

Submission by Low Carbon Kapiti on the Kapiti Coast District Council's draft Sustainable Transport Strategy

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Introduction

In May 2019, Kāpiti Coast District Council unanimously declared a [climate emergency](#). This was a courageous move and showed significant leadership.

This declaration should have signalled that climate change would be at the centre of all future strategy documents. The publication of the Transport Strategy indicates that this statement seems to have temporarily forgotten and transport planning has gone back to 'business as usual'.

The strategy starts with the statement that

“Any comprehensive transport strategy must cover all modes of travel and have a clear vision of the future. This Strategy establishes a framework for delivering good outcomes for our communities, and provides details of the key areas of focus for transport in Kāpiti for the next twenty years.”

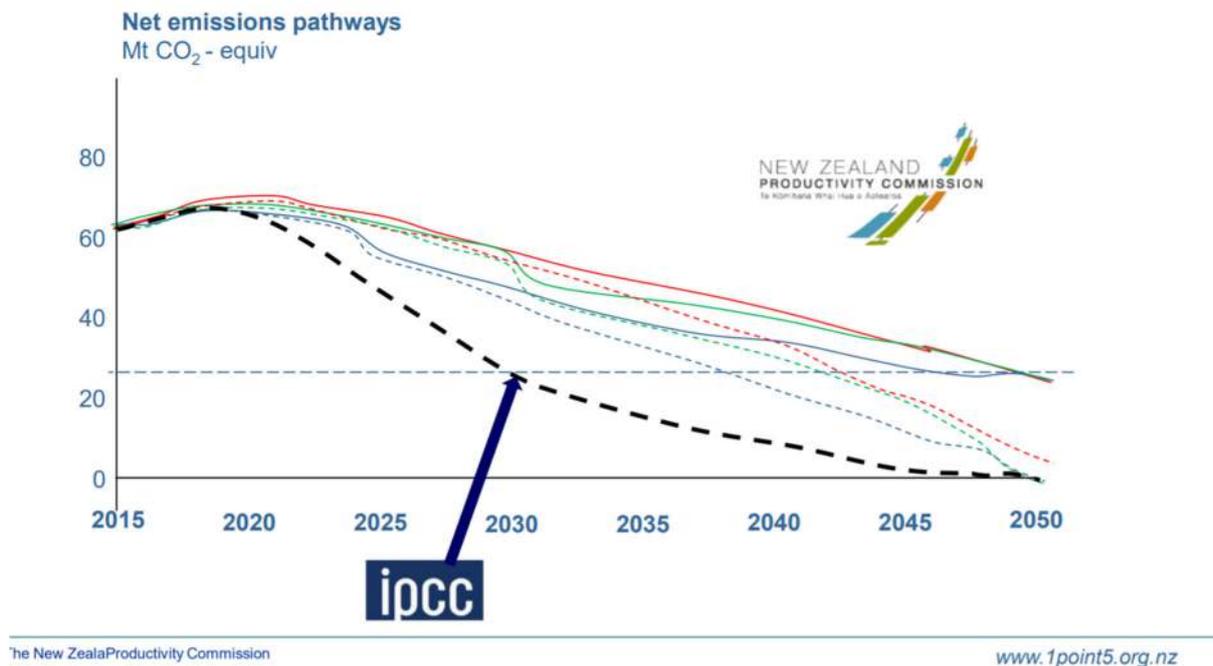
Yet the strategy does not have a clear vision, it does not cover all modes (for example there nothing about air travel) and it does not establish the framework. But most importantly the strategy does not provide details of the way forward to reach a zero net carbon transport system by 2030.

Climate change is just one of the priorities guiding the published strategy. In a climate emergency it should be at its core.

To help guide planning, there should be contextual information as to why climate change is so crucial, especially in the transport sector. The strategy should refer to New Zealand [official targets](#):

- to reduce greenhouse gas emissions to 30% below 2005 levels by 2030
- an unconditional target to reduce our emissions to 5% below 1990 levels by 2020
- a conditional target to reduce New Zealand's emissions to between 10% and 20% below our 1990 levels by 2020
- to reduce our emissions to 50% below 1990 levels by 2050.

