



The Opportunities Party Climate Change Policy

The Climate Action

The Climate Crisis is probably the largest challenge facing the world and our country. It is also one of our biggest opportunities, but at the moment we are not seizing it – we seem to just be resisting the challenge yet the chances of it going away are minimal.

NEW ZEALAND NEEDS A PLAN TO GET TO A ZERO CARBON ECONOMY BY 2050.

To limit warming to less than 2 degrees, the developed world needs to wean itself off fossil fuels by around mid-century. This places an obligation on all citizens of the world to reduce their carbon emissions per capita. New Zealand emits around 18 tonnes of CO₂e (carbon equivalent) per capita, even on carbon dioxide alone we emit 7.5 tonnes per person, significantly above the world average of 4.9.¹ Compared to the US say, that averages 16.4 tonnes of carbon per person, we are well placed to make the transition to a zero carbon economy, and to take advantage of the opportunities it presents. We are sparsely populated, produce high quality food very efficiently, and we have plentiful geothermal and hydro resources.

Aotearoa New Zealand is proud to lead the world in many ways. Whether it be sport (rugby, yachting, rowing), business (Xero, Comvita) or innovation (Lanzatech, Fisher & Paykel Healthcare) New Zealand has a reputation for being world class in the niches we carve out.

With that pedigree, Aotearoa New Zealand could be a world leader in moving to a truly sustainable economy, capitalizing on the base of a strong renewable energy sector

However, for the past 8 years the country has had no plan to achieve genuinely sustainable growth, and we have squandered much of our existing head start handed down from our endowments of plentiful renewable energy and forestry. Instead we have wasted taxpayer dollars chasing oil, gas and mining investment, but this is pointless because our oil reserves are relatively high cost and unlikely to be needed in a world where we keep warming below 2 degrees.² Meanwhile the Government has undermined the few incentives we had to move to a low carbon economy.

Back in 2009, the Clean Economy (low carbon and environmentally friendly goods and services) – had the potential to add \$12 – 27 billion to NZ's economy by 2025.³

¹ NZ statistics exclude forestry emissions/removals. These figures are calculated from NZ's Greenhouse Gas Inventory 1990-2014 and using a population of 4.5 million (via Stats NZ). Global estimates from <http://data.worldbank.org/indicator/EN.ATM.CO2E.KT>

² <http://www.carbontracker.org/report/carbon-supply-cost-curves-evaluating-financial-risk-to-oil-capital-expenditures/>

³ <http://www.treasury.govt.nz/downloads/pdfs/tfpr-mulcare-23oct09.pdf>

Transitioning from fossil fuels to homegrown renewable energy would reduce imports and provide energy security; increasingly important in an uncertain world.

The rest of the world is changing, and fast. In 2015 China installed a new wind turbine and a football pitch of solar panels every hour; this equates to the whole of Canterbury being covered with solar panels. They have also installed 317 million smart meters, to give households real time information on their electricity use.⁴ At 7.6 tonnes of carbon per person their challenge is similar to ours, but they have stabilised emissions for the last 3 years.

The Government's approach has been to set unambitious emissions targets, manipulate the way it accounts for emissions reductions and hope like hell that technology will deliver a solution to our agricultural emissions, soon.

The Government deliberately corrupted our main policy tool, the Emissions Trading Scheme, by allowing it to be flooded by cheap, **fraudulent foreign credits** from Russia and Ukraine. This did nothing for the environment and put \$200m in the hands of foreign criminals. Some of the biggest polluters in New Zealand **profited from the deal**. Meanwhile **forests were cut down** and our emissions kept climbing inexorably, to now be some 23% above 1990 levels.

Despite all the claims about us "playing our part", the Government's own advisers say their policy has **done nothing to lower emissions**. Unfortunately National are complete frauds when it comes to climate change mitigation.

Delay not only means missed opportunities, it increases the cost of adjustment long term. The Government talks up the cost of its 2030 emissions reduction target but this is largely a problem of their own making. According to the World Bank, doing nothing until 2030 will increase our long-term costs **by at least 50%**.

What kind of country do we want to leave to our children and grandchildren? One that is leading the way, or even just playing its part facing up to the greatest challenge facing the globe? Or one that is woefully unprepared for the task ahead?



Replanting forestry has a huge potential to offset most if not all agricultural emissions over time.

When Kiwis set their minds to a task, there is no limit to what we can achieve. While our advantages are clear, it is impossible to predict all the business opportunities that await a transition to a low carbon economy. It is also much cheaper if we start now, and indeed would have been even cheaper had we started a decade ago. It is that much harder to get to zero emissions from an ever-higher starting point.

