

Alignment between the New Zealand Energy Efficiency and Conservation Strategy 2007 and the Regional Land Transport Strategy 2007-2016

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1. Purpose

The purpose of this paper is to assess the alignment between the Regional Land Transport Strategy (RLTS) 2007-2016 and the New Zealand Energy Efficiency and Conservation Strategy 2007.

The Land Transport Management Act 2003 requires that every RLTS take into account any national energy efficiency and conservation strategy (section 75(b)(ii)).

2. The RLTS review

The RLTS sets out a long term vision of a sustainable transport system for the region and it contains objectives, policies, outcomes and targets to support progress towards achievement of that vision. The current RLTS 2007–2016 was adopted in July 2007 following a very comprehensive development process that took many years.

The Land Transport Management Act (LTMA) 2003¹ requires that the RLTS be renewed by July 2010 (s176 (1)(b)). Due to the comprehensive nature of the prior review, the current RLTS 2007 – 2016 is considered relatively robust and only minor changes are likely to be necessary to comply with the amended LTMA.

Various Corridor and Implementation Plans sit underneath the RLTS and detail the implementation programmes which are supported by all responsible parties. These Plans are updated on a rolling basis. Some of these Plans are currently in a review process, others have been recently updated and others predate the current 2007 – 2016 RLTS.

The Corridor Plans include:

- Wairarapa Corridor Plan (December 2003) – currently under review
- Ngauranga to Wellington Airport Corridor Plan (October 2008)
- Western Corridor Plan (April 2006)
- Hutt Corridor Plan (December 2003) – currently under review

The Implementation Plans include:

- Regional Road Safety Plan (October 2009)
- Regional Travel Demand Management Plan (December 2009)
- Regional Cycling Plan (December 2008)

¹ As amended by the Land Transport Management Amendment Act 2008.

- Regional Walking Plan (October 2008)
- Regional Passenger Transport Plan 2007 – 2016 (August 2007) – currently under review
- Regional Freight Plan (July 2007)

The above Plans will all be referred to in the draft RLTS to be released for public consultation in early 2010. The older Plans will be reviewed and upgraded to implement the new RLTS that results from this review process.

3. New Zealand Energy Efficiency and Conservation Strategy 2007

The NZEECS was released by the Minister of Energy in October 2007.

The Strategy is a detailed action plan for increasing the uptake of energy efficiency, conservation and renewable energy programmes across the economy and to make doing so part of the normal behaviour of New Zealanders. It seeks to address identified barriers to the uptake of energy efficiency and renewable energy in the wider economy: lack of information, weak price signals, access to capital and split incentives.

The Energywise Transport chapter in the NZEECS sets the objective ‘to reduce the overall energy use and greenhouse gas emissions from New Zealand’s transport system.’ Targets aimed at achieving this objective are:

- Reduce per capita transport greenhouse gas emissions by half by 2040
- For New Zealand to be one of the first countries in the world to widely deploy electric vehicles
- To have an average emissions performance of 170g/km of CO₂ (approximately 7l/100km) for light vehicles entering the fleet by 2015
- Cut kilometres travelled by single occupancy vehicles in major urban areas on weekdays, by 10 per cent per capita by 2015 (compared to 2007)
- For 80 per cent of the vehicles to be capable of using 10 per cent biofuel blends or to be electric powered by 2015
- Investigate options for improving the efficiency of the North Island main trunk line, including electrification, by 2010.

The Energywise Transport chapter is divided into four areas in which several ‘actions’ are detailed to meet the targets. These four areas are:

- Managing demand for travel
- More efficient transport modes
- Improving the efficiency of the transport fleet
- Developing and adopting renewable fuels.

4. Context of energy use in Wellington region

In 2007 it was estimated that New Zealand emitted 75.5 million tonnes of CO₂-equivalent greenhouse gases into the atmosphere. The national energy sector contributes around 43% of the total greenhouse gas emissions. The transport sector is a subset of the energy sector, contributing almost 46% of the CO₂ emissions, or 20% of total national greenhouse gas emissions.

The principal growth in greenhouse gas emissions comes from increased CO₂ emissions, particularly from electricity generation and transport. Wellington region's use of fossil fuels is primarily for transport purposes and contributes to about 1.5% of national greenhouse gas emissions. (MfE, 2009).

5. Legislative alignment

This section details the alignment between the 2007-16 RLTS and the New Zealand Energy Efficiency and Conservation Strategy 2007. The RLTS is required to take into account any 'national energy efficiency and conservation strategy' (LTMA 75(b)(ii)).

5.1 NZEECS objective and targets

NZEECS transport objective to 'reduce the overall energy use and greenhouse gas emissions from New Zealand's transport system' is well aligned with the RLTS key outcome 3.1: 'reduced greenhouse gas emissions'.

The transport targets in the NZEECS were largely taken onboard the New Zealand Transport Strategy (NZTS) 2008 except the target for 80% of vehicles to be capable of using 10% biofuel blends or to be electric powered by 2015. The NZTS states that by 2020 it is expected that 75% of the light vehicle fleet will be capable of running on a 10% bioethanol blend (NZTS, p. 48).

