Submission on the Draft Emissions Reduction Plan 2

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By Low Carbon Kāpiti Inc

www.lowcarbonkapiti.org.nz
info@lowcarbonkapiti.org.nz

To the Ministry for the Environment,

Low Carbon Kāpiti (LCK) is a grassroots community organisation made up of local people who want to see more action to reduce the causes of the climate crisis. Established in 2017, we have a current membership of 350+ based across the Kāpiti Coast District. Our focus is both national and regional.

We, like many others, don't believe the draft ERP2 document does enough to reduce our real emissions – obviously so, as the government's own analysis of the proposed policies shows we are likely to miss our budgets and targets.

Our concerns include:

- The 'least cost' approach,
- Over-reliance on offsetting through forestry and carbon capture and storage
- Over-reliance on nascent and non-existent technologies
- Misalignment of government policies – e.g. in relation to transport
- Failing to learn from and build on successful past work
- Over-reliance on existing markets and unfounded optimism that the ETS will deliver
- The minimal focus on equity, inclusivity or just transition, and,
- That New Zealand is not well-placed for 'world-leading climate innovation'.

'Least cost' approach

It is not clear from the discussion document that social and environmental costs as well as long-term economic costs were given proper consideration. Over the long term, this approach could become the most expensive (economically, socially and environmentally) as it could mean that Aotearoa New Zealand fails to mitigate climate change, does not meet its

domestic targets nor its Nationally Determined Contribution under the Paris Agreement and needs to increase the level of climate change adaptation needed. ‘Least cost’ seems to mean what will minimise costs to a select few in the short term. This is precisely why the world is in this mess – the minority that profit from it continue to pollute and ignore the price that others pay for it.

Over-reliance on offsetting through forestry and carbon capture utilisation and storage

There are risks involved in a heavy reliance on carbon offsetting by planting forests and other carbon sequestration solutions (nature-based solutions, carbon capture utilisation and storage, etc):

- Forestry and other ecosystems: While carbon in the atmosphere is long-lived, forests are not. Forestry and ecosystems are at risk (climate change impacts, land management, etc) and carbon stored in forests and ecosystems is not stable over medium to long timescales.
- Inaccurate modelling data: The ERP2 bases its modelling of carbon sequestration through forestry on significantly over-inflated tree planting numbers. The New Zealand Institute of Forestry has stated (18 July 2024) that the actual tree planting numbers this year are about half of what has been projected in the ERP2. For the plan to be credible, these numbers must be adjusted to reflect the actual number of trees being planted by the forestry sector.
- Negative environmental effects from monoculture pine forests: these are on regular display during and following heavy rain events of the East Coast of the North island.
- Carbon Capture Utilisation and Storage (CCUS): it is disingenuous to associate its investigation of a technology with a quantified emissions reduction, when investigation by itself will not lead to any emissions reductions. Also, carbon capture utilisation and storage is a highly speculative technology, which even if found to be scalable, will be costly. It is also very risky, because a failure could lead to a sudden and large-scale release of carbon into the atmosphere, and is likely to face widespread opposition.

Over-reliance on nascent and non-existent technologies

Commercialisation of new technologies usually takes at least a decade, even when there is demand, a solid economic rationale for them and they are eminently scalable. To accelerate change, the government must indeed ‘pick winners’ and support them with a range of policies, but it should choose carefully because of the consequences of backing something that is unworkable. Significant money, time and resources could be wasted. Given this and the dire urgency of reducing emissions, relying on technologies that are not market ready, are unproven, or worse yet, non-existent or already known to be unworkable, is a recipe for failure.

A good example of this is hydrogen for use in transport. The Japanese government has backed (and continues to back) this technology heavily with extremely poor results. ‘Green’ hydrogen is far too costly to supplant ‘grey’ hydrogen made from natural gas, and neither can compete with battery-electric solutions on cost or emissions reduction (in fact, grey hydrogen increases emissions as well as costs, a lose-lose).

