

# **Tackling the Environmental Challenge of our Times**

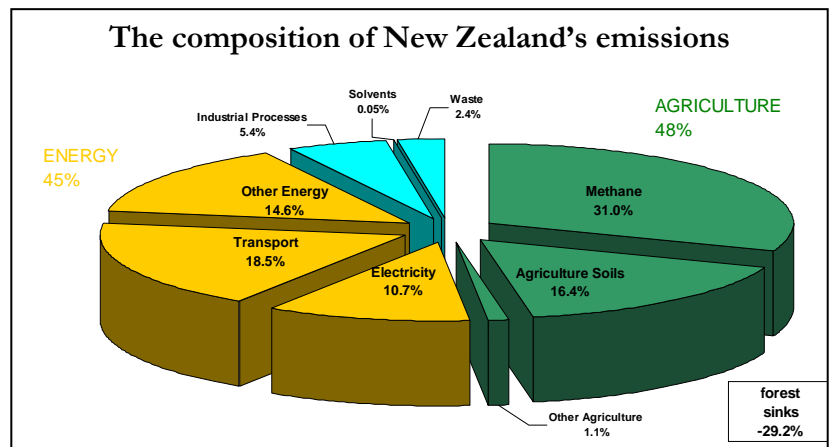
**Labour's policy for  
CLIMATE CHANGE  
2008**



## Introduction

Scientists tell us it is more than 90 percent certain humans are the main cause of global warming. The Intergovernmental Panel on Climate Change, involving hundreds of scientists from around the world, says climate change is occurring more rapidly than was predicted. We are now pouring carbon dioxide and other greenhouse gases into the atmosphere on a scale that is greater than the ability of the environment to absorb it.

Climate change is expected to pose significant hazards to New Zealand as a small island nation. As we move into the 21st century, changes in our climate are likely to lead to more intense rain and wind events during storms, and more frequent serious droughts as well as general changes in temperature and rainfall patterns.



We all have a stake in getting greenhouse gas emissions under control. The Emissions Trading Scheme will discourage growth in emissions and reward emissions reductions. Climate change is a symptom of living unsustainably, and the scheme will put New Zealand on the path to a sustainable future.

Economy-wide policies are being put in place to deal with climate change and other environmental challenges. Clear goals have been set for renewable energy, using such things as wind and solar power, and major steps have been taken to encourage energy efficiency.

New Zealand communities are being prepared for the impact of extreme weather events and sea level rises before they occur.

As the economy gradually moves away from its reliance on fossil fuels, we do not want nor need another 1980s/90s period of restructuring. But all New Zealanders need to understand and be supported through New Zealand's move towards a low-carbon economy.

While climate change poses an enormous global threat, Labour believes it also offers significant opportunities for a small sustainable nation. New Zealand's research and development into sustainable agriculture, and our expertise in renewable energy such as geothermal, hydro and wind, presents us with opportunities in a world that is seeking sustainable solutions.

We also believe New Zealand can have a leading role in international negotiations to address climate change issues in trade and other agreements, and to help our Pacific neighbours and other developing nations prepare for climate change.

## **The Emissions Trading Scheme**

The Emissions Trading Scheme is the cornerstone of a responsible and balanced plan to tackle climate change. The scheme will be implemented along with a comprehensive range of other measures.

New Zealand's Emissions Trading Scheme is advanced by international standards because it includes all six greenhouse gases covered by the Kyoto Protocol, the international agreement on combating climate change. Over time, the scheme will encompass every sector of the economy from forestry to farming.

This is sensible because it avoids distortions within the economy and shares responsibility for emissions fairly. Fairness among sectors is achieved through allocation of 'free' emissions units by the government. A central registry will track the sale and purchase of emissions units. Each sector, and each major business within the sector, must have enough units to cover their emissions and will face the full cost of any increases in their emissions over and above any units they may have been allocated.

The Emissions Trading Scheme does not create costs; rather it minimises the cost of reducing emissions. It puts a cost on emissions in the New Zealand economy so we can address our obligations as a country under Kyoto. It does that by charging the polluter for increases in emissions and rewarding decreases.