The NZEECS targets have not been 'regionalised', making it difficult to gauge the expected contribution by the Wellington region to the achievement of those targets, as well as difficult to align the RLTS targets along desired national-level outcomes.

The following table details the alignment between the NZEECS 2007 targets and the 2007 – 2016 RLTS.

NZEECS targets	RLTS alignment
Reduce per capita transport greenhouse gas emissions by half by 2040	RLTS outcome 3.1: 'reduced greenhouse gas emissions' Comment: The RLTS target is to 'hold the line' with regard to CO ₂ emissions despite growth in travel demand. The NZEECS target is similar given that the NZTS anticipates travel demand to roughly double over the same target period (NZTS, p. 25). This is generally well aligned with NZEECS.

<p>For New Zealand to be one of the first countries in the world to widely deploy electric vehicles</p>	<p>RLTS policy 8.4.d: 'support government investigations into alternative fuel options and eco-efficient vehicles'</p> <p>Comment: Meeting this NZEECS target requires action be taken primarily at the central government level and is outside the ability of the RLTS to directly influence. The RLTS policy is to support central government action in this area and is therefore fairly well aligned.</p>
<p>To have an average emissions performance of 170g/km of CO₂ (approximately 7l/100km) for light vehicles entering the fleet by 2015</p>	<p>RLTS policy 8.4.d: 'support government investigations into alternative fuel options and eco-efficient vehicles'</p> <p>RLTS policy 8.4.e: 'ensure the transport network is developed in a way that minimises the use of non-renewable resources'</p> <p>Comment: Meeting this NZEECS target requires action be taken primarily at the central government level and is outside the ability of the RLTS to directly influence. The RLTS policies are meant to support central government action in this area and are therefore fairly well aligned.</p>
<p>Cut kilometres travelled by single occupancy vehicles in major urban areas on weekdays, by 10 per cent per capita by 2015 (compared to 2007)</p>	<p>RLTS outcome 3.4: 'increased private vehicle occupancy'</p> <p>Comment: While the RLTS target measures private vehicle occupancy and not kilometres travelled by single occupancy vehicles, the intent of the NZEECS target and the RLTS outcome are fairly well aligned.</p>
<p>For 80 per cent of the vehicles to be capable of using 10 per cent biofuel blends or to be electric powered by 2015</p>	<p>RLTS policy 8.4.d: 'support government investigations into alternative fuel options and eco-efficient vehicles'</p> <p>Comment: Meeting this NZEECS target requires action be taken primarily at the central government level and is outside the ability of the RLTS to directly influence. The RLTS policy is to support central government action in this area and is therefore fairly well aligned.</p>

<p>Investigate options for improving the efficiency of the North Island main trunk line, including electrification, by 2010.</p>	<p>RLTS chapter 8.1 Network Management contains several policies relating to the rail network in the Wellington Region.</p> <p>Regional Rail Plan identifies several pathways for investment on the North Island main trunk line, including electrification and double tracking.</p> <p>Comment: This target has been achieved for those parts of the North Island Main Trunk line south of Otaki with the adoption of the Wellington Regional Rail Plan.</p>
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Table 1: Alignment between NZEECS targets and the RLTS

5.2 NZEECS actions

The Energywise Transport chapter also has several actions for progress in 4 areas. These, and the alignment with the 2007 – 2016 RLTS, is summarised in the table below.

NZEECS actions	RLTS alignment
1. Managing demand for travel	
Work with local government to promote travel demand management planning	The RLTS contains a Travel Demand Management Plan
Support businesses to put travel plans in place	Development of Workplace Travel Plans is an action in the Wellington TDM Plan 2009. Currently, 12 workplaces are participating.
Support schools to put travel plans in place	Development of School Travel Plans is an action in the Wellington TDM Plan 2009. Currently, 24 schools are participating.
2. More efficient transport modes	
Review funding policies to encourage greater provision of public transport, walking and cycling	The RLTS contains key outcomes for increasing public transport and active modes. RLTS policy 8.8.b is to 'ensure that priority is given to projects or packages that contribute significantly to key national or regional outcomes'
Regional public transport planning	The RLTS contains a Passenger Transport Plan 2007. A Public Transport Plan to replace the 2007 Plan and update it to the new legislative requirements in the Public Transport Management Act 2008 is currently underway.
Complete Auckland rail electrification with the rolling replacement of diesel trains with electric units	Not applicable

