

Future of Transport

Driving climate change action





Summary

Right now, we have a once-in-a-generation opportunity to make healthier, vibrant communities a reality while tackling the climate crisis and rebuilding the economy after the COVID-19 pandemic. We can deliver fast, frequent, clean transport options that put communities on the path to net-zero emissions by 2050.

The Green Party will:

- Sustainably reboot regional economies with a large scale investment in rapid, intercity passenger rail, connecting provincial centres with major cities.
- Invest in urban development by accelerating transformational rapid transit networks in our major cities, including busways, light rail, and commuter rail.
- **3.** Provide safe, separated school and commuter cycling routes with the capacity to be used by thousands of people each day, with a \$1.5 billion Cycle Super Highway fund.
- **4.** Make public transport free for everyone under 18, over 65, and community service card holders; half price for students; and more affordable for everyone else through a nationwide Go Anywhere transport pass.
- **5.** Introduce a target date linked to the date set by the UK, likely to be 2030, at which point only zero emission light vehicles (cars, vans, and utes) would be able to be imported into Aotearoa.
- **6.** Set standards and incentivise heavy freight to transition to zero emissions vehicles and be 100% powered by renewable energy by 2050.

Cars and trucks can be really useful in some circumstances, but for too long they have been the exclusive focus of transport investment and planning. Successive governments have spent billions on expensive motorways while underinvesting in low-carbon buses, trains, and bike paths. This has led to more traffic congestion and made transport



become the fastest growing source of climate damaging pollution for Aotearoa.

Since 1990, road vehicle emissions have risen by over 80 percent and now make up about 20 percent of all greenhouse gas emissions.¹ It is estimated that to ensure a stable planet we need to halve fossil fuel use by 2030 and eliminate fossil fuels completely by 2050.² This means changing how we travel in and between our towns and cities.

Today, many of our streets are so crowded with fast moving cars that parents don't feel safe letting their children walk or bike to school. Underinvestment in rail and bus networks means too often there simply isn't a bus to take us where we need to go.

Kiwis have shown that if the Government makes buses and trains fast and frequent, and bike paths safe, more people will choose them rather than driving where they need to go.

The Green Party is proposing major investments to deliver inter-city rapid passenger rail services and connect provincial centres with our biggest cities. Fast, inter-city rail will help reboot both urban and regional economies, while bringing our regions closer together and making it easier for more people to easily connect with work, business, friends, and families.

The cost of transport is a key factor limiting many Kiwis from participating in work, education, and social activity. To make public transport more affordable and attractive, the Green Party will introduce a nationwide Go Anywhere transport pass. This will allow people to more easily access public transport, electric car share, and e-bikes, making it easier to get places without a private car.

We will continue to need to drive for some trips, so the Green Party will make electric cars more affordable and practical for Kiwis. Vehicles powered by clean energy will help the climate and the cost of living.

Our Future of Transport plan will make Aotearoa more sustainable and a better place to live. By investing in an infrastructure stimulus package fit for the 21st Century, we can put climate change and liveability front and centre in the post-COVID economic recovery.



Transforming transport

Transport investment will be a major part of the post-COVID-19 economic recovery.

What that investment looks like will determine whether Aotearoa plays its part halting the climate crisis or makes the problem worse. It will determine whether our cities, towns, and regions become more or less liveable.

Simply getting about our cities and country should not require compromising our climate, our personal safety, or our health. However, decades of a near exclusive focus on moving people and goods by car and by truck have done just that. Transport emissions continue to rise, driven primarily by more people using petrol and diesel cars as their main form of transport.

New Zealanders have shown that if buses and trains are fast and frequent, and bike paths are safe, people will choose to use them. For example, bus travel across the Auckland harbour has grown by 58 percent thanks to the Northern Busway.³

The next Government has a responsibility to make reducing transport emissions the easy choice. But that requires change from business as usual investments in four and six lane urban motorways. It requires that nearly all new major transport investments focus on making it easier for people to hop on a bus, train, ferry, or bike. It requires that more priority on existing streets is given to the movement of buses, and to people walking and cycling. It requires the Green Party's transport plan.

Change has begun

In Government, the Green Party has driven a major increase in investment towards low carbon transport and better urban design including:

 Reallocating billions of dollars in the transport budget away from new urban motorways to new public transport, safe cycling, and road safety and maintenance.



- Increasing the investment in cycling threefold compared to the previous government, enabling us to progress transformational projects like SkyPath in Auckland, the Hutt to City coastal path in Wellington, and six major cycle routes in Christchurch.
- Providing over 20,000 more school students with Bikes in Schools facilities to learn to ride.
- Delivering a bulk purchase e-bike discount to public sector workers across NZ.
- Securing Government commitments to deliver a rapid transit line from the Wellington Railway station to Newtown and the airport, and light rail between downtown Auckland and Māngere.
- Securing investment to fast-track work on the Auckland Eastern busway and Puhinui to airport busway.
- Continuing investment in rail track upgrades in Auckland and Wellington to enable more regional services to be added and improve reliability.
- Beginning work extending electric rail from Papakura to Pukekohe.
- Co-investing with Auckland Council to bring 15 new electric trains to Auckland.
- Helping secure funding to refurbish electric North Island freight trains
- Significantly increasing the annual investment in targeted road safety upgrades like crash barriers and intersection upgrades, compared to the last government.
- Progressing work towards a daily Hamilton to Auckland passenger rail service, planned to open in February 2021.

