

Climate Change

- **Phasing out fossil fuels in process heat by preventing installation of new low and medium temperature coal-fired boilers**
- **\$50 million to support regional councils to decarbonise the public transport bus fleet by 2035**
- **Boosting funding across agricultural climate change research programmes**

Climate change is our nuclear free moment. The climate crisis is causing economic, environmental and social disruption – including through extreme weather events, sea level rise, changing weather patterns, increased air pollution, and threats to our biodiversity. We must minimise these impacts on our country and its people. Climate change minimisation, mitigation and adaptation is therefore at the forefront of Labour's decision-making, funding allocation, and reporting. Labour has put in place a comprehensive programme of work to tackle it.

In government, we have taken significant steps to address climate change, including by:

- Passing the Zero Carbon Act
- Establishing the Climate Change Commission
- Fixing the Emissions Trading Scheme
- Investing over \$3.9 billion in public transport over three years
- Ending new offshore oil and gas exploration
- Working with farmers on a world-first agreement to price and reduce agricultural emissions
- Making it easier to install ground-based solar panels
- Investing in research and development
- Allowing councils to take climate change into account when making decisions under the RMA
- Establishing the Just Transitions Unit
- Committing \$150m to address climate change in the Pacific

As we recover from COVID-19, tackling climate change is an opportunity not just to help save our planet but also to create jobs.

Labour's plan for recovery is about investing for the future, with investments that will deliver huge benefits to local businesses, accelerate the economic recovery, and help our climate. Our policies are designed to create a platform for growth in our traditional industries, alongside the creation of new ones.

In setting our path towards a low-carbon economy it is important we bring New Zealanders with us. That is why Labour is committed to ensuring a just transition to sustainable businesses and jobs through our work on climate change. We also have to look after our neighbouring countries in the Pacific region who will be amongst those most affected by climate change. Labour will continue to make this a priority.

If we don't take action on climate change, we will be left behind and lose our reputation for being clean, green and internationally responsible. The United Kingdom's emissions were 44 percent below 1990 levels in 2018 and the European Union's 25 percent below 1990 levels in 2019. In comparison New Zealand's gross emissions have increased 23 percent since 1990.

Many of our trading partners are also committed to playing their part in the global effort. The UK, EU and New Zealand have all recently established a target of achieving net zero emissions by 2050. More recently the Peoples Republic of China pledged to be carbon neutral by 2060.

Our clean and green image underpins much of our economy and New Zealand needs to be seen to be playing our part. Back in 2001, a study by the Ministry of the Environment found that if New Zealand's environment was perceived as being degraded, on average the consumers surveyed would purchase 54 percent less consumer products leading to a loss between \$241 and \$569 million. The same study found tourism would lose between NZ\$530 million and NZ\$938 million (depending on whether lost wages and GST effects are taken into account) from five markets covered in a survey of tourists. This value has likely grown significantly over the last twenty years.

Across our policies for this election, we have shown our commitment for action on climate change, including by:

- Transitioning to clean energy through 100% renewable electricity by 2030, electrifying industrial and process heat, and green hydrogen
- Increasing investment in public transport, and incentivising low emission vehicles
- Supporting farmers to reduce emissions through integrated farm planning
- Planting 1 billion trees focussing on the right trees, in the right place
- Tackling waste emissions through action on food waste
- Better buildings to help reduce our emissions

On top of these commitments, this policy sets out three new initiatives to support our transition to a low-carbon economy across transport, agriculture and energy.

Clean Energy

- **Phasing out fossil fuels in process heat by preventing installation of new low and medium temperature coal-fired boilers**
- **Bringing forward the 100% renewable electricity target by five years to 2030**
- **Investing \$70m into supporting large businesses to replace fossil fuels**
- **Increasing EECA funding to support businesses to reduce emissions**

Phasing out coal boilers

Currently coal-fired boilers are used for a range of industrial processes and heating. 60 percent of process heat in New Zealand is supplied using fossil fuels such as gas or coal which generated 8.3 million tonnes of greenhouse gas emissions in 2016. Coal makes up just 11 percent of the fuel consumption used in process heat but generates 26 percent of the emissions.