**Labour will ensure the speedy and effective implementation of the New Zealand Emissions Trading Scheme.**

There is no case to delay an emissions trading scheme; climate change is real and poses a severe threat to our way of life. Doing nothing and hoping the problem goes away is simply not an option.

## **An Economy-wide Package**

Labour's policies to tackle climate change do not rest solely with the flagship Emissions Trading Scheme. A combination of targets and sector-specific policies across the economy will put New Zealand on a long-term sustainable footing.

Labour's economy-wide targets include:

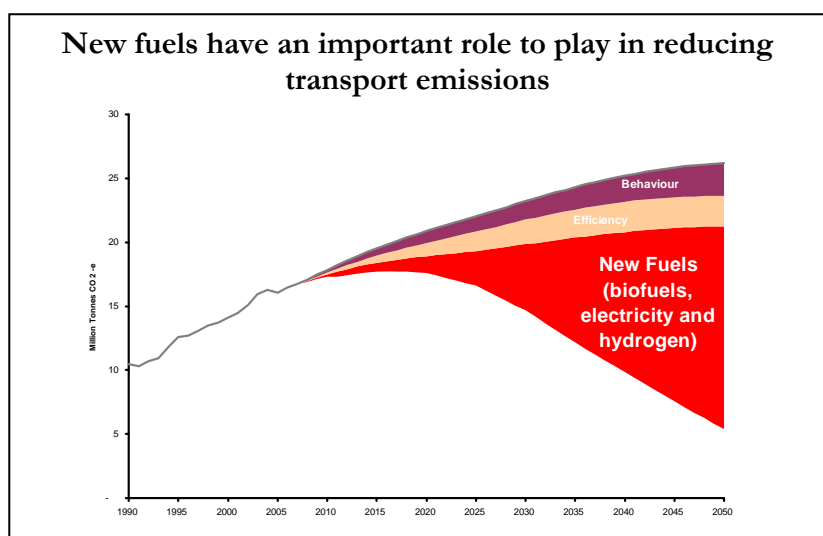
- 90 percent of our electricity coming from renewable sources by 2025
- carbon neutrality in all stationary energy production and use by 2030

- carbon neutrality in 35 core public service departments by 2012
- halving our per capita transport emissions by 2040 (taking 2007 as the base year)
- carbon neutrality in the total energy sector by 2040 (if this target was adopted globally, the planet would be well on the way to overcoming human-induced global warming)
- achieving a reduction in greenhouse gases from the agricultural sector, below business as usual, of 300,000 CO<sup>2</sup> equivalent tonnes by 2013

## **Transport**

Labour has already taken big steps towards the goal of halving New Zealand's per capita transport emissions by 2040.

Investment in public transport has surged 15-fold in this decade. The buy-back of our railway system and the establishment of KiwiRail present a real opportunity to build a sustainable nationwide transport network.



Implementing legislation passed this year to introduce sustainable biofuels is a first step away from fuels such as petrol that come from unsustainable fossil fuel sources.

## **Electric Cars and Other Vehicles**

Similarly, our ambition to be among the leading countries to widely deploy electric vehicles and plug-in hybrids marks the beginnings of a new era of energy independence and low emissions in transport.

Labour intends to prepare the way for a large-scale roll-out of electric vehicles. We have already established a vehicle emissions reduction group focussing on electric vehicles.

We expect to see electric cars starting to arrive and being used in New Zealand between 2010 and 2015. The numbers will grow slowly at the start, but volumes will increase as supply increases and costs decrease. As production of electric vehicles

ramps up internationally, the cost of the electric battery, which is the main driver of cost, can be expected to reduce markedly, and prices will come down.

Labour will also build on our clean green electricity generation to develop partnerships with electric vehicle manufacturers. While it will be up to industry to develop electric vehicle technology, there is a role for government in establishing an environment that facilitates its uptake.

**Labour will plan for the introduction of a nationwide infrastructure to recharge electric vehicles.**

Electric vehicles used for local travel can be re-charged from the owner's home. Vehicles used for longer distances, however, will need a supporting infrastructure of 'charging stations' to enable recharging.