While this is a great start, we need to go further and faster to create a transport system where the easy choice for more people is to jump on a train, bus, or bike or hop in an electric car for everyday trips.



Building low emissions transport infrastructure

The Greens will deliver a transformational infrastructure stimulus package fit for the 21st Century that has economic recovery and climate change front and centre.

After the Global Financial Crisis, the National Government's economic stimulus was a \$12 billion dollar motorway programme. The Green Party has a better plan. Cleaner, efficient transport is essential for more liveable communities and to reduce climate pollution. It also creates more jobs, which is important in the post-COVID-19 economic environment. Cycling and walking projects typically create more jobs per dollar invested, than motorways. This is because much of the cost of motorways is simply buying land and using large machines. Rail and light rail also usually create more jobs than comparable road projects.⁴

Rapid rail to the regions

As part of the post-COVID-19 economic recovery, we are proposing a major investment to deliver inter-city rapid passenger rail services, connecting provincial centres with our biggest cities.

Fast, inter-city rail will help reboot both urban and regional economies while decarbonising some of our busiest transport routes. It will bring our regions closer together, making it possible for more people to find affordable housing while still being able to easily connect with work, business, friends, and families in the cities.

Aotearoa's regional road network needs better maintenance and safety upgrades, which can be done at a reasonable cost. Building new, expensive motorways would create more problems than they solve, including contributing to urban sprawl and locking in carbon emissions. New motorways can worsen traffic congestion as more cars arrive in cities. Time spent driving is unproductive and can be stressful. By contrast, inter-city trains help eliminate congestion, cut emissions, speed up travel, and allow people to be productive or relax on their commute.



Rapid rail will be similar to high quality inter-regional European services. Trains will be able to travel up to 160km/h, making journey times by rail significantly faster and more reliable than driving.

This programme of investment will be rolled out in two stages.

Stage one: 2021-2027

The first stage of investment will be focused on new or enhanced passenger rail services, running every two hours, with hourly services at peak times on shorter journeys:

- Wellington and Palmerston North, via Ōtaki and Levin
- Wellington and Masterton
- Auckland and Hamilton
- Hamilton and Tauranga
- Christchurch and Ashburton
- Christchurch and Rangiora
- Auckland and Wellington (night train only, once a day in each direction)

Stage one infrastructure improvements will enable services to travel up to 110km/h:

- Electrification of the rail lines to provide fast, zero-emission services.
- Procurement of new electric trains.
- Targeted track upgrades to speed up travel times (i.e. double tracking, passing loops, realignments, and re-signalling).

Stage two: 2027-2035

Train journeys to more distant cities like Napier and Dunedin begin to compete with driving once electrification and track realignments have been completed on the periphery of the main cities. Faster travel on these sections of track reduce the overall travel time to more distant towns and cities, making train travel competitive with driving.

The second stage of investment will involve:

 Major, targeted track realignments to enable speeds up to 160km/h on the lines identified in stage one (with the exception of the Auckland to Wellington night train).



- Extending electrification and at least twice-daily electric passenger rail services to slightly more distant provincial centres including:
 - o Whangārei
 - o Rotorua (including reinstatement of the line)
 - o Timaru, and later, Dunedin
 - o Whanganui.
- Extending daily passenger services using hybrid electric or hydrogen trains to:
 - o The Bay of Islands
 - o Whakatāne
 - o New Plymouth
 - o Napier
 - o Gisborne (including reinstatement of the line)
 - o Dunedin
 - o Picton.





Rapid transit for sustainable cities

Creating a pipeline of large-scale urban development projects will support economic development in our major centres hit hard by COVID-19 lockdowns.

But we should not just be building infrastructure for infrastructure's sake. These projects need to also put our cities on a pathway to zero emission transport, while making it easier to get around, reducing traffic, and creating safer people-friendly streets.

The Green Party in Government will invest an additional \$6.5 billion over the next decade to expand rapid public transport systems in our major cities.

Rapid public transport means a train or bus every 10 minutes or less at peak times. It means the service has its own right of way and is able to by-pass traffic congestion and consistently be on time. Separated busways and raised platforms at bus stops don't just make bus trips more convenient and quicker, but can be more accessible for people with mobility issues too.

In Government, The Green Party has have secured funding for major new investments in fast, frequent public transport, including:

- Electrifying rail from Auckland city to Pukekohe.
- New electric trains for Auckland.
- A new rapid bus service from Auckland Airport to a new interchange at the Puhinui rail station.
- Completing Auckland's Eastern Busway and extending the Northern Busway.
- Rapid transit in Wellington.
- A new commuter train between Hamilton and Auckland.