The common uses are:

- Low: less than 100°C for water and space heating;
- Medium: between 100 and 300°C for things like drying wood or milk powder; and
- High: Greater than 300°C for high heat industrial processes like making steel.

Replacing coal boilers with electric alternatives will reduce emissions and ensure those businesses are prepared for the future. While replacing high heat boilers can be challenging there are cost effective low-emission alternatives for low and medium uses such as biomass or electricity. A number of major producers like Synlait, Fonterra, and Alliance have already committed to not installing new coal boilers or set out plans to phase out their existing boilers.

We will support industry to make this transition with our \$70m investment to support large businesses to replace the use of fossil fuel in industrial heat processes and connect to the grid. This includes transmission line upgrades, and direct support to industrial users to convert their coal boilers to electricity or other renewable alternatives. The funding will be administered by EECA and we expect funds will be distributed via a competitive process. We will have a particular focus in the lower South Island as the potential closure of the Tiwai Point aluminium smelter provides an opportunity to switch coal boilers to electricity. Other low emissions options, such as biomass, will also be explored.

We've also shown leadership by committing to reduce the state sector's reliance on fossil fuels through our \$200m State Sector Decarbonisation programme. So far, funding has been provided to help 26 schools, four universities and seven hospitals switch their coal boilers to clean energy alternatives.

Labour will continue our focus on phasing out fossil fuels in process heat by legislating to prevent the installation of new low and medium temperature coal-fired boilers.

Coal boilers usually have an economic lifespan of approximately 25 years, with repairs and maintenance enabling them to be used for much longer. We believe it's important we avoid locking in emissions from new coal boilers when there are readily available alternatives. We will legislate to enable this ban in our next term, but will also honour any pre-existing commitments that businesses may be contractually bound by. We will also work with businesses to consider alternatives where possible.

We recognise there are existing coal boilers in use across the country that will continue to operate for years to come. Our \$70m fund will support conversions where alternatives are

readily available, and our boost for business support programmes within EECA will enable us to work with more businesses on planning for the future and exploring ways to reduce emissions from existing processes and considering alternatives. We'll also work on research and innovation to develop alternatives for high heat industrial processes.

100% renewable electricity generation

Labour's wider energy policy is focused on prioritising renewable energy, investing in the development of alternative energy sources such as pumped hydro and green hydrogen, and supporting businesses to transition away from fossil fuels to low emission alternatives. Read more about our plan for 100% renewable electricity generation [here](#).

Transport

- **Requiring only zero emissions buses to be purchased by 2025, and target decarbonising the public transport bus fleet by 2035**
- **Introducing a vehicle fuel efficiency standard for new and used light vehicles entering the fleet**
- **Extending the current RUC exemption for heavy electric vehicles after 2025 and extension to other low emission power sources such as hydrogen**

Transport accounts for about 20 percent of New Zealand's domestic greenhouse gas (GHG) emissions and has been the fastest growing source of our emissions. Over the past 30 years, GHG emissions from transport grew by about 71 percent and according to Statistics New Zealand, household transport emissions increased by 15 percent between 2011 and 2017.

Over the last three years Labour has progressed a wide-ranging and transformative transport programme. We have:

- Invested over \$3.9 billion in public transport – a 105 percent increase on the previous National Land Transport Programme
- Developed and started implementing [a national plan](#) to increase the number of people using public transport and walking and cycling, and [tailored plans](#) for Auckland, the Bay of Plenty, Hamilton, Wellington and Christchurch.
- More than doubled funding for walking and cycling infrastructure, and invested a further \$360 million through the NZ Upgrade Programme in the Northern Pathway and \$220 million in our COVID-19 cycleway infrastructure package
- Made record investments in New Zealand's rail network, future-proofed the City Rail Link, got the ball rolling on a Hamilton to Auckland service, started fixing up and upgrading our commuter rail, and established the New Zealand Rail Plan
- Made climate change a priority in the Government Policy Statement on Land Transport, which will mean future transport investments will be assessed against their impact on the climate.
- Integrated housing and transport planning to enable intensification and provide more transport options for New Zealanders.