The following graph is drawn from the Productivity Commissions 2018 Low Carbon Economy report. It shows various net emissions reduction pathways calculated two years ago.¹ Added is an updated line from the latest IPCC report showing the even stronger reductions needed by 2030 to keep with 1.5 degrees warming. We need **significant** year on year reductions in carbon emissions.



The KCDC website signalling the consultation process states the strategy:

...does not detail specific projects or investments, but sets the overarching vision.

The Asset Management Plan and Long Term Plan (to be consulted on in 2021) provide details for proposed transport investment in Kāpiti.

This process is too slow. 2030 is now less than 10 years away. New Zealand will have a substantial challenge in drastically reducing emissions in many areas, including agriculture. As the [1.5 project](#) points out that to reach these overall targets **we must largely decarbonise road transport by 2030.**

Next year the Climate Commission will set targets for each sector. These are likely to call for big reductions in transport related emissions so KCDC should be positioning itself now.

Land based transport is an area where we largely know how to decarbonise. We have the technology. With the right leadership driving it, we see examples of significant mode shift overseas. Now we need the political will locally.

¹ New Zealand Productivity Commission. (2018). Low-emissions economy: Final report. Available from www.productivity.govt.nz/low-emissions

The vision

The current KCDC transport strategy vision is (pg 23)

“To achieve an attractive, well connected, responsive, safe, and environmentally friendly transport system that enables mode choice. Whilst all outcomes are linked to key challenges.”

This should be replaced with something that puts climate change and the zero carbon transport goals at the centre. We suggest it should be amended to:

“By 2030 our transport system will be safe, healthy, decarbonised and accessible to all.”

More detailed comments

The transport strategy needs to clearly lay out the local climate challenge, how transport contributes to emissions and, most importantly, how this could be fixed within Kāpiti.

There are good data available and this should be set out to guide decisions. A key information source is a study carried out for Greater Wellington Regional Council. This set out estimated greenhouse gas emissions for [Kāpiti](#).

“The highest emitting sector, transport, produced 199,773 tCO₂e in 2019 (56.9% of Kāpiti’s gross total emissions). Most of these emissions are from petrol and diesel use within the District, which produced a total of 147,940 tCO₂e (74% of the sector’s emissions and 42% of Kāpiti Coast District’s total gross emissions). The rest of the transport emissions are produced by the District’s share of the emissions associated with air, rail, LPG and Bus Electricity and port activities totalling 51,833 tCO₂e (26% of the sector’s total emissions and 15% of the District’s total gross emissions).

Emissions from transport increased in number, and as a proportion of total gross emissions between 2001 and 2019, from 142,714 tCO₂e (45% of total gross emissions) to 199,773 tCO₂e (57% of total gross emissions), an increase of 40% (the population increased by 30% in this period)

Road transport is the highest emitting activity within the transport sector. Road emissions increased overall by 48% between the start and end of the measurement period. Total petrol emissions increased by 28%, from 70,764 tCO₂e in 2001 to 90,302 tCO₂e in 2019 and diesel emissions rose by 118% (31,199 tCO₂e), from 26,439 tCO₂e to 57,638 tCO₂e. As the vehicle kilometres travelled within the district grew 12% over this time it likely the increased road traffic in the district stimulated this rise in emissions.

Air travel emissions jumped by 41%, and marine transport emissions also trended upwards by 18%”

This report sets out the emissions in table form.

Summary of Kāpiti’s gross emissions in 2019 by the transport sector

	tCO2e	% Gross	% Sector
Petrol	90,302	25.7%	45.2%
Diesel	57,638	16.4%	28.9%
Rail	233	0.1%	0.1%
Bus (electric)	11	0.0%	0.0%
Jet kerosene	31,019	8.8%	15.5%
Av gas	59	0.0%	0.0%
Marine diesel	16,708	4.8%	8.4%
Light fuel oil	3,529	1.0%	1.8%
LPG	275	0.1%	0.1%
Total	199,773	56.9%	100.0%

Source: <https://www.gw.govt.nz/research-shows-fall-in-greenhouse-gases-over-two-decades-but-a-worrying-rise-in-transport-emissions/>

It is clear from the data that private car use is the key contributor to transport emissions. But aviation is also significant.