But even with these major improvements it is still hard to get about by public transport. For example, if you live in the north west of Auckland, your bus sits in congested traffic on the motorway with no fast right of way. In Wellington, rapid transit ends at the northern edge of the CBD and the city's bus system is slow and congested. In Christchurch, Hamilton, and Tauranga, public transport is not prioritised and it is almost always much slower than driving.



Auckland public transport

Auckland has shown that if we invest in fast, frequent public transport people will use it. Following improvements, Aucklanders' use of rail and the Northern Busway has quadrupled since 2010.⁵ However, Auckland is still too hard to get around and parts of the city lack reliable alternatives to driving.

The recent disruption on the Auckland Harbour Bridge shows the problem with prioritising motorways for private cars. A congestion-free busway along the North Western Motorway and State Highway 18 could have allowed thousands of commuters to by-pass the delays, freeing up space for freight and people needing to drive.

Improving Auckland's transport network is a huge task requiring a staged approach. We can make quick changes now while work starts on longer-term projects.

Phase One: better buses for Auckland

The Green Party will fast-track bus priority measures on rapid transit routes. These will deliver more frequent and reliable bus services that by-pass traffic congestion for most or all of the route.

This can be completed in the next three years. Many bus priority and rapid transit routes will be built to allow upgrades to light rail in the future.

Routes will include:

- Māngere to Mount Eden and the central city.
- The North Western Motorway.
- Henderson to Te Atatu, Westgate, Hobsonville, and Constellation Drive.
- Botany to the Airport.
- Cross town 1 Flat Bush to Onehunga and New Lynn.
- Cross town 2 Howick, Panmure, Ellerslie, and Mount Albert.

Phase Two: light rail for Auckland

Phase Two will transform Auckland's transport network with light rail. Projects will include:



- Modern, accessible, street-level light rail down Dominion Road to Māngere and the airport. This will take the form originally proposed by Auckland Transport, but improved to enable trains every four minutes at peak times, with capacity to carry 21,600 people an hour, reaching the airport from the city centre in 40 minutes.
- Light rail from the city centre to Westgate, built at the same time as the Dominion Road/Māngere/airport route. Choosing a cost effective, street-level option for the Dominion Road/ Māngere/airport light rail rather than an expensive "metro" design means we can build light rail to West Auckland earlier.
- A new light rail tunnel under the Waitemata Harbour, from the city centre to Takapuna and Albany, with construction beginning before 2030. This will carry 16,000 people during morning peak time, and be cheaper and less-polluting than a new harbour crossing for private vehicles.
- Bus rapid transit from Botany through Flat Bush, Manukau, and to the Airport.

More detailed information about our plans for Auckland, including cost information, can be found in the Green Party's <u>Auckland's Transport</u> <u>Future plan</u>.

Wellington public transport

Wellington is a compact city, which helps makes it an attractive place to live. Space-efficient transport like buses, walking, and cycling make sense, yet Wellington is still dominated by cars. It is unnecessarily hard to get around by public transport, on foot, by bike, and even by car.

Despite recent investments in public transport and cycling, most additional transport spending in the last decade has just expanded motorways north of Wellington. In the short-term this decreases drive times, but as more people are encouraged to commute between northern suburbs and the city to work, traffic will build, adding to congestion and pollution.



Climate pollution from transport has grown 8 percent across the Wellington region since 2001, driven mostly by growth in the northern suburbs and Kāpiti Coast. Meanwhile, Wellington City Council has declared a climate emergency and wants to cut emissions by 43 percent within ten years.⁶ Wellington Regional Council has also declared a climate emergency.

Let's Get Wellington Moving

The Green Party supports the \$6.4 billion Let's Get Wellington Moving (LGWM) plan, including a massive upgrade to Wellington's public transport, walking, and cycling infrastructure. Some LGWM projects are still undergoing due diligence. The Green Party wants LGWM public transport projects prioritised, "rapid transit" to be light rail, not buses, and cheaper alternatives to urban motorways considered.

Light rail in Wellington

Light rail will provide a faster travel option between the city centre and southern/eastern suburbs, and enable more housing in these areas in coming decades. It will take buses and cars off inner-city streets, creating space for people and cutting noise and pollution.

Light rail from the Railway Station to Newtown should be the first major project delivered by LGWM. We expect the city to Newtown section, where the most immediate housing growth is expected, could be completed by 2027. Light rail could then extend to Kilbirnie and the airport/Miramar.

We also support further investigation of extending light rail to Island Bay in the south, and making the Melling rail line into light rail extending through Lower Hutt to connect with the Hutt rail line.

Wellington bus priority lanes

Wellington's Bus Priority Action Plan could shave 15 minutes off the average bus trip and dramatically improve reliability. The Green Party will fast-track the Bus Priority Action Plan. Priority routes will include Brooklyn/Kingston, Karori, Kelburn, Newtown, Kibirnie/Lyall Bay, Miramar, and Johnsonville. We will also add an additional bus priority route between Petone, Lower Hutt, Stokes Valley, and Upper Hutt.

Faster, more frequent commuter rail for the Wellington Region



Our Regional Rapid Rail Plan will create daily passenger services to Wairarapa, Palmerston North (including Ōtaki and Levin), and eventually Whanganui. These services will also benefit people living along the Kāpiti and Hutt lines with more frequent trains.