There is no time to waste, nor time for sentimental investments. The Green Party's plan to subsidise solar power is one such futile gesture. Solar power does little to meet our winter peak demand. There are better investments to make; including the **investment in electric vehicles** powered by renewable electricity.

TOP's focus is on the most efficient ways to achieve a low carbon economy.

TOP's first step would be to "dump the junk". Under National, New Zealand has handed over some 97 million fraudulent foreign carbon credits to meet our national emissions targets, creating a 'surplus' it intends to use towards future commitments. TOP would cancel the surplus of emissions permits held as at 2020, to atone for the junk units New Zealand exploited in the past. The morality of what National has done is to us, reprehensible.

Our second step would be to develop a plan to reduce emissions over time, using an approach similar to that in the UK Climate Change Act. This would set out the best places to start in reducing our carbon emissions. TOP's approach is to start with the lowest cost investments first, and to make sure that any new investments don't lock us into fossil fuels post 2050.

⁴ <http://www.carbontracker.org/wp-content/uploads/2016/11/Chasin-dragon-designed-12.pdf>

The Emissions Trading Scheme needs to be a true cap and trade scheme, giving a strong signal that the carbon price will increase over time as the supply of credits reduces. To achieve this TOP would set a carbon budget (domestic emissions reduction targets), remove the current upper limit on the carbon price, and keep the scheme closed to international credits. If the country needs to purchase foreign credits the Government should develop in-depth relationships with partner countries who themselves have stringent emissions targets. The free allocation of credits to emissions-intensive, trade-exposed industries needs to be phased out over a predictable timeframe.

TOP expects these changes to significantly increase the price of carbon, and along with auctioning of credits this would generate revenue for government. This revenue will be used to help households and businesses become more energy efficient so they can prosper in a low carbon world. A higher and more predictable carbon price would also provide the massive incentive needed to plant the 1 million hectares of erosion-prone land we have in this country. This would reduce erosion, preventing sediment from clogging our rivers, and would also help us meet our international emissions targets for the next few decades.

Transport investment needs to put road, rail and shipping on a level playing field.

TOP will get rid of the subsidies on fossil fuels. The funding of road, rail and shipping infrastructure needs to be on a level playing field to ensure that businesses choose the cheapest, safest and cleanest method of transporting their goods around the country. Such long-term transport modeling needs to include the fact that building more roads only leads to more cars.⁵

Our electricity system needs to make sure everyone has the right incentives to use and produce energy.

Similarly, electricity pricing needs to ensure people have the right incentives to generate electricity and smooth the peaks in demand. Effective policies in both these areas will reduce the long-term costs to households and business, particularly given the shift to a low carbon economy.

There is no immediate prospect of getting agricultural emissions to zero, and indeed there are questions about the appropriate accounting for methane. Our view is that currently methane emissions are weighted too heavily,⁶ so we do not envisage methane emissions being part of the ETS in the short term. However, the nitrous oxide emissions from agriculture – mainly from nitrogen leaching and fertilizer use – would be. Nitrous oxide is a long-lived greenhouse gas like carbon dioxide, although with a far more potent warming effect. Unlike methane the metrics are accurate and there are proven mitigation techniques. There are also strong synergies between reducing nitrous oxide emissions and improving water quality. As part of introducing nitrous oxide into the ETS we will review whether we could create a holistic environmental impact system for farmers. As per our water quality policy, any such system would reward good farmers and punish the worst performers, but leave the land based sector no worse off overall. Farmers would also be afforded the same protection as other emissions-intensive exporters.

Our goal would be to ensure New Zealand's land sector is climate neutral overall. So insofar as land use is concerned our goal is to ensure New Zealand is a world leader in sustainable land use and food production. A big part of that approach will be including forestry, which has a huge potential to offset most if not all agricultural emissions over time. More work is needed on methane, but one possibility is to use permanent forests to offset long-lived gases, while plantation forests could be used to offset methane. The reasoning behind that is because plantation forests and methane both have a short-lived impact on emissions and therefore warming. Additionally more research promises to identify what practices are ideal for boosting soil carbon.

⁵ Induced traffic is now a widely accepted phenomenon by transport experts: http://www.dot.ca.gov/newtech/researchreports/reports/2015/10-12-2015-NCST_Brief_InducedTravel_CS6_v3.pdf
<http://www.vtpi.org/gentraf.pdf>

⁶ http://www.oxfordmartin.ox.ac.uk/downloads/briefings/Short_Lived_Promise.pdf

TOP's Environmental policy provides for an integrated emissions management/ environmental protection strategy to achieve sustainability. So we envisage priority being given to getting the water quality systems of our Environmental policy up and running before we try to integrate climate into that. The focus will go on establishing our water quality approach, then integrating nitrous oxide into the mix (ideally in an integrated fashion with water quality), then eventually how we include methane.