Complete the Wellington rail upgrade	The RLTS contains policies that support the Wellington Regional Rail Plan which details the pathways to rail upgrades.
Support efficient bus use	The RLTS contains several policies in chapter 8.1 'Network Management' that support efficient bus use.
Bus infrastructure improvements including completion of the Northern Busway in Auckland	RLTS policy 8.1.k 'ensure the continuous review and improvement of bus services'. RLTS policy 8.1.l 'support the use of bus priority measures in congested areas'
Implement the Walking and Cycling Strategy and fund the Bikewise programme	The Bikewise programme was replaced by the <i>Getting there – on foot, by cycle</i> plan. RLTS key outcome 2.1 'increased mode share for pedestrians and cyclists' RLTS related outcome 2.2 'increased safety for pedestrians and cyclists' Regional Cycling Plan 2008 contains actions to advocate for adequate funding of <i>Getting there</i> implementation plan and to contribute information to the <i>Getting there</i> information centre
Support development of Neighbourhood Accessibility Plans to encourage mode shift	RLTS key outcome 2.1 'increased mode share for pedestrians and cyclists'
Active living programme	RLTS key outcome 2.1 'increased mode share for pedestrians and cyclists'
Collect data on freight movements	The Annual Monitoring Report on the RLTS collects data supplied by NZ Transport Agency on freight movements on selected routes in the region.
Develop a New Zealand Domestic Sea Freight Strategy	RLTS policy 8.1.b 'ensure the regional transport network provides effective connections to Wellington's Port and international Airport' RLTS contains a Regional Freight Plan 2007, but sea freight (beyond coastal shipping) is outside the brief of the RLTS.
Review heavy vehicle weight limits	RLTS key outcome 7.1 'improved regional freight efficiency'
Investigate options for improving the efficiency of the North Island main trunk line	The RLTS contains policies that support the Wellington Regional Rail Plan which details the pathways to rail upgrades.

3. Improving the efficiency of the transport fleet	
Average fuel economy standards for new and used light vehicles entering the fleet	RLTS policy 8.4.d 'support government investigations into alternative fuels options and eco-efficient vehicles'.
Introduce fuel economy labelling scheme for light vehicles by March 2008	RLTS policy 8.4.d 'support government investigations into alternative fuels options and eco-efficient vehicles'.
Report on the potential for better tyres to improve vehicle fuel efficiency	RLTS policy 8.4.d 'support government investigations into alternative fuels options and eco-efficient vehicles'.
Collection of fuel economy data on vehicles entering the fleet	RLTS policy 8.4.d 'support government investigations into alternative fuels options and eco-efficient vehicles'.
Continue the fuelsaver.govt.nz website and launch the rightcar.govt.nz website	RLTS policy 8.4.d 'support government investigations into alternative fuels options and eco-efficient vehicles'.
Develop a fleet commitment and driver training programme for heavy vehicle drivers	Not a role of the regional council
Vehicle Fleet Strategy to promote optimal fuel economy, safety and air quality	RLTS policy 8.4.d 'support government investigations into alternative fuels options and eco-efficient vehicles'. RLTS key outcome 5.1 'improved regional road safety' RLTS policy 8.4.b 'support continuous improvement in air quality through reduction in harmful vehicle emissions'
Work with the aviation industry to encourage the use of more fuel-efficient practices and aircraft	Outside the legislative responsibility of the RLTS.
Vehicle retirement (scrappage) scheme	Not a role of the regional council.
4. Developing and adopting renewable fuels	
Develop voluntary sustainability consumer information for biofuels	RLTS policy 8.4.d 'support government investigations into alternative fuels options and eco-efficient vehicles'.
Establish an Advisory Group to look at future vehicle technologies, such as biofuel and electric vehicles, and barriers to their early adoption	RLTS policy 8.4.d 'support government investigations into alternative fuels options and eco-efficient vehicles'.
Introduce the Biofuel Sales Obligation and review the post-2012 obligation levels in 2010	RLTS policy 8.4.d 'support government investigations into alternative fuels options and eco-efficient vehicles'.

Funding support for new low carbon energy research and development	RLTS policy 8.4.d 'support government investigations into alternative fuels options and eco-efficient vehicles'.
Accelerate the uptake of plug-in hybrid and electric vehicles	RLTS policy 8.4.d 'support government investigations into alternative fuels options and eco-efficient vehicles'. RLTS policy 8.4.e 'ensure the transport network is developed in a way that minimises the use of non-renewable resources'.

Table 2: Alignment between the NZEECS actions and the RLTS

There are no action areas that the RLTS does not align with. However, individual actions are of varying relevance to the RLTS and the regional council.

6. Conclusion

There is good alignment between the NZEECS transport objective and targets.

The action areas of the NZEECS Energywise Transport chapter are also well aligned with the RLTS, but the individual actions listed are of varying relevance to the RLTS and the regional council.

Overall, there is good alignment between the NZEECS 2007 and the 2007 – 2016 RLTS. It is not deemed necessary for there to be any changes to the 2010 – 2040 RLTS specifically to improve alignment with the NZEECS.

7. References

Energy Efficiency and Conservation Authority (EECA) (2007). *New Zealand Energy Efficiency and Conservation Strategy (NZEECS)*. Wellington.

Greater Wellington Regional Council (GWRC) (2007). *Regional Land Transport Strategy 2007 – 2016*. Wellington.

Ministry for the Environment (MfE) (2009). *New Zealand's Greenhouse Gas Inventory 1990-2007*. Wellington.

Ministry of Transport (MoT) (2008). *New Zealand Transport Strategy (NZTS)*. Wellington.