Existing planned track upgrades like double-tracking between Trentham and Upper Hutt and Porirua and Pukerua Bay will also speed up commuter rail services.

Doubling the tunnels to Wellington's eastern suburbs

LGWM proposes a new car tunnel through Mt Victoria and road widening either side, requiring the demolition of houses in Hataitai and Mt Victoria. Due diligence is continuing on this project and we expect further analysis will confirm it offers few benefits. In this case, the Green Party will prioritise an alternative "double the tunnel" plan to the eastern suburbs.

Most people commuting from the eastern suburbs use public transport, walk, or cycle.⁷ The Green Party's plan to double the tunnel prioritises:

- A new dedicated walking and cycling tunnel parallel to the existing Mt Victoria car tunnel. Currently, there is no short, safe cycling route.
- A new dedicated light rail tunnel near the Wellington Zoo, connecting the eastern suburbs via Newtown to the city and Railway Station. According to the NZTA, light rail could take just 20 minutes between the airport and the Railway Station, compared to a mere 30-60 second saving for car trips between the airport and CBD if a new road tunnel is built. It could accommodate 4,700 more people on public transport.⁸

More detailed information about our plans for Wellington, including cost information, can be found in the Green Party's <u>Wellington's Transport Future plan</u>.

Christchurch public transport

The Green Party will prioritise a core rapid transit network for Christchurch. This will leverage the existing rail network and integrate with our planned Regional Rapid Rail services.



Christchurch commuter rail

The Green Party will invest in a frequent commuter rail service connecting Rangiora, the city, and Rolleston. This will integrate with services to Ashburton, and then to Timaru and Dunedin in the south, and to Picton in the north.

This will involve electrifying the rail line between Rangiora, Addington, and Ashburton and targeted track upgrades allowing trains to operate at up to 110 km/h. In the longer term, the line to Ashburton will be double-tracked and able to operate up to 160 km/h.

Travelling between Rangiora and the city would take 27 minutes by train, compared to an average commute of 44 minutes by car.⁹

Christchurch bus rapid transit: CBD-University-Airport line

Commuter rail passengers will be able to transfer onto a new bus rapid transit line connecting the rail line to the CBD, University, and Airport.

This service will run every five minutes and take 25 minutes between the airport and CBD. Buses would have designated right of ways on the street, to bypass congestion. Passengers would enjoy raised platform bus stations. The stations and bus right of way designs would enable an upgrade to light rail in the future.

More detailed information about our plans for Christchurch, including cost information, can be found in the Green Party's <u>Christchurch's Transport Future plan</u>.

Other urban centres

Rapid transit and better walking and cycling infrastructure is also critical for fast growing cities like Hamilton, Tauranga, and Queenstown, as well as established centres like Dunedin and Palmerston North.

More people are choosing to live in these cities. That requires more efficient public transport, walking, and cycling infrastructure to avoid adding to traffic congestion and pollution. Rapid transit can also support more housing development close to urban centres, which prevents growing cities from sprawling out and taking up productive land.



Smaller, growing centres need to plan now for more compact urban development supported by sustainable transport. Hamilton, Tauranga, and Queenstown have taken great strides in this direction.

The Green Party will work with local councils and push for investment in rapid transit and cycling to support sustainable development in these centres. Hamilton City's 20 Minute City programme is a good example of the type of investment that should be prioritised. This programme would deliver an extensive network of safe cycleways and fast, frequent bus routes across the city to connect people to education, work, and recreation facilities within a 20 minute trip.¹⁰

Cycling Super Highways

In Government, the Green Party will establish a contestable \$1.5 billion Cycle Super Highway fund for the major cities. This fund will support councils to build high quality separated paths for people biking, scooting, and walking, directly linking outer suburbs to the city centre.

Cycle Super Highways will be at least 2 to 5 meters wide, fully separated from car traffic, and provide direct routes between suburbs and city centres. Like major urban motorways, projects will be 100 percent funded by central government to ensure fast delivery and free up council funding for smaller cycleways.

The aim of these projects is to enable cycling to become a form of mass transit, supporting large numbers of daily users travelling by bike, e-bike, and e-scooter.

Councils will be eligible to receive funding to build a Cycle Super Highway if the route is:

- Continuous, linking several outer suburbs to the centre of a city.
- Fully protected, either through its own off-road right of way or protected from car traffic on a road.
- Direct, connecting people to where they need to go along efficient routes, not dog-legging through the backs of suburbs.
- Able to start construction within the next three years and be complete within 24 months of construction starting.
- Designed in a way that provides for cycling and walking to be separated.



This will cover the cost of specific cycleways that the Green Party is proposing in the main cities, as well as additional routes in cities like Hamilton and Tauranga.

Councils will be responsible for identifying routes for Cycle Super Highways and Waka Kotahi, the NZ Transport Agency, will assess whether criteria is met. Funding will be available for Cycle Super Highways that use local roads or state highway corridors. Councils would still be expected to co-invest in cycle improvements on local roads to improve connections to Cycle Super Highways.