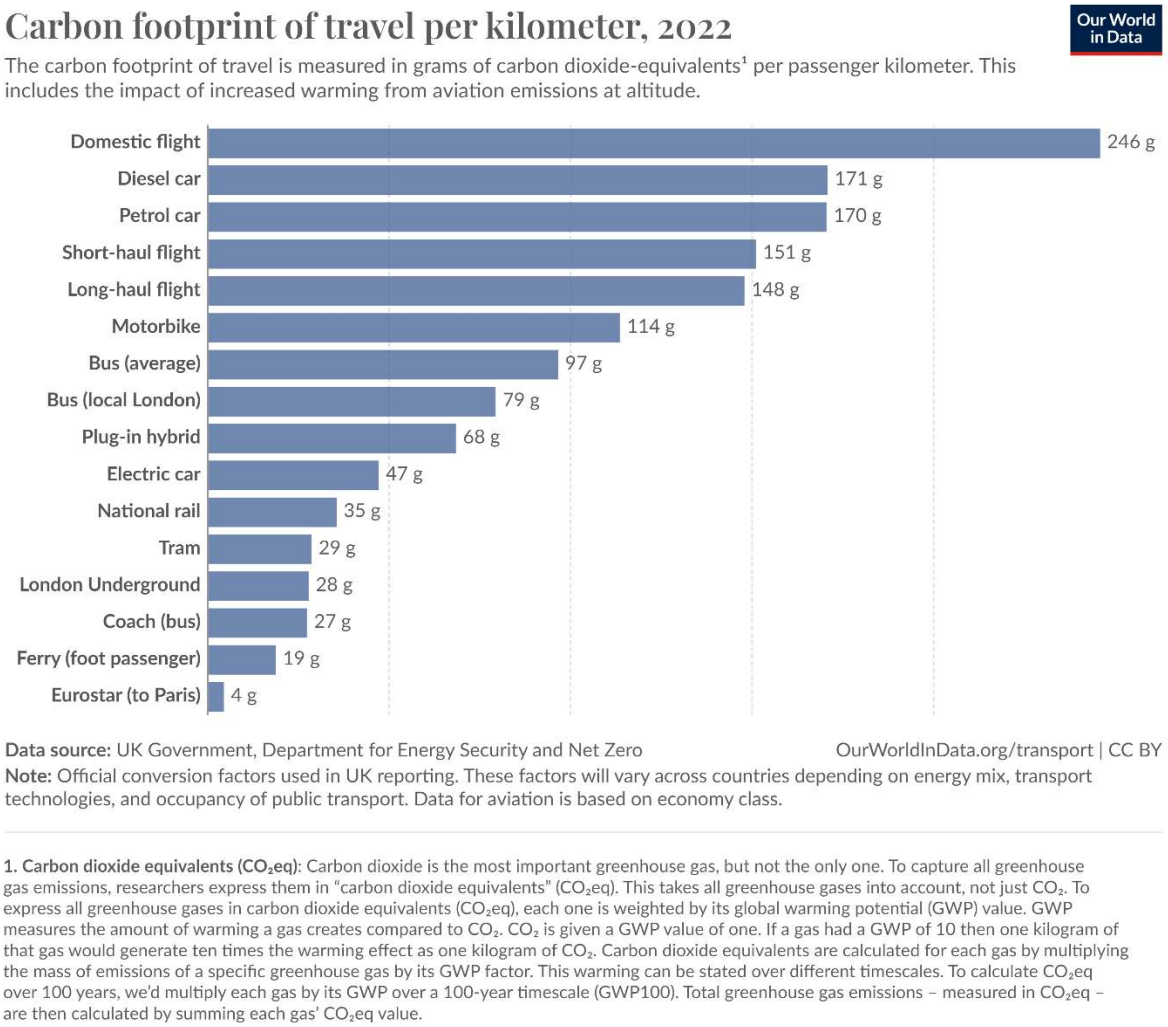
In short, Government needs to use proven approaches and while it should back newer technologies with promise, it cannot afford to bank on getting results from them.

Misalignment of government policies – for example in transport, and

Failing to learn from and build on successful past work, and

Over-reliance on existing markets and unfounded optimism that the ETS will deliver

In a science-based emission reduction plan for transport, two charts should drive thinking. For passenger travel, it would be this one.



As to moving goods, as Ministry of Transport research shows, rail – and coastal shipping – are very low emission ways to move freight.

Heavy truck emissions vs. other NZ freight modes

Mode	Typical g CO_2/tkm
Coastal shipping (oil products)	16
Coastal shipping (other bulk)	30
Coastal shipping (container freight)	46
Rail (electric)	7
Rail (diesel)	29
Rail (NZ average)	28
Long-haul heavy truck	105
Urban delivery heavy truck	390

- Coastal shipping figures based on international data for ships comparable to those used in NZ
- Rail figures based on data provided by Kiwirail; electric includes indirect emissions

Ministry of Transport

Source:
https://www.knowledgehub.transport.govt.nz/assets/TKH-Uploads/TKC-2019/Real-world-fuel-economy-of-heavy-trucks.pdf

Instead of drawing on best practice research, ERP2 is an ideologically driven step back from ERP1. Gone are references to cycling or cycleways. Gone are the goals of reducing kilometers travelled by cars. Walking as a mode of transport is only mentioned once in the main document. None of the international research on modeshift, or the actual experiences of cities such as London, Paris or other smaller towns in Europe, is drawn upon. Outside of the draft ERP, the government is planning to raise speed limits across the country, which will increase fuel consumption as well as road accidents and fatalities.

