

Green Party of Aotearoa/New Zealand - Aoraki Province Submission on Christchurch City Council's 'Our Community Plan 2006-2016'

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**Submission on behalf of the Green Party of Aotearoa/New Zealand - Aoraki Province
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We wish to be heard in support of this submission. We would appreciate it if members of the panel would let us know if there are any particular issues they would like us to address in more detail to make the hearing most effective.

Introduction

This submission is made on behalf of the Aoraki Province of the Green Party.

We have over 600 members who share a common concern about the increasing impact of human activity on the quality of our environment, not just globally but also locally.

Deteriorating water quality, pollution, loss of biodiversity on both a local and global scale, deficiencies in the public transport system and the growing threats of climate change and peak oil are all issues we believe need addressing by both individuals and the City Council.

Recently a number of important reports have been released.

One was the well-publicised report "Growing for good" by the Parliamentary Commissioner for the Environment, which highlighted the increasing impact of intensive farming on our environment, particularly on our waterways. This impact could adversely affect Christchurch, primarily through draining the aquifers and contamination of the city's water supply

Another is the Millennium Ecosystem Assessment Report by the United Nations which confirmed that what we are witnessing on a local scale is also happening on a global scale.

60% of our planet's ecosystem services have been assessed as degraded and this degradation may rapidly prove to be irreversible if we do not act now. Local and regional authorities have a crucial role to play if we are to be successful in averting global impact of a disastrous nature.

The Aoraki Greens believe that a key aspect of this role will rely on how prepared we are to all work together to put in place firm measures to protect our local and global environment.

In particular we feel that it is clear that there is an urgent need for Christchurch City Council to acknowledge that climate change is happening and that it poses real threats to the city.

We urge the Council to set aside a greater proportion of the budget to prepare for both climate change and peak oil. Recently the Green Party has released a package of proposals (Turn down the Heat) for dealing with greenhouse emissions. We attach a copy as an appendix and recommend that CCC adopts as many of the recommendations as it is able to.

Key objectives:

- Sustainability – environmental, social, economic and cultural.
- 'Future proofing'.
- Work with other territorial authorities to deal with the local impact of global problems.

General points:

The Council should:

- Acknowledge that climate change is happening and adapt policies, plans and actions to take this into account.
- Include a 'Sustainability rating' against the actions under Community Outcomes.
- Use locally produced goods and services or, failing that, NZ firms where possible.

City Development:

This is an area where the City Council can show leadership in sustainability and energy efficiency and deliver on principles, such as Smartgrowth, identified in the Greater Christchurch UDS.

The limitations on new energy generation posed by likely future restrictions on coal usage (to meet Kyoto requirements) and environmental constraints on HEP generation will heighten the need for energy conservation.

New Zealand's performance in this area is poor. EECA's Situation Assessment Report (March 2006) notes that in the period 2001-2004 energy efficiency improved by a mere 0.4% p.a. while energy use overall increased by 3.4%. The report also notes that housing energy use was basically static for that period but business and transport increased by 3.4% p.a. and 3.9% p.a. respectively. Business and transport account for 89% of energy use.

Canterbury's performance in energy conservation is also poor with a 3% p.a. increase over the two decades between 1982 and 2002 (ECan Regional Energy Survey, June 2003).

An aerial infrared (thermal) survey of Christchurch would identify buildings with high heat loss and enable efficient targeting of activities and expenditure to maximise benefits. Although this would entail a substantial initial cost this could, perhaps, be shared with ECan and may be appropriate for Government financial support. Such a survey should be cost effective in the longer term by avoiding wasted effort and expenditure. Follow-up surveys could be used to monitor progress.

We suggest that the City Council work with ECan to carry out an aerial infrared (thermal) survey to target energy conservation efforts.

The largest industrial and commercial energy users should be targeted as a priority to examine possible energy savings (from the simplest actions such as turning off heating when malls close to considerations of more efficient industrial processes).

Community Support:

The proposed additional Council owned rental housing (21 additional units) is far less than the increased need expected from the increase in population and elderly people. In order to maintain current standards either the target for additional units must be increased or the Council must work more effectively with the private sector to fulfill the projected need.

Community organizations provide many services throughout the City in a very cost effective manner since they are often volunteer based. Support for these organizations has not kept pace with inflation over the last 10 years or so and we believe the Council should adopt a policy of at least maintaining support at the level of inflation.

Culture and Learning Services:

We do not agree with the Council's proposals to close some of the smaller libraries which are important to many (such as elderly and disabled people) who cannot easily travel to larger, centralized facilities. Figures show that these libraries are maintaining user numbers (apart from Spreydon which has lost users to the new Sydenham library) which shows that they are filling a need locally. The closure proposals do not support the Council's Strategic Directions for Strong Communities (p.49) nor take into account the future demographics projected in "Future Path Canterbury". This is an issue in which the Council should have regard to its primary (social) responsibilities rather than 'business' considerations.

We support expansion of the library services in Halswell to take into account the increase in population but urge the Council to revisit using the empty building previously occupied by the Halswell New World supermarket as a suitable venue for the new Halswell library rather than building from scratch on a greenfield site. This building is accessible, adjacent to ample parking that is currently underused and large enough for mixed use as a library and service centre plus additional retail outlets and/or business accommodation. These latter could provide local employment opportunities as well as income to offset costs.

The building is currently (and has been for some time) a liability for Westpac and could be put to good use if a suitable leasing arrangement could be negotiated with Westpac.

Democracy and Government:

This is an area in which the Council's credibility has suffered in recent months, notably in the rejection of the results of the consultation on the Draft Waste Management Plan.

Although consultation is carried out much more effectively here than in, for example, the UK, there are still difficulties in reaching different age and ethnic groups consistently. This was very noticeable in the response to consultation on the Greater Christchurch UDS. The distribution of the responses (3250 in total) did not match the demographics of the population. The 45+ age group were over-represented in relation to their numbers while the younger age groups were under-represented. Similarly there were poor responses by non-European ethnic groups compared with their numbers.

Documentation put out by the Council is often quite daunting and so we suggest that material be provided in a simpler, plain English form (this has proved very successful with Government documents in the UK). This would make it more accessible to people with limited reading skills, such as intellectually disabled people and those who are not native English speakers, and should encourage participation.

Similarly providing material in media suitable for blind or visually impaired people would improve accessibility. Audio, large print, simplified layouts and Word versions (many screen-readers function better with Word documents than Adobe pdfs) are options that could be considered.

We recommend that the Council explore other ways of communicating to the wider public.

Permanent displays in public areas e.g. malls and notice boards in supermarkets should encourage participation. Other avenues that could be used are regular (say weekly) columns in community newspapers and weekly programs on local radio and TV. All of these could be managed as co-operative initiatives with other territorial authorities to improve outreach.