This funding would sit atop the \$360 million already allocated by the government to deliver the Northern Pathway in Auckland and the \$220 million for 10 "shovel ready" cycleway projects funded from the COVID-19 Economic Recovery Fund. Many of these shovel-ready projects could link to or form part of future Cycle Super Highways, like Te Whau Pathway in Auckland, the Eastern Bays shared path in Wellington, and the South Express and Nor West Arc projects in Christchurch.



Walking and cycling connections

The Cycle Super Highways fund will deliver transformational, high capacity routes for people cycling, walking, and using micro mobility (escooters, e-bikes, e-skateboards) to get around their cities. However, the ability for people to be able to walk or bike down the road to the shops, to school, or to visit friends locally is just as important to create more liveable communities.

Currently, more than half of all children under 12 and a third of high school aged students are driven to school each day. ¹¹ Because our streets prioritise car traffic, many parents understandably don't feel safe letting their kids walk or bike to school or to visit friends.

Changing this trend is entirely possible. We saw during the COVID-19 lockdown that when streets felt safe, huge numbers of people, particularly kids, began walking and cycling in their neighbourhoods. To preserve this sense of safety and freedom to walk and cycle we must prioritise the safety of people on residential streets over the speed of through traffic. On arterial roads we need to provide more safe pedestrian crossings and protected bike lanes to connect homes to shops and schools.

Approximately \$420 million will be set aside in the National Land Transport Fund (NLTF) over the next three years to deliver these types of projects, co-funded with councils. This is funding freed up in the NLTF by the creation of the Cycle Super Highway Fund.

Funding will be available for councils to make local street safety improvements, such as raised pedestrian crossings on urban side-streets, and to implement active transport plans created in partnership with school communities. Councils will also be able to use this funding to fix "missing links" in street accessibility, such as areas where there is no safe crossing close to a bus stop, and to ensure street and pavement upgrades are suitable for people using mobility assistance devices.



Easy, affordable transport

Convenient, affordable, and accessible transport enables people to participate in work, education, and social activities.

The average household spends \$216 a week on transport. Since 2013, this has increased almost \$60 per week and is now 16 percent of an average household's expenses. Petrol and purchases of vehicles are the main commuter transport costs for households. At the same time, there are barriers to shifting to public transport because paying for public transport in Aotearoa is often complex and inconvenient, compared to systems found overseas.

Alongside improvements to services, reducing the cost of public transport is a key part of increasing public transport use. For example, the OECD has recommended that to meet Auckland Council's 2050 climate target, the cost of public transport should reduce by 80%.¹³

The Go Anywhere Transport Card

To make public transport more affordable and convenient, the Green Party will introduce a nationwide Go Anywhere transport card. A Go Anywhere card would be available to everyone, delivering a mixture of universal and targeted benefits.

With convenient, affordable access to all modes of public transport, car share, bike hire, and e-scooters, the Go Anywhere card will enable more people to choose not to own a car. This will have significant public benefits from reduced climate pollution, less traffic, and safer streets.

The Go Anywhere transport card will:

- Provide access to all public transport services (bus, train, and commuter ferry) in every city in Aotearoa.
- Have a maximum limit on how much a person can be charged for public transport in one week. For example, people could pay for their first eight journeys a week, after which the rest are free.



- Have targeted fare reductions, including:
 - Free public transport for people over the age of 65, under the age of 18, and community service card holders.
 - o 50 percent off fares for tertiary students and apprentices.
- Include automatic access to participating car share programmes and micro-mobility schemes such as e-bikes and e-scooters. The cost of these would depend on the service, and would not count towards the weekly maximum cost limit for public transport.

Fare reductions will be focused on groups of people where there is evidence the cost of transport acts as a barrier to participation in activities that are important to work, education, and health.

Free public transport for everyone under 18 will reduce costs for families and relieve parents from having to drive children around. It will also help to reduce peak time traffic congestion associated with driving children to and from school, and show young people how public transport can unlock freedom and independence.

Students and apprentices will receive half price public transport, helping reduce their cost of living especially while rising rents force many students to live further away from their places of study.

Free public transport for people with Community Services Cards will ensure people with low incomes have the freedom to enjoy their cities, see family and friends, and travel to work.

People over 65 will retain the current "Gold Card" free public transport benefits, which will be incorporated into the Go Anywhere card.

The Go Anywhere card will eventually be accepted by all regular public transport services operating nationwide, providing a level of convenience that is common overseas. This will require accelerating upgrades to public transport ticketing systems to enable nationwide integration and new payment channels, such as using mobile phones. This will make it easier for people to try public transport.

Fare discounts will apply to public transport services within an urban boundary, not inter-city bus and rail services or the Interislander ferries.



Transforming our vehicles

Aotearoa has an opportunity to power all our vehicles from clean, local energy sources. With just ten years to halve carbon emissions in order to stay within 1.5C of global warming, we need to act urgently to transition to zero emissions vehicles.

Public transport, walking, and cycling is an essential part of the solution to reducing climate pollution from transport. But many people will still choose to drive. Public transport is not suitable for some trips and not available in some parts of Aotearoa. We need cleaner cars too.

