

Submission by KiwiRail

On the 'Low-Emissions Economy' Issues Paper (Aug 2017) prepared by the New Zealand Productivity Commission

24 October 2017

1. Introduction

KiwiRail acknowledges the need for New Zealand to transition to a low emissions economy and supports this review and other work being undertaken in this area. We commend the New Zealand Productivity Commission for a comprehensive Issues Paper and welcome the opportunity to contribute to the Inquiry process.

KiwiRail are members of the Sustainable Business Council (SBC) and understand the SBC are preparing a submission that will provide a collective members perspective on the Issues Paper. In addition to this, KiwiRail has prepared this individual submission to provide key points and more detailed information on a number of specific areas relating to transport.

2. About KiwiRail

KiwiRail owns, operates and optimises rail and ferry transport and supply chain networks to facilitate the efficient movement of freight and passengers within NZ. The business transports around 25% of New Zealand's exports and has a current market share of around 16% of the total national freight task (based on tonnes-km).

As a mode of transport, rail produces 66% less emissions than trucks to move the same volume of freight across the transport network. The natural advantage of rail as an energy efficient and low carbon mode of transport provides significant opportunity for New Zealand in the transition to a low emissions future.

KiwiRail has developed '[Steel Wheels](#)' to illustrate this advantage to its customers and stakeholders. In the 2016 financial year, freight transported by KiwiRail represented a reduced heavy vehicle impact of 1.1 million trips, resulting in savings of 77 million litres of fuel and 208,000 tonnes of CO2 emissions, as reported in the [KiwiRail Annual Integrated Report 2016](#) (pg. 37).

KiwiRail has a proven track record of reducing carbon intensity across the freight business since 2010 through a range of means including:

- Investing in new locomotives with improved engine technology;
- Implementing a Driver Advisory System comprised of both technical and behaviour change elements;

- Undertaking track and wheel interface improvements;
- Increasing network capacity by strengthening bridges to increase maximum loads; and
- Improving the focus on full trains.

KiwiRail is continuing to build on this momentum and has established strategies and targets to drive further improvements in energy efficiency, carbon intensity and reduce greenhouse gas emissions across its business.

As members of the Sustainable Business Council since August 2015, KiwiRail has been actively involved in SBC initiatives on climate action. To date this has included contribution to the freight efficiency group work and the recent appointment of our Chief Financial Officer to the SBC Advisory Board. We will continue to work with the SBC, their members and others across our sector on collaborative opportunities to progress action on climate change and to improve transport efficiency.

3. Response to Issues Paper Questions

Detailed below are responses to specific questions presented in the Issues Paper.

Question 10: In addition to encouraging the use of electric vehicles, what are the main opportunities and barriers to reducing emissions in transport?

While there are many initiatives in place in New Zealand to help towards achieving a reduction in emissions, significant reductions of greenhouse gas emissions in transport are likely to only be achieved through wide spread technological and behavioural change. Given this often takes a generational timescale, increased movement of freight on rail provides a very real opportunity for reducing GHG emissions in a relatively short timeframe.

With New Zealand's freight market projected to grow by 30% by 2030, it will be crucial to provide the most efficient and low carbon logistics solutions within the transport sector, now and into the future. If the current mix of road and rail remains the same, then emissions will grow to match freight growth. Conversely, increasing the use of rail to accommodate the future freight task will assist in slowing emissions growth.

The Issues Paper includes reference to the Vivid Economics (2017) report that supports this point in stating "that switching freight from road transport to rail or coastal shipping is a relatively low-cost way of mitigating emissions produced by heavy vehicles".

In addition, we note that the National Rail Strategy from 2005 included an initiative to specifically "encourage modal shift within a sustainable development context", highlighting the associated social and environmental benefits of this shift. The strategy went on to note that "As the public health impacts of pollution from rail are relatively small compared to roads,

policies aimed at modal shift – from road to rail – are likely to make an effective contribution to improving transport-related public health outcomes. In particular, initiatives aimed at encouraging freight to transfer from road to rail, and greater use of passenger transport (including urban passenger rail services), relative to single occupancy car travel, may reduce overall transport-related health problems.”

It is our view that the following are required to achieve a step change in modal shift from road to rail:

- Recognition of the importance of the role of rail within the broader transport system
- Consideration of potential incentives to encourage lower carbon modes of transportation
- Investment in rail infrastructure (including investment to aggregate freight volumes, improve speed, reliability and maximum loads on commercial routes).
- Investment in technology to make railways more efficient and competitive

It may also be appropriate to consider the inclusion of sustainability goals within the framework for allocation of transport funding.

While the ‘other transport mitigation opportunities’ section of the Issues Paper (pg. 25) acknowledges the benefits that rail can provide in the freight transport sector for mitigating emissions, we encourage greater consideration of the role of rail in the Inquiry process and any associated further work on planning the pathway for New Zealand’s transition to a low emissions economy:

- (i) How modal shift and progressing the evolution of an effective integrated intermodal freight transport network can enable New Zealand’s transition to a low emissions economy.
- (ii) The co-benefits that increasing rails modal share can provide New Zealand including improved productivity, reduced congestion, improved road user safety and reduced road maintenance.

Question 27: Is New Zealand’s current statutory framework to deal with climate change adequate? What other types of legislation might be needed to effectively transition towards a low-emissions economy?

There is potential to consider other incentives to encourage lower carbon modes of transportation. This could include policy or other incentives to allow low carbon transportation alternatives to better compete in the marketplace and encourage aggregation of bulk freight and people movements.

Question 33 What are the main co-benefits of policies to support a low-emissions transition in New Zealand? How should they be valued and incorporated into decision making?

Co-benefits that rail can provide in the transition to a low emissions economy and increased modal share include:

- reduced ongoing road maintenance costs
- a safer national transport network for New Zealanders to connect, work and travel
- reduced traffic congestion which saves millions of hours in lost productivity
- reduced CO2 emissions
- a resilient transport network that underpins New Zealand's growth in overseas trade

Thank you for the opportunity to provide this submission. For enquiries, please contact Grant Heather, Senior Strategy Manager, KiwiRail grant.heather@kiwirail.co.nz