Economic Development:

We strongly oppose any proposals to sell-off the City's strategic assets such as Lyttelton port. Although such sales may bring short term financial gain we believe that in the long run they would result in social disbenefits to the city and it's people by the loss of control over essential assets.

We do not support further farming intensification in Canterbury as intensive land use and stock access to waterways are by far the dominant cause of low surface water quality (see Table WQL6 in the Chapter 4 of ECan's Proposed Natural Resources Regional Plan). Similarly intensive agricultural land use dominates abstraction from both surface and ground water. Intensive farming is a threat to the City's water supply and the Council should make all efforts to ensure that the City's water supply is protected.

The Council has spent a substantial sum of the ratepayers' money on feasibility studies associated with the Central Plains water scheme which, rather than contributing to sustainability, would contribute to ongoing environmental degradation in the Region. Feasibility studies should be paid for by the proposers not the ratepayer.

We oppose any future funding by the Christchurch City Council or it's agents for the Central Plains Water Trust, Central Plains Water Ltd or for any other irrigation scheme.

Adopting a 'buy local' policy for goods and services wherever possible would enable the Council to make a direct contribution to economic development.

Parks, open spaces and waterways:

The Botanic Gardens are central to the character and vision of Christchurch. We strongly support the replacement of the visitors' centre and upgrading the facilities. Any new building should be designed with flair to be an icon and centerpiece, an instantly recognisable symbol like the Palm House at Kew.

The Botanic Gardens are, however, not just a tourist and visitor attraction although they play an important and largely unrecognized role in supporting the local economy which should be emphasized.

The Gardens also have an important role in education which should be pursued vigorously and the "Learning through Action" program expanded.

Botanic gardens are the custodians of plant diversity and plant taxonomy (classification) and many plants that are extinct in the wild are now only found in botanic gardens. Greater emphasis on conservation (particularly as regards New Zealand's unique species) in conjunction with strong links with the appropriate departments at the University of Canterbury and Lincoln could expand the national importance of the Gardens. This aspect of the work carried out in the Garden is particularly relevant now that Banks Peninsula has merged with Christchurch.

The Plan makes little reference to the changes to the Council regional parks and reserves management that will come from the incorporation of Banks Peninsula into its area. There are significant opportunities for indigenous biodiversity enhancement, park and reserve acquisition and walkway and cycleway development on the Peninsula. The Banks Peninsula region is very different from the areas that the City has been responsible for in the past, implying a steep learning curve. Close cooperation with community groups, Banks Peninsula Conservation Trust and Department of Conservation will be needed to facilitate this.

Recreation and Leisure:

We do not agree with the proposed priorities for aquatic facilities outlined on p.134. The Papanui area is reasonably well-served by Jellie Park and will benefit from the proposed improvements. We do not feel that priority should be given to an additional facility in this area at this time.

In contrast, the Eastern area is neglected as no new facilities are programmed until 2017-2020 and the Woolston pool will be closed this year. The current proposals contribute little to the Council's Strategic Directions for Strong Communities (p.49). A new indoor facility, say in Linwood, would help reinvigorate what are currently some of the lower socio-economic suburbs and send a strong message that the Council cares and is serious about improving the quality of life for all people in Christchurch. We do not support the closure of existing outdoor pool facilities until such time as a full evaluation has been undertaken of their redevelopment potential, including taking into account of the results of current user surveys.

Rail trails have proven a very effective use of rail corridors. They can be a strong tourist draw and provide significant economic benefits to local people, as evidenced by the impact of the Central Otago Rail trail. We are very pleased to see that the Motukarara to Catons Bay section of the Little River Rail Trail will be opening on May 28th but would like to see a commitment on the part of the City Council to completing the trail. This includes the provision of toilets at Catons Bay and a carpark and toilets at the Kaituna Quarry.

Looking to the future, a network of cycle trails throughout Canterbury would provide both recreational and travel opportunities.

Refuse Minimisation and Disposal:

The current application by Transwaste to increase waste volumes to the Kate Valley Landfill does not auger well for the future and is a graphic illustration of the inadequacy of the Council's present policies and actions.

Hence, while we support much of the policy aspirations of this section of the Draft LTCCP, we are concerned that what is actually delivered will fall short of the desired achievements unless action is pursued aggressively and with adequate resources. The 2016 targets that have been set for Kate Valley residential and commercial waste (220 and 295 kg/capita/annum respectively) anticipate a completely inadequate effort.

We would welcome information on the progress of the Council in complying with the NZ Waste Strategy and with it's own and ECan's waste strategies.

The Council could also play a role in lobbying central government with regard to producer responsibility for packaging (litter from fast food outlets has been cynically referred to by the industry as 'free advertising').

We await with interest the report of the Zero Waste Working Party later this year.

We believe that the Council should lead by example by committing to a 'Zero Waste Policy' and expanding its internal waste minimisation initiatives.

We propose that the Council adopt a purchasing policy of buying products that are durable, repairable, reusable and recyclable and, as far as possible, locally produced goods to decrease the need for packaging and transport and encourage the local economy.

Similar considerations should apply in the tendering process when sub-contracting.

Waste at Council crèches should be reviewed, particularly policy as regards disposable nappies. Disposable nappies are a major problem in waste disposal and the Council should show leadership by minimizing their use in it's own facilities.

Regulatory Services:

We believe that building energy efficiency and sustainability are matters in which the City Council can play a leadership role by ensuring that the provisions of the Building Act are applied effectively (not least in their own operations).

The Building Code is currently under review to ensure consistency with the Building Act 2004. The review will set standards for sustainability and energy efficiency and we suggest that the Council advocate for improved energy efficiency measures (over and above those of Clause H1) and for strong sustainability provisions be included in the new Building Code.

There are on-going problems with liquor consumption in many parts of the City, particularly in the CBD. Binge drinking and drunkenness are one of the main reasons why people do not feel safe in the City. This is also a national problem and the emphasis for a solution has been on changing the legal drinking age since it is a straightforward and gives the impression that the problem is being tackled.

However, the major cause is that bars and liquor outlets commonly flout the law and get away with it.

The Council in it's role as a regulator should work closely with the police to ensure that the law as it stands is enforced and liquor outlets (i.e. bars and retailers) breaking the law are successfully prosecuted.

Streets and Transport:

We strongly support the Living Streets project and are concerned that increased traffic congestion is likely to lead to more drivers using residential roads as 'rat runs' to avoid traffic jams. In such cases the Council needs to take action early on.

The Aoraki Greens would like to see the transport policies explicitly recognise the increasing cost of transport fuel, the imminent arrival of 'Peak Oil' and the increased demand for public transport that will develop as a result.

The Regional Passenger Transport Plan has been very successful in enabling Christchurch, in particular, to buck the New Zealand trend in public transport use and a number of the key deliverable's of the Plan are ahead of target. We were particularly pleased to see that bus use in Christchurch in March this year was a 30 year high at 1.51 million trips.