Aotearoa spends \$8 billion every year importing fuel to run vehicles, and the small amount of oil we extract here isn't suitable for most vehicles. Running our vehicles on local renewable electricity, green hydrogen, and biofuels is good for the economy and the environment.

The Green Party has a plan to transition our entire vehicle fleet to be powered by clean, local energy by 2050, including all light vehicles like cars and heavy vehicles like trucks.

The light vehicle transition plan

Aotearoa is uniquely well positioned to transition to electric vehicles (EVs) because of our significant renewable energy generation capacity. Currently, electricity generation in Aotearoa is more than 80% renewable. This will increase with the Green Party's <u>Clean Energy Plan</u> that sets out a pathway to 100% renewable electricity by 2030.

Despite this enviable advantage, the cars, vans, and utes most of us drive every day continue to pump out increasing amounts of climate-damaging pollution each year. A key reason for this is that we are one of only three developed countries with no standards requiring new vehicles to become progressively more fuel efficient each year (i.e. produce fewer greenhouse gas emissions). This unique lack of regulation has led to Aotearoa becoming a dumping ground for large, gas guzzling vehicles that can't be sold elsewhere in the world.



For example, the popular Hyundai Sante Fe family-size SUV sold in the UK uses 22 percent less fuel per kilometre than the version Hyundai sells in Aotearoa.¹⁴ And lots of other brands of cars are similar.

The Green Party has a plan to leverage our renewable energy and power the transition of our vehicle fleet to electric vehicles:

- 1. Introduce a Clean Car Standard to ensure fuel efficient cars, vans, and utes get imported into Aotearoa.
- 2. Reduce the cost of electric, hybrid, and fuel efficient light vehicles with a Clean Car Discount.
- 3. Introduce a target date linked to the date set by the UK, likely to be 2030, at which point only zero emission light vehicles (cars, vans, and utes) would be able to be imported into Aotearoa.
- 4. Require new large buildings that include parking to include EV chargers, and continue current financial support for roadside EV chargers.

Clean Car Standard

Fuel consumption has a direct relationship with the amount of carbon emissions a vehicle emits. By regulating to improve fuel efficiency, importers will be encouraged to import a wider variety of electric, hybrid, and ultra-fuel efficient vehicle models into Aotearoa.

The Clean Car Standard will require the average fuel efficiency of all imported vehicles to progressively improve, year-on-year, until the import of internal combustion engine light vehicles is fully phased out in 2030. It will only apply to vehicles when they are registered in Aotearoa for the first time. This means the sale of second hand vehicles already registered in Aotearoa will not be affected.

This will benefit all types of car buyers including people who rely on vans and utes for work. Importers will be encouraged to bring in more fuel efficient van models that are currently not sold in Aotearoa, like the Toyota Proace (sold in Europe) which uses up to a third less fuel than the Toyota Hiace sold here. Hybrid utes are entering the global market and Toyota has announced it expects to sell hybrid Hilux utes in



Aotearoa in 2021.¹⁶ The Clean Car Standard will encourage Kiwi importers to make these options available and affordable.

Clean Car Discount

A Clean Car Discount aims to support both vehicle buyers and importers by reducing the upfront cost of electric, hybrid, and ultra-low emission vehicles. This discount will stimulate demand for new low emission vehicles, which will support importers to meet the fuel efficiency targets set by the Clean Car Standard.

Discounts will be set according to the amount of pollution a vehicle creates, not its sale price. They will range from up to \$12,000 off the price of a new fully electric vehicle and several thousand dollars off the price of a fuel efficient hybrid vehicle.

Discounts for low emission vehicles will be paid for by introducing oneoff fees of up to \$5000 on the highest emitting vehicles when they are imported and registered for the first time. Fees will be concentrated on the highest emission vehicles, mostly luxury sedans, SUVs, and some utes.

Both discounts and fees will be lower for used imports. This is because used imports will be likely to have a shorter life on our roads and therefore have less impact on or benefit to the climate compared to new vehicles.

Unlike the Government's 2018 proposal, the Green Party will set the fees in a way that initially exempts the most efficient four wheel drive utes from any fee, because we recognise that until cleaner options are developed, some people still need these vehicles for work.

The Clean Car Discount will only apply to vehicles when they are registered in Aotearoa for the first time. This means the sale of second hand vehicles already registered in Aotearoa will not be affected.

Zero emission imported cars by 2030

Establishing a target date for all imported cars to be zero emissions is an approach used around the world to signal a clear pathway to a zero emission vehicle fleet. It helps give vehicle suppliers, automotive



services like mechanics, and electricity network companies, the certainty they need to adapt their businesses.

In Aotearoa, the average car has a lifetime of almost 20 years. That means a new vehicle purchased today will likely stay on the road until 2040. In order to achieve the Zero Carbon Act target of a zero carbon economy by 2050, we need to ensure we are only importing zero emission vehicles well before then. This is likely to mean only electric vehicles, unless hydrogen or other technologies for light vehicles evolve.

In Government, the Green Party will introduce a target date linked to the date set by the UK, likely to be 2030, at which point only zero emission light vehicles (cars, vans, and utes) would be able to be imported into Aotearoa.