We will need to work through a variety of issues about the public infrastructure required for people to charge their vehicles during a journey. The cost of the technology is likely to be expensive, especially for the sort of high voltage facilities that would allow shorter charging times. Questions about how these facilities will be funded, where they will be located and relevant health and safety issues will also need to be addressed.

Major centres with an interest in electric vehicles such as California, London and Tokyo are likely to confront many of these challenges first and we will be able to learn from their experience. New Zealand could, however, be in a position to be the first country to set up a nationwide infrastructure for charging electric vehicles.

## **Energy Efficiency**

Labour is committed to energy efficiency and conservation so that less electricity is wasted.

In the past, the automatic response to our growing demand for energy has been to build more generation. A cornerstone of our New Zealand Energy Strategy, however, is to invest in improved energy efficiency where this is cheaper than the cost of producing extra energy or extra energy infrastructure. An assessment of these costs should include environmental costs. Investments in household energy efficiency, so that households consume less energy, are an example of this approach at work.

The Energy Strategy also goes beyond electricity generation. For instance, our vehicle fuel efficiency measures are designed to reduce fuel consumption so that less fossil-fuelled energy is required for New Zealand's vehicle fleet.

**Ten years ago...** insulation standards were weak and few, if any houses built before 1978 had adequate insulation.

**Today...** insulation standards have been strengthened and, through the insulation retrofit programme, 42,000 New Zealand families now live in warmer, healthier, and more energy efficient homes.

**Ten years from now...** hundreds of thousands more houses in New Zealand will be insulated to the recommended standard to help households stay dry, healthy and warm.

Labour now intends a major extension to the home insulation programme.

We have brought in energy efficiency measures, such as insulating existing homes known as 'retrofitting'. We are scaling up in this programme to ensure New Zealanders have warm, dry homes. These measures are timed with introduction of the Emissions Trading Scheme in mind.

**Labour is prioritising the insulation of state houses so that the remaining homes without insulation are retrofitted within 5 years.**

Labour recognises it is important the government sets an example for other landlords to follow. That is why the 2008 Budget provided for the state house insulation programme to be significantly accelerated, improving tenant health and reducing power bills.

The new timeframe will see 21,000 state houses insulated within five years. Almost 12 homes a day will be insulated, doubling the pace of Housing New Zealand's previous Energy Efficiency Retrofit campaign which began in 2001.

Many homes in the South Island, where it is colder, have already been insulated. Houses in Auckland, Wellington and Manawatu, where there are significant concentrations of state housing, will be targeted next.

A retrofit includes insulation of floors and ceilings, hot water cylinder wraps and 'lagging' around hot water pipes. Efficient heaters will also be installed where appropriate.

With the New Zealand economy clearly facing challenges from the global financial turbulence and economic slowdown, we have begun work on an economic stimulus package which will be implemented if the projected impacts on the New Zealand economy remain as they appear to be at the moment. The state housing insulation programme could have a role to play in this economic stimulus package.

**Labour is prepared to bring forward the current spending programme on home retrofitting, upgrading the State Housing stock, and planned development on Housing New Zealand land, as part of the economic stimulus package to be presented to Parliament in December.**

We have also announced a one billion-dollar fund over 15 years to assist families to insulate their homes and improve the efficiency of their heating.

This fund is the largest-ever investment in household energy efficiency in New Zealand's history. It is not just a one-off cut to a household's power bills but a long-term plan to reduce the amount of electricity every household uses. The fund will start in 2009, a year ahead of the electricity sector entering the Emissions Trading Scheme.

The one-billion dollar fund to help New Zealanders make the most efficient use of energy will be targeted according to energy needs and income. Spread over 15 years, it will take private household energy efficiency to a whole new level.

It will not only save energy, it will also reduce dampness in homes and the health problems that causes. For sufferers of respiratory diseases such as asthma, that means fewer visits to the doctor, fewer hospital admissions and fewer days off school or work.

This is a great example of how actions to tackle climate change can benefit us in other ways. More New Zealanders than ever before can enjoy the benefits of a well-insulated home and efficient heating while at the same time lessening their impact on the environment.

This programme is relatively labour-intensive and people can be trained for the work in a relatively short time period. This makes the work ideal for generating work around the country. Improving the energy efficiency of our housing stock also contributes to the sustainability of our nation overall. It not only reduces demand for energy, but also it improves health outcomes.