There is no mention of possible modeshift to low emission long distance passenger trains – or long-distance coaches- for domestic travel.

Both the ERP2 and the GPS focus on cars and expanding and improving roads. For emission reductions for car travel it is relying very heavily on EV uptake. Yet the supportive policies for buying EVs have gone. The government has even weakened vehicle emissions standards for the coming years.

As the technical annex indicates, walking as a share of travel is expected to decrease ‘Walking mode share by distance (% of household travel) From 1.6% in 2019 to: 1.5% in 2035 1.4% in 2050.’

With cycleways no longer supported by the government, the projection is there is no increase in cycling. This is despite international evidence that shows the building of safe cycling infrastructure, supported by the uptake of e-bikes, can lead to significant modeshift.

The only small bright spot is that the public transport mode share by distance (% of household travel) is projected to increase from 3.5% in 2019 to 5.3% in 2035 reaching 6.3%

in 2050. But this is not a transformational rise and suggests cars remain the main form of transport.

In terms of freight, there is expected to be a continuation of a shift away from rail freight. ‘Rail / coastal shipping freight mode share (% of tonne kilometres) From 13.7% / 12.4% in 2019 to 12.8% / 11.6% in 2035 12.8% / 11.7% in 2050.’

This is not surprising given the cancelled rail enabled ferry project. And any push to lower emissions from rail is scuttled by an assumption of ‘No further electrification.’

Flying is expected to increase. Projected domestic air passenger kilometres, as modelled by the Ministry of Transport. rises from 7.4 billion in 2019 to 10.4 billion in 2035 and increases to 13.4 billion in 2050. This is despite flying being one of the highest emitting modes of transport per passenger (see the first chart above).

While not yet part of New Zealand’s emission reduction targets, international aviation demand (annual growth) is 3.2% from 2025, then 2.9% per annum from 2031 to 2050.

In line with Air New Zealand’s recent announcement to drop its carbon reduction targets, the modellers do not expect electrification of air travel any time soon. As for low carbon fuels for both domestic flights and international ones, the modellers put “NA”. Is this ‘not applicable’ or will the fuels be ‘not available’? This suggests that more fossil fuel is expected to be burnt by the aviation industry.

The types of policies that would have supported transport decarbonisation were already working here in NZ or have been proven to work overseas. But the policies we had, that we could have built upon, have been jettisoned by the government since the beginning of 2024. In short, there is now a near-total misalignment of government policies and reducing transport emissions.

A higher NZETS carbon price, should it eventuate, will not compensate for this, as the ‘price signals’ will never be enough for most people to overcome the other barriers to driving less, driving more efficiently or driving a cleaner vehicle. The short term pain that very high carbon prices would inflict would inevitably lead the government to intervene to lower them out of short term political expediency, rather than triggering transformational change.

<u>Minimal focus on equity, inclusivity or just transition</u>

There is a notable lack of emphasis on equity, inclusivity and equitable transition in the ERP2. Yet we know from a large body of both international and New Zealand research that it will be our poorer and already disadvantaged communities that will be hit hardest by climate change. We can already see this playing out in our East Coast communities, such as Wairoa, where up to 60% of those affected by recent unprecedented flooding are uninsured.

The ERP2 also has a heavy emphasis on household consumer choices, such as switching to an electric vehicle, but this is only an option for our wealthier households. As mentioned in Chapter 12, clarity around the steps Government will take to understand the distributional impacts of emissions reduction policies and the methods for reducing these impacts are important.

<u>New Zealand is not well-placed for ‘world-leading climate innovation’</u>

One of the five pillars of the Government's climate strategy is 'World-leading climate innovation is boosting the economy'. We agree that the New Zealand economy must diversify to encompass a much stronger science, innovation and research base. However, there is currently not enough investment from the Government into science, research and innovation. A 2021 report by the OECD found that New Zealand Government's funding of research was only 0.29 percent of GDP, significantly less than the OECD average of 0.5 percent. We are also concerned about the recent budget cuts at GNS and NIWA, and the subsequent loss of climate science expertise.

We do not believe that the current level of investment will allow Aotearoa New Zealand to become a country of 'world-leading climate innovation'.

Conclusion

ERP2 is a step backwards from ERP1. It is a step backwards from New Zealand doing its part to stop dangerous climate change and our international commitments in this regard. The focus on 'least cost' is half a step away from 'doing nothing' and a million miles from an effective and credible response that will help safeguard lives and all the things we care about from an intolerable future. New Zealand and the world needs the government to step up and do better.

Yours sincerely,

The Low Carbon Kāpiti Committee