We will regularly review the 2030 date for Aotearoa to ensure we are staying in line with major vehicle markets, so we have a good range of vehicles available and don't become a dumping ground for polluting vehicles that other countries refuse to sell. The date for Aotearoa should be at least on par with the target date set by the UK Government, which is also a major importer of right hand drive vehicles.

Many countries, like France, Ireland, Norway, and Canada, have set dates at which all new light vehicles will need to be zero emissions. California has recently announced it will not allow new fossil fuel car sales from 2035.

More EV chargers

To be able to transition to electric vehicles, public access to EV charging will need to keep increasing. While many EV owners charge at home overnight, people should also be able to charge their vehicle wherever they go. With the Green Party in Government, we have seen significant investment in public EV chargers, including in malls, holiday parks, and on the Interislander ferries.

The Green Party will amend the Building Code to require new medium and large buildings with parking to have EV chargers. This will include



apartments, offices, entertainment facilities, supermarkets, and carpark buildings.

We will also continue government financial support for public EV chargers, through EECA's Low Emission Vehicles Contestable Fund, until a commercially viable nationwide network of public chargers exists.

The heavy vehicle transition plan

The Green Party's ambition is that all heavy road freight is moved using domestically produced, low-emissions fuels by 2050. This is likely to involve biofuels, green hydrogen, electric trucks, and shifting some freight to rail and coastal shipping. All of these offer opportunities to build new domestic industries that will provide high-paying, secure jobs in Aotearoa.

With the Green Party in Government, a \$20 million investment has started to establish Aotearoa's first nationwide network of hydrogen fuelling stations for trucks and buses. This initial network will provide coverage for about 95% of heavy freight routes in the North Island and 82% of the South Island. We are also seeing more electric trucks in Aotearoa.

Part of the solution is moving some road freight to rail and coastal shipping, which produce significantly less emissions per tonne of freight per kilometre. Moving freight to rail will be supported by the upgrades to the regional rail network we are proposing to support passenger rail. The Government Policy Statement on Land Transport 2021/22–2030/31 invests in coastal shipping to support the efficiency and resilience of the coastal shipping sector. Work is underway to allow New Zealand flagged ships to operate on a level playing field with other land-based freight.

The Green Party's plan will go further and faster to reduce emissions from freight:

- Introduce a biofuels mandate to require sustainable, low emissions biofuel to be blended with diesel.
- Expand the current exemption on Road User Charges for electric heavy freight vehicles to include hydrogen trucks, and consider extending this beyond 2025 if necessary.



 Conduct a feasibility study into constructing a clean energy manufacturing plant (for hydrogen and/or biofuels) at Tiwai Point, as part of a wider plan to develop an alternative fuels industry.

Biofuels mandate

Biofuels are a proven low-emissions technology that can be used in existing diesel vehicles and distributed through existing fuel infrastructure. Biofuels are already used in Aotearoa, so increasing their use is a fast way to begin to reduce transport emissions.

The Green Party will introduce a biofuels mandate, requiring commercially available diesel to be blended with 7% biofuel.

Ministry of Transport analysis suggests this could be implemented quickly, with no negative impacts on existing diesel vehicle engines, and would reduce the heavy vehicle fleet's greenhouse gas emissions by 6%.¹⁷ It would also help reduce emissions from diesel cars, utes, and vans in the light vehicle fleet, and from machinery that burns diesel.

The mandate will provide biofuels producers with certainty that demand will grow, which will encourage investment in biofuel processing and manufacturing. Biofuels in Aotearoa are likely to be made from waste products from forestry and food growing and manufacturing, such as tallow. This helps avoid some of the problems in other countries where forests have been cut down and food-growing land converted to biofuel production.

Low emissions fuels are evolving. Over time, it may be necessary to modify the biofuels mandate to encourage a broader range of fuels. California, the EU, and the UK have carbon intensity standards for their fuels. These apply to a wider range of fuels. Once the biofuels mandate has been in place for five years in Aotearoa, we will review it to determine if it should be expanded into a broader carbon intensity standard to include other fuel and energy technologies.



Encouraging green hydrogen trucks

Hydrogen is an emerging clean energy technology that holds promise for heavy freight vehicles, including trucks and trains. When produced using renewable electricity, it is "green" hydrogen.

Electric heavy vehicles are currently exempt from Road User Charges (RUC) until 2025, to encourage their uptake. Green hydrogen-fuelled vehicles can carry freight over a longer distance than electric trucks.

The Green Party will expand the RUC exemption to include hydrogen trucks. This will apply to hydrogen trucks purchased before the end of 2025, which will be exempt from RUC until the end of 2028.

This is a temporary measure intended to help kick-start the transition to low-emissions hydrogen freight transport. In 2024 we will review the exemption and determine whether it needs to continue, or whether the market has become sustainable. This review will occur alongside the review of the biofuels mandate.

It has been estimated that exempting hydrogen from RUC will cost the Crown \$285 million in foregone revenue from now until 2028, depending on how many hydrogen trucks are registered and how far they are driven.¹⁸

Tiwai Point clean energy manufacturing plant

The growth in alternative, clean fuels creates opportunities for domestic production. The Green Party wants all energy and fuel sources to be clean, and domestically produced.