Kāpiti Coast District Council need to explore a range of options for reducing emissions by private vehicles. Ideally this would require a modelling exercise. The [Auckland modelling](#) shows a wide range of measures are needed, including improving public transport and electrification of private cars. But by far the most effective change is a reduction in driving private vehicles. In order for people to retain mobility, this requires a major transport mode shift.

The Kāpiti Coast 2050 emissions calculator shows aggressive measures on transport (including reducing travel demand, increasing vehicle occupancy, mode shift and electrification) can reduce energy demand for transport by 50% by 2030 and 85% by 2050. These are shown in Figure 1 and Figure 2 below. Figure one shows business as usual, where transport energy use continues to grow. Figure 2 is where all the transport emissions abatement measures available within the calculator are set to maximum.

See: <https://Kāpiti.coast.2050calculator.nz/calculator/energy-demand> (change area to Kāpiti Coast using the drop down selector on the upper left).



Figure 1: Kapiti Coast district energy use projection to 2050 under a BAU scenario.



Figure 2: Kapiti Coast district energy use projection to 2050 with transport emissions abatement measures set to maximum.

Our ideas for reducing emissions

In order to reduce transport emissions, we suggest the following measures:

Transport reduction emissions will come about through actions of government and individuals. However local authorities will also have to play a key part.

KCDC needs to support the transition to EVs

EVs cover electric cars, trucks, bikes and micro-mobility devices such as scooters. KCDC can provide leadership by converting its own fleet or vehicles. It can also require contractors to convert to EV use. But the vast number of vehicles are owned by private businesses and individuals. Currently the uptake of electric cars is too slow and hopefully the government will put incentives in place to speed this up. But KCDC can help by continuing to expand the charging network. This includes slow chargers at railway station and shopping mall car parks.

The uptake of electric bikes has been strong in New Zealand and seems especially so in Kāpiti. **The bike infrastructure needs to be vastly expanded and ordinary roads made safer for cycling.** Adding covered bike racks at schools, cafes, supermarkets, railway stations, bus hubs and libraries would be a large step towards encouraging bike use. KCDC should also investigate the installation of some bike charging infrastructure as seen in some [other cities](#).

Council should adopt the recommended strategy and consider implementing the suggested measures in the 'Supporting EVs in the Wellington Region' [Advisory report](#), which it helped commission.

Low carbon transport friendly town planning

Town planning decisions greatly affect the carbon emissions from transport networks. A compact, higher density, urban environment reduces emissions. In Auckland the new [Unitec](#) development shows how more affordable high density housing can be developed.

In many areas of the world the concept of a compact "[20 minute city](#)" is being developed so long car trips are not necessary.

Improvements in urban design support the needed transport modeshift. Ideas for this can be found in an article about [Ghent](#) and one about generally [reducing traffic](#).

More and better cycleways and safer streets for walking and cycling

Kāpiti is relatively flat and could emulate what has taken place in the Netherlands and other European countries. This is helped by the uptake of electric bikes. In the UK London and Birmingham are giving considerable support to cycling. Often the key driver of these changes has been a mayor committed to this mode shift.

Cycling must be safe and must be perceived as being safe – it is key to enticing more people to ride. While the more expensive separated cycleways are needed, it is increasingly recognised lower cost changes can also support safe cycling and walking. This is often referred to as ‘tactical urbanism’. This is now being supported by the government through [NZTA](#).

Better and smarter local bus networks

While shifting to electric buses is important, the whole system needs to be redesigned to be more user friendly. This may involve the adoption of ‘smartbus’ technology.

To encourage bus travel more bus shelters should be built on the many bus stops currently without a shelter. This includes shelters for school buses. The inclusion of wifi and constantly updated information about timetables and time to next bus should be included in key shelters.