Labour will continue this progress and prioritise investment in public transport and walking and cycling to ensure accessible, affordable and reliable transport options.

Reducing emissions of new cars entering the fleet

New Zealand is only one of three OECD countries without any vehicle fuel efficiency standards. Labour will introduce a vehicle fuel efficiency standard for new and used light

vehicles entering the fleet gradually phased in from 2021, saving families of \$6,810 per vehicle over the lifetime of the car. Read more about our policy [here](#).

Electrifying the transport fleet

Electrifying the transport sector represents a huge opportunity to reduce the country's emissions, and encourage more efficient and healthy modes of transport.

Low emissions contestable fund

Labour will progressively increase funding for the Low Emission Vehicles Contestable Fund to fund more EV chargers and support the purchase of more low emission vehicles. Read more about our policy to accelerate the electrification of our transport sector [here](#).

Decarbonising the public transport bus fleet by 2035

Around three-quarters of the 173 million public transport journeys each year in New Zealand are made by bus. The Ministry of Transport estimates that New Zealand's public transport bus fleet currently produces 155,000 tonnes of carbon dioxide equivalent (CO₂-e) per year. This figure is projected to increase to between 193,000 and 224,000 tonnes of CO₂-e by 2040 if no additional measures are taken to accelerate decarbonisation.

Some regional Councils have developed plans to decarbonise their public transport fleets. There are an estimated 2,600 public transport buses operating in New Zealand, mostly in Auckland, Wellington and Christchurch. Auckland currently has two electric buses and will soon have eight more operating. Wellington is adding another 98 e-buses to its existing 11, and Christchurch will have 92 e-buses by 2022 or 46 percent of the fleet.

Labour will back regional councils to accelerate these plans and require only zero emissions buses to be purchased by 2025, and target decarbonising the public transport bus fleet by 2035. We will work with local government to find to best way of supporting their transition to zero carbon fleets, including through changing the Public Transport Operating Model.

To support regional councils and bus companies decarbonise, Labour will contribute \$50 million over four years to accelerate decarbonisation plans and support the uptake of buses powered by electricity, hydrogen or other power sources that reduce greenhouse gas emissions. This funding will particularly help smaller cities transition their bus fleets.

This funding is in addition to other funding sources that may be available, such as the Green Investment Fund and the expanded Low Emissions Contestable Fund.

Partner with industry on the Green Freight Project

The Green Freight project is focused on heavy vehicles carrying road freight and the role alternative green fuels could play in reducing emissions. To support industry adopting low-emissions technology, Labour will enable an extension to the current RUC exemption for heavy electric vehicles (including buses) after 2025 and broaden the exemption to cover other low emission power sources such as hydrogen. These initiatives will be funded by reduced revenue to the National Land Transport Fund.

Investing in transport infrastructure that reduces emissions

There are also significant opportunities to invest in transport infrastructure that will help reduce our emissions by encouraging public and active transport use and improving the efficiency of our freight network.

Labour will:

- Prioritise investment in public transport, walking and cycling to ensure an accessible, affordable and reliable service for users, and implement region-specific plans to increase the number of people using public transport and walking and cycling

- Progress the Auckland Transport Alignment Project, including a light rail connection from the City centre to Māngere (following advice from the Ministry of Transport), Let's Get Wellington Moving, and develop a rapid transport network for Christchurch
- Continue investing in KiwiRail including investigation of further electric passenger services and to develop domestic rail workshops at places like Hillside and Woburn
- Continue helping New Zealand's freight network to become more sustainable and efficient, including through coastal shipping.

Agriculture

- **Boosting funding across agricultural climate change research programmes**
- **\$50m to work with the agricultural sector to develop integrated farming plans**
- **Implementing the primary sector vision Fit for a Better World and developing the Te Taiao strategy to connect consumers and shift our food and fibre higher up the value chain**

Investing in agricultural climate change research

New Zealand's greenhouse gas emissions profile is not like that of most developed countries. Where many countries are focused on driving emissions out of their electricity and transport sectors, New Zealand is fortunate to already have a relatively low level of fossil fuels in our electricity generation system. This means agricultural emissions are overrepresented in our emissions profile compared with many other countries. In fact, our current emissions profile is what many other countries are likely to face in a decade or two.