However, the overall targets set by the Council are disappointing. The Council projects a static number of Shuttle Bus trips and has no overall target for increased public transport numbers. It projects a reduction (68%-65%), rather than a significant improvement in cycleway satisfaction. Expenditure projections show that Council has little commitment to cycling. Current off-road cycle and pedestrian linkage expenditure is 1.03% of total streets and transport expenditure rising to a meagre 1.18% by 2016. Current public transport expenditure is 5.4% of total and projected to rise to 12.03% by 2016. We would prefer a more robust target such as 25%, if traffic congestion and air pollution are to be seriously tackled by Council.

Consideration should be given to cheaper fares for frequent users such as people using the public transport system to get to work (i.e. season tickets) and intellectually handicapped people. Increasing the transfer period to, say 10am-3pm (the non-peak period), should also be considered. These measures would encourage greater use of public transport and increased bus occupancy. Reinstating the discount on the Quail Island ferry would make the island more accessible both as a recreational resource and illustration of conservation practice.

The Council needs to improve access to transport for disabled people, elderly people and children

There are still problems with physical accessibility for disabled people, elderly people and those with young children (particularly in pushchairs). These problems are likely to be more prevalent in future as Canterbury's demographics change. Most notably Future Path Canterbury projects that the number of persons over-65 will more than double in the period 2001-2021 (from approx. 48 000 to 110 000) with an consequent increase in those with mobility constraints (due to conditions such as arthritis or deteriorating vision) and hence difficulties with access.

Considerable progress has been made with the buses themselves (both in numbers and in quality) and the original targets have been exceeded which is great to see. Increased standardisation in bus layouts would be helpful, especially for people who are blind or have low vision (contrasting colour schemes can be important for those with low vision), and more room for motorised wheelchairs. It is also important that arrangements for securing wheelchairs are adequate to ensure passenger safety.

Substantial infra-structure deficiencies still remain that particularly affect disabled people. These issues are primarily the duty of the City Council. Many of Christchurch's roads are not 'crossing-pedestrian-friendly' particularly for anyone with impaired mobility (note that adults with young children could fall into this group). This can make a bus stop a mere 20 metres away inaccessible to, say, elderly people from a home simply because the road is an impassable barrier. Careful siting of stops and associated crossings, cut kerbs etc. is essential to ensure the most cost effective expenditure. Standardised shelters and stops would also be beneficial (and may bring economies of scale as distinct from the costs of 'one-offs'), again ensuring that they are accessible to people in motorised wheelchairs.

Information needs to be provided in forms accessible to people with sensory impairments and intellectual disabilities.

We suggest that the most effective way of dealing with the problems identified above would be for the Council (and its partners in the Metro Strategy) to implement the recommendations of the Human Rights Commission's report "The Accessible Journey" (see Chapter 10 of the Report) as soon as possible. This would ensure that the public transport would not only be accessible to disabled people but would also improve accessibility for elderly people and those travelling with young children.

We support providing priority lanes for buses.

We would like the Council to examine the feasibility of park-and-ride schemes from the City edge and from other townships such as Kaiapoi and Rolleston. The strategies adopted in the Selwyn and Waimakariri DC LTCCPs may adversely affect the usefulness of park-and-ride schemes (and bus use generally) as the current prevalence of piecemeal development in rural areas, rather than concentrating development around existing centres, tends to encourage car not bus use. Strategies of concentrating development in key settlements would be more effective in discouraging car use and encouraging alternatives. Focusing development around making best use of existing communities and assets by properly planned mixed-use development, i.e. following the principles of 'Smartgrowth', would have a number of advantages.

Sustainability and self-sufficiency require a shift away from fossil fuels. Hence, we would ask that the Council and its partners investigate alternatives for the vehicle fleet. These could include expanding electric shuttle services, hybrid buses (which are up 60% more fuel efficient), bio-diesel, liquefied petroleum gas and ethanol. These all have both advantages and disadvantages but assessing the overall benefits and disbenefits would be useful in establishing future policy directions.

We believe that the Council should aim to move away from diesel-based public transport to improve air quality and energy efficiency.

We also want the Council to look further at the practicability of providing rail or light-rail travel facilities and for working with other territorial authorities and Central Government in the development of these networks.

We support rail passenger transport from urban centres like Rangiora, Rolleston, Amberley, Ashburton, Kaiapoi, Lyttelton and the proposed Pegasus Bay development. Light-rail/tram options on the major arterial routes in Christchurch City need to be incorporated into transport planning to reduce congestion and air pollution.

Public transport also has a role in reducing air pollution. The Public Passenger Transport Strategy Update notes that it is likely that pollution levels along a number of heavily used road corridors will reach unacceptable levels in the next 10 or so years. Examples are Colombo Street, Riccarton Road and Papanui Road

We would like to see ECan put in place an air-quality monitoring program along main traffic corridors and ask that the City Council support such a program.

We would like to see a commitment from Council to securing cycling as a safe and efficient alternative to the private motor vehicle for both children and adults

The current cycle network is extremely patchy and varied according to safety and the servicing of transport from one area of the city to another. The Council needs to put more effort into ensuring that cycling is an attractive choice of transport for all age-groups. This means that deterrent factors such as poor road crossings, inadequate on-road cycle lanes, air pollution and general concerns about child safety need to be reduced.

The Council should have an active programme of implementing a Strategy providing off-road or car-separated cycle routes from all suburbs into the City Centre and between suburbs. By car-separated we mean that cycle lanes need to provide a safe width between cyclists and moving

or parked cars. Highly dangerous routes such as Gasson St are examples of complete failure in this respect. More red-marking and policing of car usage of lanes at intersections is required.

Car-separation requires a street by street renewal of pedestrian and parking areas along road cycle routes (eg Tennyson St) so that cycles have a dedicated lane free from car or pedestrian interference. Wide avenues, such as Fitzgerald, Linwood and Bealey, have space for central cycleways controlled by traffic lights. The rivers need additional cycleways and the Council should obtain cycle space along the east-west rail line.

Safety for children should be increased by establishing traffic calming and separating measures outside all schools and the formation of marked separated cycle lanes on all popular routes to the school.

We believe the issue of freight transport should be given more prominence in the Plan. Heavy goods vehicles have an impact well in excess of their comparative numbers.

Regional plans and strategies developed over the past few years are too focused on car and truck transportation. An aim should be to increase the use of other transport modes apart from vehicles on roads need. The use of rail, coastal shipping, bicycles and public transport modes needs to be explicitly stated and targets and activities developed for these.

We agree with many of the objectives and policies, such as supporting hubs (particularly rail) and access thereto and retaining public ownership of (currently) unused rail corridors. We also appreciate support for using unused rail corridors for cycleways.

The Land Transport Plan notes that rail freight capacity is under-used and we believe that rail freight should be promoted and policies for increasing rail use could be given more prominence.

