



**Communities for Climate  
Protection Programme  
LOCAL ACTION PLAN**

**October 2008**



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## 1) Introduction

The purpose of this action plan is to outline the greenhouse gas reduction targets the Council wants to achieve, and establish a work programme to achieve these goals.

All actions included in this plan are intended to be:

- focused on reducing carbon dioxide equivalent tonnes (eCO<sub>2</sub>)
- affordable, cost-effective and have other benefits (such as energy savings)
- supportive of partnerships between spheres of government, business and the community
- equitable and meet the needs of the whole community.

## 2) Targets

	Medium term (2012 target)	Long term (2020 target)
<b>Corporate</b>	Stabilise at 2004 levels by 2012	Reduce emissions to 40% below the 2004 level by 2020
<b>Community</b>	Stabilise at 2001 levels by 2012	Reduce emissions by 40% below the 2001 level by 2020.

The baseline years of 2004 for corporate emissions and 2001 for community emissions reflect the availability of data. An in depth audit of corporate (Council) energy use was carried out in 2004. The 2001 census data was used to calculate the community's emissions.

These are voluntary targets and there is no penalty to the Council or the community of failing to meet them. Significant changes will be required for the targets to be achieved. As outlined in the action list, further investigation is needed into what will be the most cost effective actions to achieve the targets. The current proposed actions are only a step in the right direction.

A 40 percent reduction by 2020 is in line with the Intergovernmental Panel on Climate Change (IPCC) which has stated that we need to reduce global emissions to about 40% of the present level to stabilise the atmosphere. A United Nations global warming conference held in Bali in December 2007 discussed a proposal for industrialised countries to consider cutting emissions by between 25 percent and 40 percent by 2020.

## 3) Initial Inventory

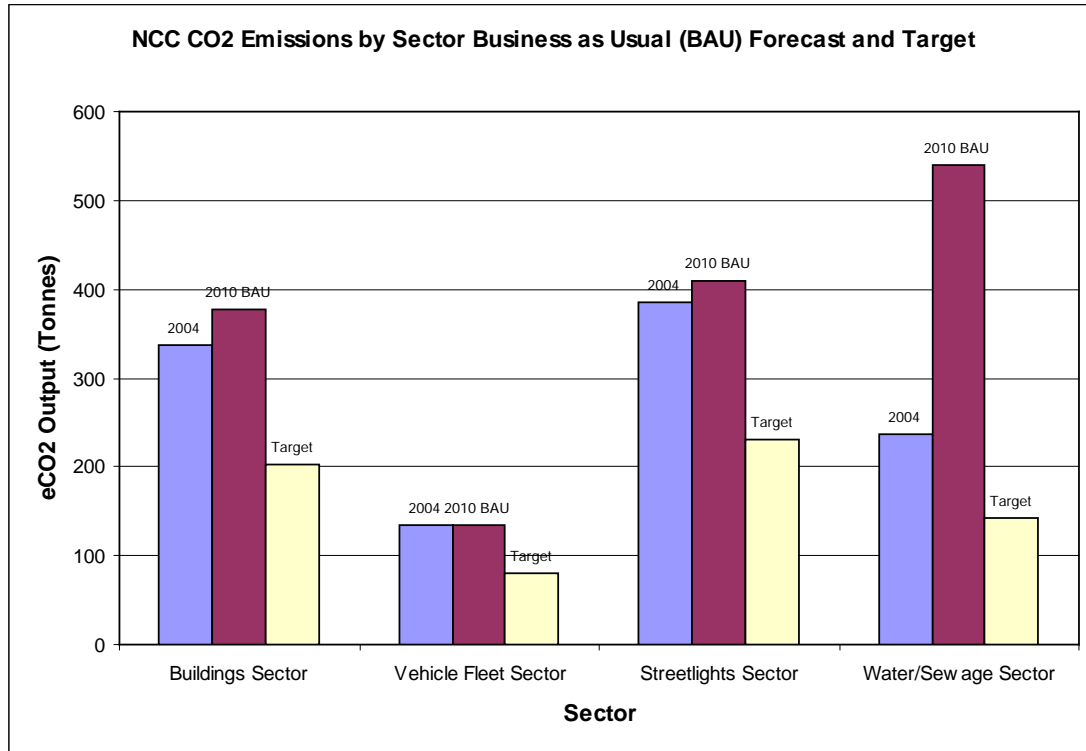
The following inventories indicate the Council and community activities which generate the most emissions.

### Information to support targets

More robust information will be needed in future, particularly relating to the community emissions. The 2001 community inventory are based on census data including population, local employee numbers in each business sector, vehicle registrations and national transport figures, and average residential energy consumption. One of the actions in this plan is to improve data collection and reporting of emissions.