That means most countries are behind us in addressing agricultural emissions, but eventually all countries will need to take action on them. It's a matter of when, not if. So New Zealand will be developing a competitive advantage if we act now to reduce our agricultural emissions. We can leverage our position as a world leader in the agricultural sector and secure a premium for our products in the future. Also we can export our expertise in dealing with agricultural emissions to other countries, which will be looking for solutions in the coming decades.

Labour believes that our farmers are well positioned to benefit from this transition and we believe investing in research right now is critical to maximise the opportunity for New Zealand. In 2019, Labour committed \$25 million over four years through the Agricultural Climate Change Research Platform to support research into reducing emissions from New Zealand agriculture, and on adapting to the impacts of climate change on our primary sector. A key area of research will be the continued development of technologies to reduce methane from livestock, including vaccines and inhibitors, as well as other approaches such as on-farm practices.

Labour will increase funding across agricultural climate change research programmes by \$6 million per year, to boost research happening in New Zealand and build on our international leadership in this area.

We know that farmers are keen to work in partnership with Government, and we have the expertise right here in New Zealand to lead on agricultural climate change research. We want to accelerate the transition by further investing in research to help farmers and our agricultural sector find solutions and ensure we continue to grow our global position and reputation. That's why Labour is committed to increasing funding for the Agricultural Climate Change Research Platform. This boost in funding reflects not only the critical role agriculture

will play in our transition to a low-emissions economy, but also the opportunities presented for New Zealand on the global stage as an exporter of sustainable food and fibre.

Labour will also continue our global leadership on tackling agricultural emissions through the Global Research Alliance on Greenhouse Gases. The Global Research Alliance was formed in 2009 to find ways to grow more food without growing greenhouse gas emissions and has involves more than 60 countries from around the world. Earlier this year Labour in government committed \$34m over four years towards international research efforts through the Alliance. Labour will boost this funding, to accelerate the important work happening through the Alliance and ensure we remain a world leader in this area.

Labour's commitment to additional funding will take the overall government spending on agricultural climate change research programmes over the next four years to more than \$77 million. It will help accelerate work to reduce emissions in the agricultural sector and support New Zealand farmers over the longer term. We expect the bulk of the additional funding will go towards domestic research, supporting local jobs and accelerating local innovation that will help bring down our own emissions and open up opportunities for export. New Zealand's contribution to the Global Research Alliance on Greenhouse Gases will also be increased.

Working with farmers to reduce emissions

New Zealand's farmers and growers are creative, innovative and constantly looking to improve their practices. They are taking steps to improve freshwater quality, protect biodiversity and reduce emissions, which has created real value for our exports and is a core part of our New Zealand brand. Agriculture makes up 48 percent of New Zealand's emissions and taking action on it is essential.

This term in government we signed a world-first partnership with the primary sector to reduce emissions – He Waka Eke Noa: Primary Sector Climate Action Partnership. This aims to reduce primary sector emissions by equipping farmers and growers with the knowledge and tools they need to reduce on-farm agriculture greenhouse gas emissions. This includes collaboration on the detailed development of an appropriate farm gate emissions pricing mechanism by 2025. Effective ways to measure and price emissions at the farm level will ensure all sectors are contributing to reducing our emissions.

The five year plan of action includes:

- Improved tools for estimating and benchmarking emissions on farms
- Integrated farm plans that include a climate module
- Investment in research, development and commercialisation
- Increased farm advisory capacity and capability
- Incentives for early adopters
- Recognition of on-farm mitigation such as small plantings, riparian areas and natural cover

In government we also recently launched a bold plan to boost primary sector export earnings by \$44 billion over the next decade, while protecting the environment and growing jobs. We will continue to build on this. Fit for a Better World provides a roadmap for accelerating our economic potential; and sets out actions to bring together opportunities to accelerate the productivity, sustainability and inclusiveness of the primary sector, to deliver more value for all New Zealanders.