**Labour will bring forward access to the \$1 billion home energy efficiency fund so that schemes for retrofitting older houses can be expanded in those areas where unemployment is emerging.**

New Zealand has abundant solar energy resources. Heating water can account for up to 40 percent of a household's electricity bill, and three-quarters of your water heating costs can be saved by installing a solar water heating system. Labour has increased the grant for installing a solar water heating system to \$1000.

**Labour will provide support for the installation of 15,000 - 20,000 additional solar water heating systems by 2010.**

## **Assistance to Households**

While Labour is committed to action on climate change, we are determined to moderate the economic impact on households, particularly for our most vulnerable families.



**Labour will deliver to all households in 2010 a one-off electricity rebate to assist with power bills, with those receiving benefits, superannuation and Working for Families tax credits also receiving a targeted one-off cash payment.**

The financial assistance will be broadly equivalent to the total amount of the increased electricity costs faced by the household sector in the first year of the introduction of the electricity sector into the Emissions Trading Scheme in 2010.

## **Economic Transition**

As the economy gradually moves away from a reliance on fossil fuels, we do not want or need another 1980s/90s period of restructuring. All New Zealanders need to be engaged and supported in the move towards a low-carbon economy.

Government has a clear role in setting the framework for a new type of economy to flourish. That policy framework includes research and development, the provision of incentives, and negotiating in international forums.

Labour will develop practical policies to assist New Zealanders in the move to a more sustainable, less fossil fuel-dependent economy.

Different industries and sectors will move into the Emissions Trading Scheme at different times over the next five years. A staged entry allows different sectors to prepare for entry.

Where firms face international competition and so cannot easily pass on the extra costs to their customers, they may be eligible for a subsidy in the form of some free emissions units which they can sell to offset increased costs. This support will continue until 2018 and then be gradually phased out over the next 12 years to 2030.

We will also work with businesses, unions, and workers to develop environmental plans to reduce greenhouse gas emissions and waste, and promote energy and transport efficiencies including telecommuting.

## **Agriculture**

New Zealand's emissions profile is unique among developed countries in that half our emissions come from the agricultural sector. Bringing agriculture into the Emissions Trading Scheme retains the integrity of the scheme. However, because of the complexities of reducing agricultural emissions, its entry will not occur until 2013.

A range of measures will smooth its entry. Support will continue for work aimed at reducing overall greenhouse gas emissions in the broader agriculture sector, and New

Zealand will continue to be a world leader in developing low emissions technology to reduce the environmental effects of livestock farming.

Labour will work with farmers to implement changes to reduce agriculture's contribution to New Zealand's greenhouse gas emissions, in particular through the \$700 million New Zealand: Fast Forward Fund - a research and innovation fund set up to help our food and pastoral industries become smart, sustainable, high-value suppliers of goods and services to world markets.

**Labour will support world leading research into new agricultural solutions, in particular through New Zealand: Fast Forward.**

The New Zealand: Fast Forward Fund of \$700m will be matched by private funding from the food and pastoral sectors to create a substantial step forward in research and development, ranging from basic environmental research to pre-commercial development, over the next 10-15 years. This is easily the largest single investment in research and development in New Zealand's history.

One of the areas in which New Zealand: Fast Forward programmes will run is basic environmental research into the pastoral sector to reduce the environmental effects of climate change gases including improvements in water quality and reduced chemical use. Research is likely to be carried out through groups such as the Pastoral Greenhouse Gas Research Consortium and the Livestock Emissions Abatement Research Network (LEARN) which was established in collaboration with international partners.

**Labour will encourage research on, and experimentation with, a range of alternative technologies and farming practices, including low intensity farming.**

As farming systems intensify, greater amounts of nutrients are used which in turn can mean higher amounts of pollution in the environment. Growth in agricultural production is vital to New Zealand's future economic prosperity, but not at any cost.

We are already strongly engaged in working with the industry to investigate and apply measures which can significantly reduce nitrous oxide emissions from the agricultural sector over the next five years.