The planned winding down of the aluminium smelter at Tiwai Point means there will be large amounts of electricity in Southland that could be used to produce hydrogen and biofuels. It is possible that the infrastructure can become a way of reducing Aotearoa's emissions, rather than a contributor to emissions through aluminium smelting. This would also create good, high-paying jobs for people in Southland communities.

The Green Party in Government will conduct a feasibility study to assess if and how Tiwai Point could become the site of a major new clean energy manufacturing plant, for hydrogen and/or biofuels.



Funding

New investment

Many of the transport projects the Green Party will prioritise are already earmarked for funding in the National Land Transport Programme, NZ Upgrade, and COVID-19 Response and Recovery Fund (CRRF). However, our programme also includes a number of new projects above and beyond existing planned investment.

Over the next ten years, through to 2030/31, these new projects will require an additional \$13.6 billion in capital expenditure above what is currently planned. Over the same ten year period, our plan also requires an additional \$457 million in operating expenditure and up to \$285 million in foregone revenue from the road user charge exemption for hydrogen heavy vehicles (depending on take-up).

Where official cost estimates are not available for the Green Party's priority projects, we have estimated the cost of projects generously, i.e. we have rounded up to allow for overspend.

Funding reallocation

The Green Party will fund some of our proposed sustainable transport projects by reallocating funding from planned low-value, climate-destabilising motorway projects.

\$1.58 billion over the next ten years will be reallocated from within the National Land Transport Fund (NLTF) by scaling back and deferring spending on low priority urban motorway projects that support urban sprawl. This majority of this reallocation will come from deferring Auckland motorway projects like the \$800 million East West Link.

We will reallocate \$1.73 billion from within the NZ Upgrade programme by:

- Borrowing to part fund the Penlink project, and repaying this via a toll once the road is complete (as per the original ATAP plan).
- Scaling back the planned Mill Road motorway to what was originally agreed in ATAP.
- Progressing Ōtaki to Levin and Whangarei to Marsden Point motorways as more cost effective 2+1 bypasses/highways.



Go Anywhere transport card

We estimate the upfront cost of establishing the Go Anywhere card will be around \$300 million. This reflects the cost of creating a ticketing system integrated across multiple public transport operators and networks. Central and local government have already put resources towards developing such a system. Fare discounts are estimated to cost an additional \$42 million a year.

New funding

After reallocating \$3.3 billion from projects in the National Land Transport Fund and the NZ Upgrade Programme, there is a net new spend of \$10.3 billion for capital expenditure, \$457 million for operating expenditure, and up to \$285 million in lost revenue. This funding can be drawn from the revenue raised, but not currently allocated, from the Green Party's proposed tax changes. The unallocated revenue raised by our proposed asset and income tax changes comfortably covers the average of \$1.104 billion per year proposed new transport spending over the next ten years.

Table 1: New capital expenditure (\$m)

	New capital expenditure 2020-2030/31
Regional rapid rail: Stage One	1,954
Regional rapid rail: Stage Two	3,298
Rapid transit in cities	6,546
Cycle Superhighways (nationwide)	1,500
Go Anywhere transport card (capex)	300
Clean Card Standard implementation (capex)	15
Total	13,613

For more detailed project-by-project cost and funding information, see:

- Regional rail fact sheet at <u>http://www.greens.org.nz/future_of_transport</u>
- Auckland's Transport Future.
- Wellington's Transport Future.
- <u>Christchurch's Transport Future.</u>



Table 2: New operating expenditure (\$m)

	2020/21	2021/22	2022/23	2023/24	Total over
					forecast period
Go Anywhere		42	42	42	126
transport card					
Clean Car			4	4	8
Standard					
Administration					
Tiwai Point	0.95				0.95
feasibility study					
Total	0.95	42	46	46	134.95

Over the next ten years, this new operating expenditures comes to an additional \$457 million. Added to the new capital spending of \$13.613 billion, we have \$14.070 billion additional spending through until 2030/31. This will be paid for through the savings and revenue listed in Table 3.

Table 3: Savings and revenue implications (\$m)

	Savings and Revenue implications 2020-2030/31
National Land Transport Fund –	1,581
scaling back and deferring some	
projects	
NZ Upgrade programme – scaling	1,732
back some projects	
Additional investment can be covered	11,042 (on average \$1.104 billion
by the Green Party's proposed income	per year)
and wealth tax policy changes	
Revenue foregone by Road User	-285
Charge exemption for hydrogen heavy	
vehicles	
Total	14,070



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- 3 Based on an increase in total bus trips across the harbour during the morning peak, from approximately 7000 in 2008 to 11,000 in 2018.
- https://www.nzta.govt.nz/assets/projects/awhc/docs/BRI-1270-awhc-transport-modelling.pdf, page 6.
- ⁴ Based on analysis of US stimulus investment after the Global Financial Crisis. See Smart Growth America's report on 'What we learned from the Stimulus' from January 2010.
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