INTERNATIONAL CASE STUDIES

All the countries listed below have emissions reduction targets that are far more ambitious than New Zealand's. Even more impressively, they have also put in place long-term plans, complete with interim milestones (e.g. 2030) consistent with a pathway to their long-term goal:

- Norway – **climate neutrality** by 2030 (through use of international offsets)
- Sweden – cut emissions to at least **85% below 1990 levels** by 2045 and offset the rest to be carbon neutral.
- Denmark – fossil fuel free energy system and **80-95% emissions reduction** below 1990 by 2050.
- UK – at least 80% reduction below 1990 levels by 2050, target enshrined in domestic law through Climate Change Act.
- Germany – **80-95% reduction** below 1990 levels by 2050. Has set out 2030 target ranges for each sector in its Climate Action Plan.

States in Canada and the US (such as California and **Ontario**) have similar goals and plans. There are also many cities, states/regions, and companies that are aiming to be **carbon neutral**.

TOP's policy is to make the most out of the climate opportunity

As per the UK Climate Change Act we will ensure there is an independent body to recommend carbon budgets, policy changes and monitor progress.

Based on carbon budgets, the Government will auction credits into the Emissions Trading Scheme. All revenue gathered will be used to help households and businesses transition to a low carbon economy.



Electric vehicle charging station next to car parks.

There is ample evidence of many possible improvements that could be made which would reduce costs for households and businesses. Revenue is difficult to predict as it depends on the price of carbon, which in turn depends on how much forestry is planted, and how quickly emissions are reduced.

We will ensure that a plan is developed for each sector to move to net zero carbon including the following:

ELECTRIFY OUR CARS AND TRAINS

- Bring rail infrastructure funding inside NZTA's budget to ensure that government funding puts road and other transport on a level playing field. KiwiRail would be expected to return a profit. In the wake of the Kaikoura earthquake, the ferry services should be reviewed also.
- Replace the public sector vehicle fleet with electric vehicles as they come up for renewal.
- Allow local authorities to implement congestion charging to manage traffic jams and generate revenue to invest in public transport.
- Review regulations that are biased towards cars such as those that force retail and residential developers to provide parking spaces as part of their development.
- All government infrastructure spending and economic assessments for major consents under the RMA will assume a long-term carbon price of at least \$60 per tonne of CO₂ and rising in line with the social cost of carbon. This is an international estimate of the true cost of carbon, based on the damage it causes.⁷
- Put in place ever-tighter emissions standards for all newly imported vehicles.

⁷ <https://www.epa.gov/climatechange/social-cost-carbon>



Huntly Power Station, the largest thermal power station in New Zealand.

PIONEER A 100% RENEWABLE ELECTRICITY SYSTEM

- TOP will immediately remove all subsidies for oil exploration.
- Use the revenue from selling carbon units to fund energy efficiency advisers to work with businesses and individuals. We will continue the EECA Warm Up NZ grant system for low income households and expand it to take into account electricity use in the whole home. The remit of EECA will be broadened to include small businesses as per the recommendations of the **Green Growth Task Force**.
- Require all landlords to insulate up to modern code and provide a heat source. We will progressively improve the building code, moving towards a passive house standard over time.
- Work with Fonterra to create demonstration projects for electric and wood fuelled boilers.
- Amend the mandate of the Electricity Authority beyond security of supply and cost to also include meeting the existing target of 90% renewable electricity by 2025 and 100% renewables by 2035. An important part of their role will be getting the price signals and industry organisation right to encourage shifting demand away from the peak and getting the right generation in the right place.
- Phase out carbon subsidies to energy intensive exporters.

SUSTAINABLE LAND USE (AS PER OUR FRESH WATER POLICY)

- Reviewing land use from an environmental perspective to create a simple and holistic package of incentives across the issues of soil, forestry, water quality and climate change.
- As part of that review we will consider bringing nitrous oxide inside the Emissions Trading Scheme (but not methane) while ensuring farmers are afforded the same protection as other emissions-intensive exporters.
- Use the revenue from emissions trading and water charges to reward land based businesses for environmental improvements.
- Re-forest all our erosion prone land by 2030 by expanding the **Afforestation Grant Scheme** and tweaking it to provide the money up front to farmers, then have it paid back as carbon credits accrue. This would remove their risk and cashflow issues, provided the land was planted according to the agreement.

ADAPTING TO SEA LEVEL RISE

- Regardless of our actions to reduce emissions, some communities such as South Dunedin will be impacted by sea level rise within our lifetime. A large disaster, far greater than the Christchurch earthquake is looming. This however is completely predictable, and as the Parliamentary Commissioner for the Environment recommends we need to discuss it now to ensure that individuals, local authorities and government are all fully aware of their rights and responsibilities.