a positive effect on emissions, such as better internet connectivity. New Zealand should move quickly to rollout fast, cheap, ubiquitous broadband and improved telecommunications, providing increased availability to remote working, education, etc. and increased access to tools such as online shopping. These services will increase overtime, we should plan for it.

The plan needs to also include a tax that will create a gradual, but meaningful increase in fossil fuel prices. This tax needs to create a floor on fossil fuel prices, being flexible enough to address fluctuations in fossil fuel pricing (i.e. to avoid fossil fuel suppliers from simply lowering their prices to negate the tax). The floor price of fossil fuels needs to be published in a very visible way. Consumers need to be able to see that their choice of goods today will increase in cost to use over time. This is not being made clear at the moment.

One of the reasons people do not move to hybrid or EVs is because they assume if they can afford paying for petrol today, they will be able to in 5 or 10 years as well. We need to change that assumption.

To improve equity, the plan should extend that universal carbon tax into a carbon dividend. Money collected by the carbon tax should be apportioned back to the KiwiSaver accounts of all adult New Zealanders, with a fraction withheld to further distribute to those accounts that are investing exclusively in "green" accounts.

A similar system should be adopted in the mid-to-late 2030's to promote energy efficiency, a small tax on electricity use which is apportioned in the same way. This will help assure electrification of the economy is done with efficiency as a goal.

The plan also needs to include a blanket refusal to invest in projects that will delay the transition to a zero-GHG solutions, this might include alternative "carbon neutral" fuels that likely are not carbon neutral and are definitely not emission reducing.

While broad and lacking in detail, this plan outlines big steps we could take that will materially improve the lives of all New Zealanders while providing the foundation for a carbon neutral economy.

Appendix B: On business doing more

There is a fundamental reason that businesses cannot solve global warming, even with the best of intentions. Government has suggested that the private sector can do more to help solve the issue, but the structure of the market economy, capitalism, and competition militate against businesses being able to act for the common good, as opposed to their own interests.

Government knows the problem is hard, so they have developed a plan which, in their own words, "will not, by itself, meet the full extent of any given emissions budget." They continue by asking for "proposals and commitments from the private sector", asking what sacrifices businesses are willing to make.

Most business owners, directors, and shareholders are good people who have kids and a family, who care about their neighbour and the environment, and who want to make choices based upon the "greater good". No one wants global warming to occur and even those who may not be convinced by the evidence and scientific consensus, would not object to the goals of clean water, clean air, and reduced waste.

The problem arises in the basic assumption that businesses are able to make decision that might reduce profits. And be assured, if reducing GHG is likely to increase profits, government would jump on the chance to make it happen.

There are dynamics, both official and otherwise, that are a very real part of business decisions and explain why businesses cannot act in the greater good for the sake of good alone.

For instance, the idea of fiduciary duty. Our economy is a system built not on the decisions of any one company, but on chains of transactions where people are managing and spending other people's money. There are legal and ethical limitations in place governing responsible use of that money.

In other words, everyone in this chain of transactions has a duty to create economic value. When that economic value and social value overlap, great – but, when it does not, it is legally required that the economic value trumps, even when that means, pollution, exploited workers, or even GHG emissions.

What companies *want* to do is really irrelevant because there are already things they *must* do.

To illustrate with a single example, there is a principle baked deeply into our economic model called shareholder primacy. This principle is simple: the primary focus of a business is to make money for shareholders. This idea has many advantages for businesses, an obvious one being that investors are more likely to invest in a company that prioritises their needs.

Another advantage is simplicity. In a shareholder primacy model, it is much easier to identify a successful business versus one that has chosen to prioritise say, GHG reduction, a social cause, or even employee welfare.

Most modern economies (including New Zealand) have had the idea of shareholder primacy legitimised and cemented into their economic system through legal precedents if not directly in regulation. These precedents provide shareholders with significant power, sometimes including the ability to sue for reparations when companies act counter to the goal of maximising profits.

There have been attempts to rebel against this principle, such as through the introduction of alternative classes of shares and shareholding, but such attempts have not gained serious traction or acceptance, especially in New Zealand.

Competition, usually seen as a good thing, is also a major hurdle to businesses making decisions based upon "the greater good". Profits pay bills, good doesn't. It is a simple fact, businesses that voluntarily make themselves less competitive in a competitive market will fall.

Competition is seen as so important to our economy that we have government agencies set up to prevent businesses from behaving otherwise.

A brief story from New Zealand's automotive importation industry illustrates how competition can conflict with the idea of businesses voluntarily doing the "right thing".

A few years ago, when the stink bug issue became a major focus, the border inspection companies had to develop and implement heat treatment systems to meet new biosecurity regulatory requirements.

The regulations required heat treatment during stink bug season, but only during the recognised stink bug season. The industry asked government to mandate heat treatment all year. This change would have allowed the industry to keep people employed (as opposed to only employing seasonal workers), it would have allowed industry to spread the cost of setting up the systems across the entire year, and most importantly, it would have strengthened New Zealand's border protection.

The industry feared that an abnormally weather or climate changes could lead to problems outside of the recognised pest season and the industry had no interest in being the vector that led to a pest decimating our agricultural sector.

The government responded that they could not require it all year because they could only take "evidence-based" decisions and the current evidence did not support the need. Therefore, they concluded, a year-round mandate was not possible. Government did recognise the benefits, however, and they invited industry to do it voluntarily.

Herein lies the problem. No single company could voluntarily set a policy of year-round heat treatment because it would have made them less competitive. No individual business could "go first", because to do so would have rendered them uncompetitive. And the industry could not decide to do it together because it would have been seen as anti-competitive behaviour.

As a result of this stand-off, New Zealand is left without that added layer of protection, against the "greater good", even though the existing industry and government would prefer it be there.

The current economic system is simply not designed to allow businesses to focus on anything but profits. Doing otherwise is almost certainly a self-imposed death sentence. Not only are business not able to make decisions that potentially reduce profits, but New Zealand also has regulatory frameworks in place to assure they do not.

That said, there are real opportunities for change, but businesses cannot do it voluntarily. It is the role of government to regulate their economy to desired effects. If GHG emissions are undesirable, they must be made unprofitable; if they are unprofitable, investment will end. Unfortunately, it is the government, the only power capable of making the necessary changes, who intends to abdicate their responsibility -- although, there is an argument to be made that the fact this discussion is being had at all illustrates they have already done so.

The philosophical argument about "who should be responsible, and who should go first" does not only apply to the automotive import industry in New Zealand. This example is a microcosm of the issues faced globally by all countries, societies, and businesses internationally. Under the rules in place today, business cannot solve global warming.