We support long term planning outside the 10yr framework but this will require increased cooperation between territorial authorities throughout South Island to ensure the best outcomes. In this context experience in developing previous joint strategies, such as the Greater Christchurch UDS, may be a useful model and the City Council a key player.

Wastewater Collection and Treatment:

We are acutely aware of the implications of discharges to ocean. Not only do some of these practices have undesirable visual effects, but they also affect the health of aquatic ecosystems, the opportunity for recreational use and gathering of food and kai moana. A recent report from the United Nations shows an increased likelihood of 'dead zones' in our ocean resulting from the discharge of nitrates and phosphorus into the sea (UNEP Global Environment Outlook (GEO) Year Book, 2003). The report highlights the expansion of these zones into areas around New Zealand.

We strongly support any moves to limit discharges to ocean and to encourage the greater use of 'wastewater' as a resource.

Flows in the foul sewer system show large increases under storm conditions due to increased infiltration and runoff. This leads to more discharges of mixed foul and storm water and increased pumping costs. The current programs for improvements take infiltration into account but do not seem to consider mitigating the impact of runoff. Runoff is also controllable by separating runoff from drives and roofs from the foul system but there does not appear to be a program for increasing separation. We would like to know what measures the Council is taking to deal with this, both from existing building and new developments.

Decreasing impervious areas by use of permeable surfaces in areas such as car-parks would also help.

Residential rainwater storage for domestic irrigation and toilet flushing also helps to minimise peak sewage flows as well as contributing to lowering the use of drinking water.

Targets for minimising emergency overflows from the foul system should also be stated as such discharges can be very damaging to watercourses since they generally occur under dry conditions when sewage strength is high and watercourse flows low.

Water Supply:

Water is a 'hot issue in Canterbury and we are particularly pleased that the City's leakage control program has been so effective. The current level of 131 l/connection/day is an impressive improvement over the original target of ca. 180 l/connection/day and all those involved in delivering the program are to be congratulated.

There is still a problem with drinking quality water being wasted on garden and lawn irrigation. This is noted in the Plan as the major use of water supplied for drinking. Irrigation is not being applied appropriately for plants' needs and too much is wasted on watering drives and pavements (which don't grow too well!). More education is needed, both at the individual level and in targeting retailers to advise on efficient watering.

In addition, rain water storage tanks can be used to replace (to a large extent) drinking water for garden and lawn irrigation and for flushing toilets. This is recognised in Council publications, such as the Sustainable Building Guide, but the benefits are not appreciated by the general public and should be promoted more vigorously. Financial assistance for installing rainwater collection tanks should be considered since this would save investment in water supply. Rainwater collection tanks should also be included in new developments and could be made more attractive by an appropriate remission in the system for development contributions.

The City's water supply is being put at risk by intensification of agriculture with its twin impacts of water abstraction and water pollution. These impacts must not only be recognized in Regional plans, such as the NRRP, but action taken to protect the City's drinking water sources.

General comments

Climate change

Climate change has received considerable media coverage over the last few months. It is now generally agreed that not only is climate change occurring, but that climate change is occurring at a faster rate than previously thought. Carbon dioxide and methane levels in the atmosphere are higher now than they have been in the last 650,000 years. The West Antarctic ice sheet is breaking up at an unprecedented rate and glaciers are in retreat in most parts of the world.

While temperature increase is predicted to be a little less in New Zealand than on large landmasses and at the poles, the other effects will be serious. In particular, changes in rainfall patterns are likely to make drought-prone areas like Canterbury drier, while at the same time the rain we do get will come in more intense bursts increasing the risk of severe flooding and wash-outs such as recently occurred in South Canterbury and Dunedin.

Sea level rise, driven by expansion of warming seawater and melting of ice, will pose a serious threat to coastal settlements and infrastructure with the New Brighton area (Waimari Beach to South Spit) being especially at risk locally.

The Green Party's proposals on climate change (Turn down the Heat) are attached as an appendix.

We consider it vital that the Council acknowledges the reality of climate change and starts to prepare for the impact of it now. Failure to do so is likely to result in serious hardship for many from the severe risks it poses to people's lives and property.

We would also like to see the Council take a leadership role in initiating projects to decrease greenhouse gas emissions within the Canterbury region, as there are many actions that can only be undertaken by councils.

Specific actions that we would like Christchurch City Council to undertake are:

1. Show leadership on the issue. Much of the public is aware of the issue and wants to help to solving the problem. However, there are some things that can only be done by councils and these strongly influence how much individuals can do to help. Note that this issue is too important for political allegiances to get in the way.
2. Join Communities for Climate Protection New Zealand (see <http://www.climatechange.govt.nz/sectors/local-govt/ccp-nz.html> and <http://ccp.iclei.org/ccp-nz/>). This is low cost and enables the council to get some funding from MfE and to access resources to help the community decrease its greenhouse gas emissions.
3. Contribute funds and participants to a regional conference on how climate change will affect the region and the districts within it and what councils and communities could do to decrease greenhouse gas emissions and to minimise the adverse effects of climate change on the region.
4. Allocate funding to have a council staff member dedicated to climate change issues.
5. Require all council reports to address the greenhouse gas emissions impact of whatever is the subject of the report. This would be part of the role of the dedicated climate change issues officer.
6. That funding be put aside for community (residential and business) education, information provision and behaviour change workshops about climate change.
7. That funding be devoted to employing greenhouse gas reduction advisers for business and public institutions as well as for residences..
8. That as equipment and vehicles are replaced, they be replaced with the most energy efficient models.
9. Earmark funding for urban design plans to be re-evaluated in light of the greenhouse gas emissions that would result from implementation of different plans. This is particularly needed to address urban sprawl.
10. Review the current district plan for urban districts to allow more mixed use areas (residential mixed with certain types of suitable [quiet, non-polluting] business activity) so that people need to travel less within the city.

11. Invest in renewable energy projects (e.g. bulk purchase of solar water heaters, separate collection of garden and putrescible waste and subsequent conversion to biogas and compost). Currently most of these projects would be eligible to apply for carbon credits from central government so decreasing the costs to council.
12. Contribute significantly to the Healthy Homes project that supports low-income households to insulate and damp-proof their homes.
13. Fund assessment of the energy ratings of buildings and making such assessment a necessary part of a building warrant of fitness.
14. Allocate funding, in cooperation with ECan, for reassessing the threats from floods and erosion of coastal and inland areas in the City, as well as of droughts, on a regular basis as the threat may change rapidly as climate changes. The region from Waimari Beach to Southshore (Brighton Spit) is particularly vulnerable.