## **The Fishing Industry**

The fishing industry faces unique challenges as it enters the Emissions Trading Scheme. Because of the sector's dependence on fuel, it is significantly affected by price rises for, say, diesel. Labour recognises this.

**Labour is providing for a free allocation of emission units for the fishing sector, to ease the sector's entry into the Emissions Trading Scheme.**

This free allocation is equal to 50 percent of the impact on fuel costs for a three-year period.

## **Forestry**

Forestry is rewarded under the Emissions Trading Scheme because forests have a big role in reducing greenhouse gas emissions. As trees grow, they absorb carbon dioxide from the atmosphere and store it as wood. Forests are therefore sometimes referred to as “carbon sinks”. When forests are felled they release carbon.

Carbon sinks make a contribution to meeting our obligations under the Kyoto Protocol and encouraging forestry is a major means of achieving this. Labour has set a target of increasing our forest area by a net 250,000 hectares by 2020, on top of what it was in 2007.

**Labour will encourage landowners to plant forests to act as carbon sinks, and provide incentives and information on suitable trees to plant.**

Several schemes such as the Permanent Forest Sink Initiative and the Afforestation Grant Scheme are already in place to encourage the planting of forests. Trees vary in their ability to capture and store carbon, and there are also biodiversity issues to consider, when determining the optimal mix of planting.

## **Industry**

**Labour has established a contestable innovation fund of 150,000 emission units a year, under the Emissions Trading Scheme.**

This will assist firms that face international competition but have not received a free allocation to help them take advantage of innovative technologies with the potential to reduce industrial emissions.

## **Assisting Local Communities**

We need to prepare for the risks and opportunities a changing climate will bring. Sea level rise is an important issue in climate change, but science cannot yet provide precise answers as to the economic impact of the sea levels expected. Consequently, we must consider the risks of a range of sea level rises.

Climate change will affect the lives of millions of people, but the impacts can be lessened with forethought, good information, and careful planning. Labour is already providing guidance for local communities to deal with climate change hazards such as storm surge, high waves, and rising sea levels. We are committed to providing further help for communities.

**Labour will carry out a plan of action for sustainable land management and climate change in partnership with land management sectors, Maori, and local government.**

Effective adaptation to a changing climate will require close cooperation between central and local government, the agriculture and forestry sector, Māori and other stakeholders. We will work with representatives from these groups to develop a five-year adaptation programme.

The plan of action includes development of new technology and encouraging farmers to move towards the latest technology and environmental practice as they become available. It also includes provision for significant new research funding, with a priority on new technologies and practices that will improve the measurement and reduction of greenhouse gas emissions, including methane from livestock.

Labour's plan of action also considers business opportunities arising from climate change. Moving from a high-emission to a low-emission economy is as much about positioning New Zealand for longer-term economic growth as it is about meeting this country's international climate change obligations.

**Labour will ensure that local authorities are provided with reliable and up-to-date information so they can properly take into account climate change risks in their infrastructure and planning decisions.**

## **International Opportunities**

While climate change poses an enormous global threat, it also offers great opportunities for a small sustainable nation. New Zealand's research and development into sustainable agriculture, and our expertise in renewable energy such as geothermal, hydro and wind, present us with commercial opportunities in a world seeking sustainable solutions. Labour intends to maximise the economic benefits of our clean green country.

**Labour will work to ensure that New Zealand can export our expertise in renewable energy technologies.**

We are already a world leader in geothermal, wind, and hydro technologies, and we can further develop our expertise in marine generation and deep geothermal (also known as 'hot rock'), and use that to help other countries build a renewable energy sector. We will help New Zealand companies export their expertise and products to other countries.

To support tourism and agriculture, New Zealand already markets itself internationally as clean and green. Progressive policies on climate change extend this brand and bolster our environmental credentials.

**Labour will work with the private sector to maximise the brand value of our environmental credentials in both tourism and agricultural exports.**

Labour also believes New Zealand has a leading role to play in international negotiations to address climate change issues in trade and other agreements, and to help our Pacific neighbours and other developing nations prepare for climate change. New Zealand has signed an agreement with the United States to engage on renewable energy research and development, and commercial use of renewable technologies that will benefit Pacific nations.