In congested areas, such as Kāpiti Road, peak bus lanes and priority traffic lights should be considered.

There should be integrated ticketing with trains

This requires GWRC to also adopt smart cards for train travel. A single, integrated fare system – as already operates in Auckland with their HOP card - should be supported.

In [Auckland](#), young people travel free on buses (and trains) in weekends and public holidays. Such incentives would help make travel for families also more affordable.

Local trains

The frequency and reliability of local trains should be further improved. Trains also need to be able to carry more bikes especially on weekends and holidays. Currently small trains on weekends can only take 3 bikes per train.

Support regional and long distance passenger rail and bus

Double tracking and electrification to Ōtaki (and beyond) needs to be supported.

Along with these improvements, the Capital Connection train should be upgraded and made more frequent.

KCDC should support the re-introduction of a [night train](#) to Auckland. This would link Kāpiti with all the major population centres in the North Island with a very low carbon means of travel.

There also needs to be better bus stops for InterCity buses in Paraparaumu, Waikanae and Ōtaki. Ideally these should be part of railway station complexes to share facilities such as toilets and allow easy connections between bus and train travel.

Do not support the building of new expressways

KCDC has historically supported the expansion of [expressways](#). This is despite new roads not meeting the required cost/benefit [ratios](#).

In a climate crisis, there should be no further expansion of expressways. It is clear expressway building 'induces' new traffic demand and thereby drives up emissions. There needs to be mode shift away from long distance driving. This will not occur if the majority of transport spending continues to be allocated to supporting travel by private car.

Correctly price parking

Parking still an issue: KCDC needs to discourage use of the private car by increasing parking rates and improving access to stations by public transport. This includes building covered bike stands and lockers. A hub for commuters to store bikes, shower and change, as well as buy coffee and breakfast could reduce the need for commuter parking. Commuter hubs in Raumati and Te Horo would allow commuters to bus to and from the railway station at appropriate commuter times.

Support working at home and virtual meetings

The Covid pandemic has shown how virtual meetings and working at home can significantly reduce transport [emissions](#).

These technologies can be supported in various ways. For example, meeting rooms that support such technology could be built into local libraries so public meetings could easily be held using a combination of remote working and face to face contact.

Support high value, low carbon, tourism

While Kāpiti is not a key destination for overseas travel, its tourism offerings should support the call for a shift to low carbon [tourism](#).

An example is the escarpment track. Walkers can reach both ends by low carbon trains. There is also a need for access to Queen Elizabeth Park and Whareroa by train with a weekend stop created.

There should be encouragement for ferry operators to Kāpiti Island to move to electric ferries.

Turn the airport into medium to high density housing

The airport is also part of a town planning change needed. Over the next ten years flying will increase in cost as carbon prices rise and the real environmental impacts of aviation are passed onto passengers. Flying frequency will have to reduce in order to meet New Zealand's, and Kāpiti's, carbon reduction goals. To keep Kāpiti airport operating has in recent years required ratepayer support. [Ratepayer support](#) for a high carbon form of transport has to be unacceptable in a climate emergency

Kāpiti has the opportunity to redevelop the Paraparaumu airport into high and medium density housing. This area is near to shops and transport hubs including existing cycleways. There are already two nearby airports, Wellington and Palmerston North. Instead the additional housing could provide additional rates and help avoid strip developments up the coast that add to transport emissions. Development could be linked to predicted retreat from the coast from rising sea levels.

Final thoughts

While we need to significantly reduce emissions, and to do this quickly, we also need to explore all options for reaching the net zero position.

Kāpiti has much potential for carbon sequestration through tree planting and wetland creation. For example, there is much land on Matai Huka, Queen Elizabeth Park, Whareroa farm. Perkins farm and the Paekākāriki escarpment that could be planted.

Decarbonising transport will depend heavily on drawing on a growing – preferably local - supply of renewable electricity. Kāpiti Coast District Council needs to support the expansion of both solar and wind power on the coast. All schools should have solar panels. There should also be many more solar panels on houses in order to power EVs.