Sustainability

Sustainability is a major consideration in much of the legislation covering matters dealt with in the Draft LTCCP but it is given little prominence in the Plan. We propose that each action be given a simple 'Sustainability Rating' (as in the 'ticks' for the Community Outcomes) for each of the four criteria for sustainability, identified by the Parliamentary Commissioner for the Environment; environmental, social, economic and cultural. These can be used to indicate its contribution towards a sustainable city.

Using local goods and services is an important contribution to sustainability.

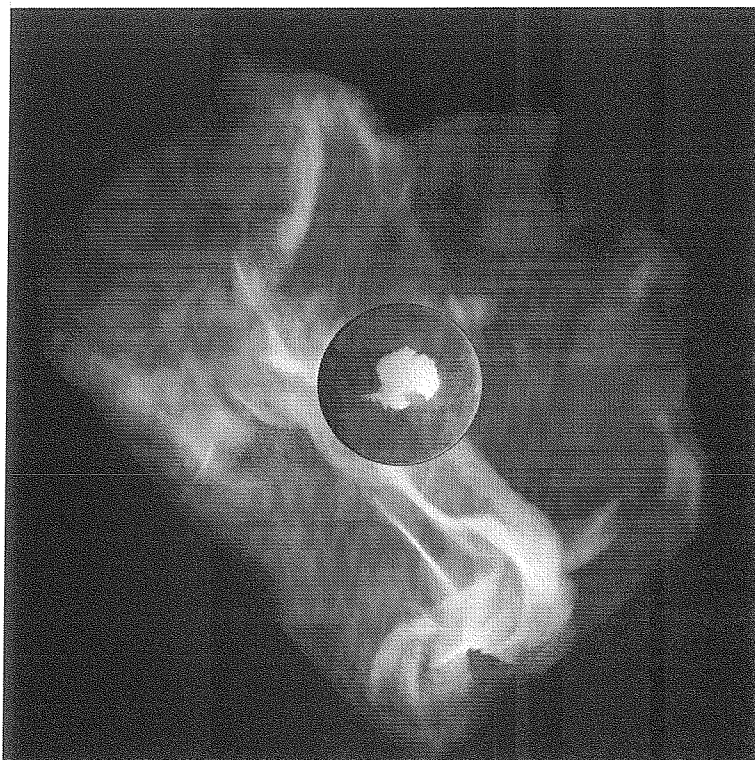
We would like the Council adopt a policy of using local businesses to provide goods, equipment and services where possible or, failing that, New Zealand firms wherever practicable.

Genetic Engineering

Managing local risks of Genetically Modified Organisms is a significant issue for the community and a desired Community Outcome. This submission asks that it be included in the 10-year Plan. Issues which should be considered include:

- That current laws expose the community to costs for clean-up of GE organisms and other local impacts.
- Consultation with the community should be part of the 2006-2016 Plan.
- Legal advice shows Councils have a right and a duty to consider local regulation for GM organisms including: Prohibiting release, bonds to cover cost of clean-up, listing GE use on LIMS, requiring insurance to fund decontamination.
- That the Council should co-operate with other Councils to develop policy.

Turn Down the Heat



The Green Party's Proposals to Address Climate Change in New Zealand

March 2006



Green
Green Party of Aotearoa New Zealand

Turn Down the Heat– a Green Party proposal

Executive summary

The Government's 2002 climate change policy package is being rolled back, with the cancellation of the carbon pollution charge, leaving the question of what will happen to the negotiated Greenhouse Agreements with industry and the Projects to Reduce Emissions mechanism – which was just beginning to get more renewable energy projects built – unresolved. There is no other plan in place, and officials are just beginning work on what to do instead. It is now less than two years until the Kyoto agreement comes into force, and the scientific evidence all points to climate change being further advanced and more serious than forecast even just a few years ago. Indeed, it is now well understood scientifically that climate change has begun.

Recent analysis shows that New Zealand is far from meeting the target set by the Kyoto Protocol to reduce our net emissions to what they were in 1990. At the end of the first Kyoto commitment period, in 2012, we will be liable to purchase credits on the international market to offset our emissions. We also get some credits from the carbon sequestered in 2008-12 by our "since 1990" forests. There is therefore a strong argument to be made that the Government should be much more proactive in purchasing carbon reductions now to avoid the cost of purchasing international credits later.

This paper is the Green Party's contribution to the debate about what New Zealand should do in the current policy vacuum. Not all of it is ratified policy; it is a set of proposals, and we welcome input.

Dealing with climate change requires measures to reduce emissions from burning fossil fuels, from the digestive systems of cattle and sheep, from the use of fertilisers and fluorocarbons, and from land clearance. Fundamental to making progress is for there to be a price for emitting / reward for saving greenhouse emissions. That was the purpose of a carbon charge, with the advantage that it would be recycled through the economy, reducing other taxes or helping people to adapt to higher energy prices.

Another possibility is an emissions trading regime at international prices. Some of the measures in this paper tend in that direction, but it is an intensely complex market to set up, and the policy work on it has not been done, as it had been for the carbon charge, so we doubt it could be done in time for the first Kyoto commitment period.

We have therefore taken a pragmatic approach, and suggested a range of goals and measures to reduce emissions and increase carbon storage, using, where practical, an economic incentive, with possibilities for trading among similar business types.

The Green Party's policies on energy and transport have been available for some time. What is new here are our proposals for the forestry, farming and air transport sectors, and some new goals we propose for the energy sector.

The main new elements are:

- carbon storage payments should be made to owners of "Kyoto forests" with penalties for deforesting;
- methane emissions from livestock should be capped at the present level, with any increases in livestock numbers requiring an offset in carbon reduction projects;

- carbon dioxide emissions from air transport should be capped, with offsets required for increases;
- a goal should be set of a fully renewable electricity generation system by 2027, through a 2% increase in renewables each year, and demand should be stabilised through energy efficiency;
- a goal should be set of improving the efficiency of the New Zealand vehicle fleet by 15% by 2012.

The climate is changing fast

Ice core analysis shows that carbon dioxide levels in the atmosphere – at 380 parts per million – are higher now than they have been in the last 650,000 years, when they ranged between 180 – 280 ppm over 5 glacial and interglacial ice ages. It is not surprising that we are noticing the effects of that on the earth.^{i, ii}

Over the last year or so we have seen worrying evidence that climate change is accelerating. The West Antarctic ice sheet is breaking up at an unprecedented rate.ⁱⁱⁱ Arctic sea ice is disappearing and exposing ocean which, with its darker colour, is absorbing more heat and accelerating the process.^{iv} Glaciers are in retreat in most parts of the world.

The Gulf Stream, the warm current that keeps Western Europe habitable, has weakened by 30%. This is believed to be the result of polar ice melt upsetting the ocean circulation pattern.^v If the Gulf Stream were to stop altogether the climate of Europe would be more like Greenland.

The gradual melting of the tundra (frozen swamps in Siberia and northern Canada) has started to release thawed methane from swamps.^{vi} This has the capacity to cause runaway climate change which would be unstoppable.