Labour will implement Fit for a Better World and develop the Te Taiao strategy to connect consumers and shift our food and fibre higher up the value chain. Many farmers and growers are working hard to improve their environmental and farming practices but having to complete multiple and overlapping compliance requirements creates barriers to their

progress. We want to work with them to address these barriers and make it easy and practical for them to fulfil regulatory obligations and track their progress.

We are committed to working alongside industry to streamline processes, boost environmental practice, attract greater returns for farmers and growers' hard work and ensure that our country is in great shape for future generations. Read more about our plan to reduce costs for famers and growers [here](#).

Forestry

Planting trees helps the country to sequester carbon and contribute to the global effort to address climate change. Labour is committed to planting more trees in New Zealand to help clean up waterways, diversify our economy, and address the climate crisis. As part of this work, Labour is increasing the proportion of native trees planted. Careful tree planting along riverbanks and lakeshores helps keep our waterways clean and free from erosion, while new sustainable forestry also provides New Zealand with a more diverse primary sector and an additional source of export income.

Labour will continue working towards New Zealand's goal of planting one billion trees by 2028, with the right tree being planted in the right place.

We're also committed to a strong primary sector to feed people both in New Zealand and around the world. Labour will empower local councils to decide which land can be used for plantation and carbon forests through the resource consent process. Farmers will retain the right to establish small plantations of trees, but large scale forestry conversions will be limited to land that's not well-suited for feeding people instead. That way our environment is enhanced and our food production remains strong.

Waste

Tackling waste is a critical part of our action on climate change. In 2018, waste produced 4.1 million tonnes of greenhouse gas emissions – mostly methane from landfills, comprising 11 percent of New Zealand's methane emissions, and 5 percent of our total emissions.

Under the Zero Carbon Act, we are aiming to reduce methane emissions 10 percent by 2030 and 24-47 percent by 2050 in order to help limit global temperature rises to 1.5 degrees. Reducing waste emissions is an important way we can do that.

Labour's plan to tackle waste is focused on:

- Phasing out single use and hard to recycle plastics by 2025
- Creating a \$50m Plastics Innovation Fund to develop alternatives
- Standardising kerbside recycling
- Reducing food waste

Read more about our plan to tackle waste [here](#).

Building and construction

There are significant opportunities to reduce our emissions by building better buildings and improving the energy use and efficiency of existing buildings. Buildings account for 20

percent of New Zealand's emissions, which are often locked in for decades by poor design and building practices.

During this term we have:

- Invested in our State Sector Decarbonisation programme and the contestable fund for schools, which supports innovative energy projects, such as installing solar panels, LED lighting, and replacing inefficient heat sources.
- Invested \$28m to trial renewable energy technology for public and Māori housing to test new and innovative ways to make energy affordable and support our renewable energy and climate change goals.

We have committed to improve the energy efficiency of our buildings and houses, and reduce the emissions from the building sector by:

- Introducing mandatory energy efficiency information to help homebuyers
- Requiring the public sector to build or lease energy efficient buildings
- Working towards GreenStar 5 or 6 for Government-funded construction projects
- Continuing to implement the *Building for Climate Change* programme

Read more about our housing policy [here](#).

Research and Development

During our first term in Government, Labour prioritised programmes to boost innovation and new technologies, such as via our \$1b investment into a new R&D tax incentive scheme. We have also invested directly into energy innovation, because we recognise the vital role this will play in tackling climate change and transitioning our economy.

This included \$20 million in a new science research fund for cutting edge energy technology. The fund aims to support some of New Zealand's leading researchers working with emerging technologies such as super conductors and hydrogen.

We also invested \$27 million in the establishment of Are Ake in Taranaki. Are Ake will facilitate research, investment and deployment of emerging clean energy options such as offshore wind, solar batteries, hydrogen and new forms of energy storage.