As much as half of the carbon released over the last century has not gone into the atmosphere, but been dissolved in the ocean. As a result the seawater has become measurably more acidic, making it more difficult for limestone and the shells of crustaceans to form, threatening the basis of the marine food chain.^{vii}

These are changes of planetary scope; an indication that something very big is happening. Our responses so far have been pathetic.

Predictions for New Zealand

While temperature increase is predicted to be a little less in New Zealand than on large landmasses and at the poles, the secondary effects will be serious. In particular, changes in rainfall patterns are likely to make drought-prone areas like Canterbury and Marlborough drier, and wet areas like the West Coast wetter. Warmer temperatures will make it easier for tropical pests and diseases, which we are not adapted to, to establish here, and sea level rise, driven by both expansion of warming sea water and melting of ice, will threaten our largely coastal settlements and infrastructure.^{viii} Our unique biodiversity will be pushed out of its normal habitat, and for many species there will be nowhere else to go. The rate of extinctions will accelerate.^{ix} In a developed economy, the best climate is the one we have already spent billions of dollars adapting to.

Why should New Zealand do anything when we are so small?

New Zealand produces only 0.2% of global greenhouse emissions. We cannot protect our own climate unless others act too. Yet this argument can be made by every country in the world – even the US, with 25% of global emissions, cannot protect its own climate unless others act. New Zealand's emissions per capita are 4.25 times the global average. We are a small country, but per person we are not small polluters. New Zealand's emissions have risen by 22.5% since 1990 and show no sign of abating.

Morally, we have an obligation to be a good global citizen, and to help put pressure on those who are not. From a self-interested point of view, we have more to lose from a destabilised climate than most countries, and we have little chance of influencing international agreements and action by others if we don't put our own house in order. There is also likely to be an international backlash against countries with high per capita emissions who are perceived to be doing little or nothing.

What happens if we do nothing?

Our Kyoto commitments require us to return our emissions to 1990 levels for the period 2008-12 or buy emissions credits from those who have some to sell. If present trends and policies continue we are on track to be in deficit by 54m tonnes by 2012. We do not know what the cost of this will be, but a conservative estimate puts it at \$562m. So we have a choice – spend that amount, or possibly much more, buying compliance from Russia, who is likely to have spare credits, or pay our own people to reduce their emissions.

The Greens believe the sensible course is obvious – we should buy carbon compliance from our own households and industries rather than offshore. This will put us in a better position to comply with more stringent requirements in future, reduce our energy costs in the long term, and, most importantly, do our bit to slow climate change rather than just shuffle money.

What should our priorities be?

New Zealand is unlike all other countries in that 49% of our greenhouse emissions are from agriculture. These include methane as a product of livestock digestion (31%); nitrous oxide from animal urine (15%) and nitrous oxide from fertilisers (3%). Research is ongoing, but it is unlikely that we could reduce these emissions significantly other than by reducing the number of ruminant livestock. This is often used as an excuse to do nothing. However, the fastest growing greenhouse gas is carbon dioxide from fossil fuels, up by 37% since 1990, and currently 48% of the total. In particular, transport emissions have risen by 58%. Stopping the growth in these should be our first priority, while research continues to select lower emitting animals by breeding and find animal diets that produce less methane.

The other unexpected source of carbon dioxide is deforestation, as more forests are being cleared than are being planted. Conversion of forests to intensive farming such as dairying has a double effect – less carbon storage in the trees and soil and more methane from the cows. Discouraging this land conversion is another urgent priority.

Goals:

1. To be in compliance with our Kyoto obligations over CP1 and beyond once negotiations are finalised.
2. To set New Zealand's climate changing emissions on a permanent downwards path by 2012, the end of the first Kyoto commitment period.

3. To create a sense of urgency and make real progress towards reducing New Zealand's net emissions by 60% by 2050, as is required globally to keep global warming below 2 degrees Centigrade on average.
4. To transform the New Zealand economy to seize our natural advantages and benefit from the research, infrastructure and technology we put in place to achieve these goals.

Achieving these goals requires a whole of government approach to land use, energy use, transport, trade and business development. We need targets for each sector that contributes to climate change, and measures to meet those targets.

We have not attempted in this paper to develop full implementation plans for each measure we suggest. That requires the resources of several government departments. We have, however, laid out a set of achievable goals and workable mechanisms on which further work should be done.

Land use/forestry

New forest plantings were expected to absorb enough carbon to provide some leeway for increases in emissions from farming and energy use. But plantings have reduced from an average of 44,000 ha/y to around 10,000 ha in 2004. In 2005 forest harvest exceeded plantings and replantings for the first time. This trend must be reversed if we are to meet our goals.

The 2002 government policy package decided that forest credits would be retained by the Government as a national asset. It makes sense for the Government to continue to hold the forest credits and take responsibility for complex measurement, insurance against fire and pests, and general Kyoto compliance, because the costs are much less when they can be averaged across the whole forest estate. However, carbon capture by the forester now needs to be recognised and some payment made for it to avoid a perverse incentive to deforest. This will improve the economics of retaining land in forest and discourage, but not prevent, its conversion to livestock farming.

Objective 1: To halt deforestation

Measures:

1. Make a "carbon storage payment" during the 2008-12 Kyoto commitment period (and any future commitment periods) to the growers of Kyoto forests, (i.e. planted after 1990). This would be less than the value of the carbon credits attached to those forests, to allow for the costs of Kyoto compliance carried by the state - carbon measurement, insurance against fire, pest and disease, and management of international carbon trading. Broad classes based on species and silviculture would be established and payments made accordingly, rather than attempting to measure each block of land in detail.
2. During the 2008-12-commitment period, (and any future commitment periods) net deforestation by owners of Kyoto forests would incur a deforestation penalty based on the same "value of carbon" calculation.
3. During the 2008-12 period, if the current 10% deforestation cap is breached, each grower would pay the penalty for any net deforestation above 10% of its holdings.

4. Land better suited to other land uses could still be deforested and its use changed, provided new land (not forested in 1990) was planted to compensate. Only the net change per grower would be counted.
5. Where the owner of the forest does not own the land, the owner of the forest would be liable for any deforestation penalties. These can be avoided either by coming to an arrangement with the landowner to replant, or by planting new land elsewhere.

Objective 2: Encourage more afforestation, particularly with permanent forest and a diversity of species, on steep land, and where soil and water values will be enhanced.

Measures:

1. Support the Permanent Forests Sinks Initiative, and in addition to carbon credits proposed in the current Bill, make additional payments for well-demonstrated erosion or flood control, water protection and biodiversity.
2. The continuation of carbon payments to those planting new land will encourage afforestation on suitable land.

Agricultural methane

Methane from ruminant animals and nitrous oxide from animal wastes and fertilisers make up nearly half our greenhouse gases. These are the most difficult greenhouse gases to avoid, other than by reducing livestock numbers and the use of fertilisers. However it is not equitable to exempt the farming sector totally from responsibility for their effects on climate change. We propose they should take responsibility for increases, rather than for total emissions, and that the only option for this is for them to reduce emissions elsewhere in the economy.

Objective 3: prevent the increase of net methane emissions from livestock

Measures:

1. Require carbon offsets for any increase in stock numbers. This could be for example by production of biogas or other bioenergy from farm wastes, planting of forests on farm land or funding of forest planting by others.
2. Resource consent would be needed to convert land to ruminants or intensify stocking. Green policy on protecting water quality already proposes requiring resource consents for intensifying land use in sensitive areas. Greenhouse emissions and water pollution issues could be dealt with together. Farmers reducing stock numbers could sell spare capacity to farmers wishing to increase theirs.
3. We propose a register of approved offset projects in which farmers could invest if they did not wish to develop projects on their own land.

Objective 4: reduce methane production per hectare and per animal

Measures:

1. Intensify research into alternative feeds, breeding and selection of lower emitting animals and rumen biochemistry. We support the use of new genetic technologies in the

laboratory as part of the research, but not the release of living genetically modified organisms, whether cows or bacteria, into the farm environment.

Objective 5: reduce nitrous oxide release from agricultural fertilisers

Nitrous oxide is a greenhouse gas 200-300 times more potent than CO₂. Nitrogen-based fertilisers increase denitrification, emitting nitrous oxide.

Measures:

1. Research and require the use of appropriate fertiliser management practices to ensure the most efficient use of nitrogen-based fertilisers. Applying nitrogen fertilisers only when required and in the appropriate quantities and forms needed by crops will not only reduce emissions of nitrous oxides, but also improve water quality and reduce costs for farmers.

Transport

Transport is the most important sector to tackle as it produces 18% of total greenhouse emissions and is the fastest growing source. The current vehicle fleet is so inefficient that gains can be made quite simply.

Objective 6: Improve the fuel efficiency of the light vehicle fleet by 3% a year reaching a 15% improvement by 2012.

Measures:

1. Introduce mandatory fuel efficiency labelling on all cars entering the country by end of 2006.
2. Set a minimum fuel economy standard for all cars entering the country, whether new or used.
3. Introduce a feebate system to link registration price to fuel efficiency for vehicles entering the country from 2007 on. More efficient vehicles would get a rebate, less efficient ones would pay an extra fee.
4. As Government vehicles are replaced, all should be from models in the top 5% of the fleet, measured on fuel efficiency. This probably means they will be somewhat smaller.
5. Require all vehicles to be properly tuned at warrant of fitness time to eliminate excess exhaust emissions as a result of poor fuel combustion.

Objective 7: Reduce distance travelled by cars

Journeys less than 2 km are 30% of the total distance travelled. There are many alternatives for such short trips, and some for longer ones.

Measures:

1. Allocate more of the Land Transport Fund to public transport, travel demand management, cycling and walking facilities.
2. Change the Financial Assistance Rate used by Land Transport New Zealand to fund regional public transport infrastructure such as commuter rail and bus lanes at the same rate as state highways that are mainly of regional benefit.
3. Implement the Greens' public transport plans for Auckland and Wellington, including a third option focussed on rail for the Western Corridor.
4. Work closely with local government to assist the development of urban form that allows shorter travel distances.
5. Work towards reinstating long distance passenger rail services.
6. Insist on nation-wide faster broadband to assist telecommuting.
7. Increase awareness of possible oil price rises as conventional oil depletes.

Objective 8: Shift heavy long distance freight to rail and coastal shipping

For long distance freight on main trunk lines rail is 4-5 times more energy efficient than road. Coastal shipping uses even less energy. Sweden has already moved to a policy of investing twice as much in rail as in road in order to reduce its dependence on petroleum.

Measures:

1. Accelerate the upgrading by Ontrack to ensure large containers can pass all tunnels and bridges.
2. Finish the electrification of the north island main trunk and require Toll to use electric locos once this is complete.
3. Support coastal shipping by re-introducing coastal cabotage, or equivalent measures to ensure international shipping does not destroy our capacity for coastal shipping.
4. Investigate options for modern wind-assisted shipping such as what has been built in Scandinavia, Japan and Germany.

Objective 9: Develop renewable transport fuels to provide 5% of sales by 2010, increasing to 10% by 2015.

Measures:

1. Require companies selling petrol or diesel to obtain 5% of sales from renewable fuels by 2010 with escalating targets as the technology develops.
2. Work with industry to establish infrastructure for biodiesel, bioethanol and blends.
3. Remove excise tax from renewable fuels not sold through oil companies for the first five years after they enter the market (eg farmers' co-operatives producing their own vegetable oil or compressed biogas and converting their vehicles to suit).
4. Increase research, development demonstration and deployment of fuels from wood and other sources of ligno-cellulose such as vegetative grasses.

Objective 10: Reduce net emissions from air transport

Domestic air transport fuel produces 7% of our transport emissions but is growing particularly fast. Other characteristics of aircraft emissions mean they have a greater climate changing effect than the measure of carbon dioxide output would suggest.

In addition, no international air transport is counted in any country's emissions budget – it is totally exempt from Kyoto. This creates a perverse incentive to transport goods long distances internationally rather than within the same country, and an incentive for international rather than local tourism.

Measures:

1. Establish a carbon offset programme for domestic air travel – voluntary until 2008 then mandatory with payments going to a New Zealand carbon sink project such as afforestation, agrienergy developments, biodiesel/bioethanol production facilities, landfill

gas projects. Offsets would be required only for the proportion of the carbon generated that exceeded 1990 levels.

2. Work within the international climate change discussions to have international air transport emissions included in future climate change obligations for all participating countries.

Electricity generation

Electricity generation produces only 8% of total emissions, but with the recent move to coal to replace declining gas, those emissions are growing fast. Despite our hydro stations, the proportion of electricity coming from renewable sources has been going steadily backwards. In 1991 it was 81%; in 2004 67%. It is decreasing by an average of 1% a year, but this year with a dry autumn and winter it could fall below 60% for the first time. We need to reverse this trend. That requires both encouraging more renewables and discouraging the building of more fossil fired power stations, especially coal.

Objective 11: Build on New Zealand's comparative advantage of world-class renewable energy resources to achieve a world-class renewable electricity system.

Objective 12: Increase the proportion of electricity from renewable sources by 2% a year until our electricity supply is fully renewable. An exception should be made for some fossil-fired plants on stand by as reserve power for exceptionally dry years or unexpected failures.

If demand growth can be halved to 1% pa this would take until 2040. If efficiency improvements can halt growth in demand, it could be achieved by 2027.

Objective 13: Increase the efficiency of energy use to prevent further increases in demand.