Labour will increase investment in world leading research that helps us reduce emissions. This investment helps New Zealand businesses and communities to adapt and to innovate to drive our transition and reduce or offset carbon and other greenhouse gas emissions.

Our regulatory system

In government we passed the landmark Climate Change Response (Zero Carbon) Amendment Act 2019 (Zero Carbon Act). This established a permanent Climate Commission and set a 2050 emissions target of net zero other than for biogenic methane, which has to be reduced in gross terms 10% by 2030, and 24% to 47% by 2050.

The Zero Carbon Act also requires emissions budgets, emissions reduction plans and a national adaptation plan. In addition, Labour has overhauled the Emissions Trading Scheme (ETS) to make it actually effective at reducing emissions, including by setting a cap for total emissions allowable.

In government we also repealed sections 70A and 104E of the Resource Management Act 1991 so that local councils must consider emissions in their plan-making and consenting activities, and in light of national direction and targets and Labour now requires that all major government decisions are assessed against their climate implications.

Labour will repeal and replace the Resource Management Act to deliver better outcomes for natural and urban environments. We will replace the Act with two new pieces of legislation – one focused on natural and built environments, and another on strategic planning. We will move to an outcomes-based approach rather than the current approach of controlling effects. This will help ensure that our planning system helps tackle climate change.

As the electrification of our economy steps up a gear, it's important we ensure the right settings are in place to enable accelerated deployment of new renewable electricity generation. Transpower estimates that demand for electricity will increase by approximately 55 per cent by 2050. This means we will need significantly more renewable generation in the coming years.

A new National Policy Statement for Renewable Electricity Generation will improve certainty for developers of new renewable electricity generation by providing guidance to local authorities when consenting hydro, wind, geothermal, solar, biomass, and marine energy projects, so the processes are less costly, consistent, clear, and faster.

Providing a just transition

The COVID-19 economic recovery represents a once in a generation opportunity to reshape New Zealand's energy system to be more renewable, affordable and secure, while creating new jobs and developing the high skill workforce our future economy needs to thrive. This has to be something New Zealand does together to ensure no one is left behind. Labour will work with a range of stakeholders and our communities to create a cleaner more sustainable future.

The Government has committed to ensuring we are preparing our workforce for the future, not only through the establishment of the Just Transitions Unit within the Ministry of Business, Innovation and Employment, but by investing in new initiatives such as Are Ake in Taranaki. Along with our wider education policies, we will continue to prioritise our Just Transitions work.

Labour will work with local councils, unions, industry, iwi and Māori organisations to ensure a just transition to a zero carbon and climate-resilient economy and society, which also optimises economic development opportunities.

Labour will ensure that workers can access targeted training and new jobs as new opportunities are created and the economy transitions to being carbon-free.

Labour will expand the Just Transitions Unit to regions and communities beyond Taranaki, where it is currently working to transition the Taranaki economy away from oil and gas. Even with meaningful climate mitigation action, there are still unavoidable consequences of climate change that we need to adapt to, such as flooding and impacts on agriculture. Good information and careful planning can lessen these impacts.

With two-thirds of New Zealanders living within 5 km of the coast, preparing for sea level rise, staged retreat and impacts on infrastructure must be priorities. A collaborative approach

reduces the risk of piecemeal planning and decision-making and allows for best practice to occur across all communities.

Labour will develop a national adaptation plan under the Zero Carbon Act and work with all councils to plan for the effects of climate change.

Supporting the Pacific

Our Pacific neighbours are some of the countries most at risk from the impact of climate change despite being some of the smallest contributors towards it.

This term Labour made a global commitment to \$300 million of climate-change related development assistance, \$150 million of this specifically for the Pacific. This enables support for investments like water tanks, climate hazard mapping, and improving access to international climate finance.

New Zealand's immigration policies support our economic growth and strengthen our relationship with other parts of the world. We want to build on this and strengthen the partnerships with our Pacific neighbours. This will become even more important as the impacts of climate change continue to disproportionately impact Pacific Islands. We will continue to explore migration policies in the context of climate change and work with our Pacific neighbours on climate-related migration policies.