Measures:

1. Pass the Resource Management Act (Climate Protection) Amendment Bill (a Green Party Member's Bill currently before Parliament) to return the power of regional councils considering air discharge consents to take into account climate changing emissions. In the absence of a carbon charge, there needs to be another disincentive for building new coal-fired plants. If cost-effective and reliable carbon removal and long term storage is eventually proven, this will make it easier for coal fired plants to get approval again.
2. Green Party current policy is to require all sellers of electricity to hold certificates to show that they have purchased at least 2% of it from new renewable resources. Recent information, particularly from Germany, suggests that a much faster rate of uptake and maturing of the technologies can be achieved with feed-in tariffs, where the electricity system is required to buy electricity from renewables at a set tariff and give it priority access to the wholesale market, which allows efficient renewable plants to be economic. The tariff would initially be higher than that received by traditional plants, reducing over the first few years, to reflect the higher capital cost and lower running costs of these new technologies. Separate tariffs would be needed for each renewable energy form with the potential to become cost-effective in the future. We therefore propose this measure be prioritised. Net metering or net billing is required to allow small generators to make use of this measure.
3. Cap carbon emissions from the electricity sector at the present level, declining over time. New fossil power stations could then be built only if they backed out existing less

efficient ones. Public disclosure of every generator's fuel mix would be required, along with an ability to trade entitlements between generators.

4. Amend the rules of the Wholesale Electricity Market to facilitate access to the market by small-scale renewables and demand side initiatives (such as energy efficiency improvements), and in particular allow lines companies generating renewable electricity to sell directly to customers. (At present they can only sell into a market controlled by their competitors.)
5. Fast track adoption of time of use metering and smart metering to provide consumers with price signals and to facilitate demand response measures such as shifting part of their load off peak.
6. Fund research, development, demonstration and diffusion of selected decentralised, marine energy technologies to take advantage of New Zealand's natural advantages in this resource and of our technological capacity in this type of engineering. For example, the Government could facilitate a marine energy development park. Aim to be a world leader in marine energy technologies, and in coastal assessment processes in order to avoid conflicts over the use of marine space.
7. Build economies of scale to increase the affordability of solar water heating by using the Government's ability to bulk tender.
8. Use the opportunity of the review of the National Energy Efficiency and Conservation Strategy to strengthen the targets, accelerate timetables and invest seriously in a whole of government approach to energy efficiency. This should include Government purchasing; ensuring that energy savings are purchased throughout the economy wherever the cost is less than the long run cost of new generation and transmission investments; and transforming energy efficiency markets.

Households

Objective 14: to reduce energy use in new and existing homes to the maximum cost-effective extent with improvements in health and comfort.

Measures:

1. Upgrade the Building Code as quickly as possible for household insulation, glazing, water heating and lighting.
2. Develop a home energy-consumption labelling scheme and require that all homes offered for sale carry such a label.
3. Accelerate the retrofitting of pre-1977 homes so that all have adequate insulation, damp proofing, efficient heating and other cost-effective energy efficiency measures.
4. Seek partnerships in industry and the community to establish a network of local home energy advisory services as a one-stop-shop for households wanting to upgrade their homes and access information and government services.

Industrial energy use

Objective 15: Improve industrial energy efficiency by 2% per year across the sector, consistent with world best practice.

Measures:

1. Facilitate industry clusters where the waste from one (including waste heat) becomes the feedstock for another.
2. Require world's best practice in energy efficiency as part of the consent process for new plants.
3. Provide accelerated depreciation rates for best practice energy efficiency and renewable energy business investments.
4. Improve recycling rates for energy intensive materials, eg aluminium, glass, paper.
5. Continue the "Projects to reduce emissions" programme (currently under threat) which purchases carbon savings from new projects in renewable energy and energy efficiency; and expand it.

Objective 16: Increase use of wood wastes as industrial energy

Measures:

1. Increase support for research, development and deployment of technologies using wood wastes and systems for aggregating the waste arising from the forest.
2. Provide favourable feed-in tariffs for wood fired co-generation plants exporting power to the grid and providing heat for users off site.
3. Make self-sufficiency in energy, on a net basis, a requirement for consents for new wood processing plants and offer very favourable depreciation rates for the equipment.

Objective 17: Develop a fuel industry based on purpose-grown wood

The market for unpruned logs is poor and with rising costs of international transport of heavy and bulky commodities, along with the volumes of wood coming from North Russia it is likely to get worse. To use these substantial quantities of logs and branches for energy requires technological and market development.

Measures:

1. Develop a demonstration system of integrated harvesting, and storing, transporting and processing of the woody biomass component from the forest to the energy conversion plant.
2. Orient carbon capture and storage research to the use of this to capture carbon from wood, thus providing a net removal of carbon from the atmosphere in future, should accelerated climate change make this necessary.

Local Government

Objective 18: Enable local government to reduce its direct greenhouse emissions, and to inform and encourage its communities to reduce theirs.

Measures:

1. Encourage the collection and use of landfill gas with feed-in tariffs to gas pipelines or, if used in a power station, to the grid.
2. Offer accelerated depreciation rates for climate protection investments such as capture and use of landfill gas; efficiency upgrades in street lighting; more efficient sewage and water pumping; efficiency measures in council buildings.
3. Implement the recommendations of the 2001 inquiry by the Local Government and Environment select committee: Role of Local Government in Meeting New Zealand's Climate Change Target.

Trade and the future New Zealand Economy

Objective 19: To transform the New Zealand economy in the direction of sustainable economic activity, where exports are primarily low volume, high value products to minimise transport fuels and costs.

Measures:

1. Focus whole of government work on 'economic transformation' on energy productivity as well as labour productivity.
2. Analyse trading relationship and patterns for their vulnerability to climate change and to higher energy prices.
3. Target industrial assistance to enterprises that reduce our dependence on markets, production systems or resource use that are particularly vulnerable to climate change and higher energy prices.
4. Develop export capacity in small scale, renewable technologies of interest to the Pacific region and the knowledge and hardware to assist Pacific island states to take their own action on climate change

Government Sector

Objective 20: To provide government leadership in all aspects of action to reduce emissions.

Measures:

1. Set criteria for government procurement that include best world practice in energy efficiency, transport fuel reduction, travel demand management.
2. Adopt highest level of energy efficiency standards for all new government buildings.
3. Strengthen the targets and actions under the Govt3 programme.

Conclusion

Many of these measures are designed to set a price on carbon emissions – to send an economic signal that encourages carbon reduction. A carbon pollution charge, as proposed in the Government’s 2002 policy package, and as Green Party policy since 1993, remains the simplest, cheapest, fairest and most transparent way to do this. It could be combined with many of the measures above. In the absence of a carbon charge, we still need pricing signals that reflect the international price of carbon, as well as targeted measures to capture the maximum amount of cost-effective carbon reduction.

End notes:

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