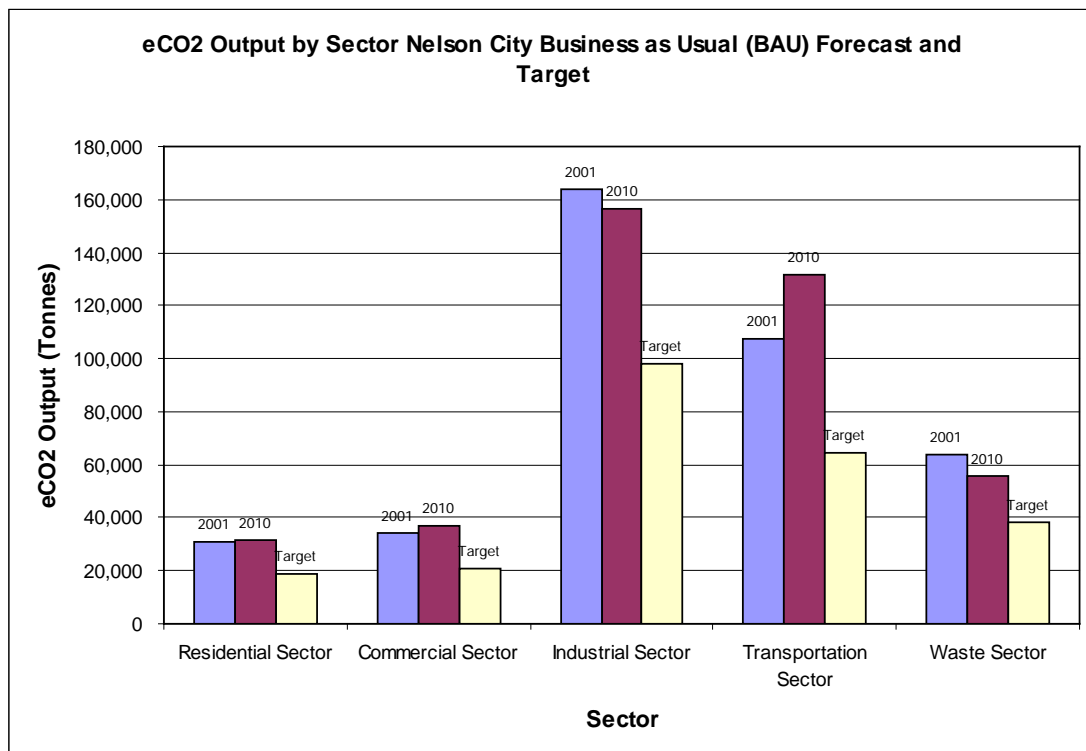
Nelson City Council activities resulted in 1,096 tonnes of CO<sub>2</sub> equivalent emissions in 2004. These emissions are forecast to increase to 1,461 tonnes in 2010, an increase of 33%.

**Figure 1**



The community's activities resulted in 400,534 tonnes of CO<sub>2</sub> equivalent emissions in 2001. These emissions are forecast to increase to 413,010 tonnes by 2010, an increase of 3%.

**Figure 2**



#### 4) A Partnership Approach

The Action Plan targets will only be achieved by the Council working with the community and other organisations to achieve them. A Sustainability Forum will provide an opportunity for all organisations with an interest in emission reductions to work together more effectively to achieve shared goals. (See Action 5, on page 7 of this plan.)

#### 5) Review of the Action Plan

Progress on the implementation of the Action Plan will be reviewed annually, and reported in the Council's annual reports.

The Council will undertake a full review of the Action Plan no later than 2011 which will look at new legislation, new technology and funding. The next Action Plan will be more of a community action plan, prepared in collaboration with interested parties. It will include their actions, as well as the Council's. The next Action Plan will be more strategic, more inclusive and collaborative, and provide a more quantitative assessment of the emission reductions being achieved by the Nelson community's actions.

#### 6) The Big Decisions – Upcoming Opportunities for Reductions

During the 2008/09 year the Council will be making decisions on a number of documents which have potential to achieve significant reductions in Nelson's greenhouse gas emissions. Some of the most significant decisions will be made during the following planning processes:

- Nelson Community Plan
- Regional Land Transport Strategy
- Central City Strategy
- asset management plans for transport, waste, water supply, storm water and waste water management.

#### 7) New Actions

1. Make greenhouse gas reductions a key goal in Council decision making	When	By who
Make reducing greenhouse gas emissions a key goal in all Council decisions, plans (including Asset Management Plans), strategies, policies and actions, including a procurement policy, particularly where there are significant emission implications.	Ongoing	All relevant staff
Increase staff awareness and capacity for reducing greenhouse gas emissions, and to implement actions identified in asset management plans, policies and strategies to achieve the Climate Protection Action Plan targets.	2009/10 onwards	All relevant staff
Require Council Controlled Trading Organisations (CCTOs) to set targets to reduce emissions and prepare action plans, including a procurement policy – as part of the CCTOs' statements of intent with the Council.	2009/10	CCTOs

<b>2. Data collection and reporting</b>	<b>When</b>	<b>By who</b>
Monitor and report on Council's greenhouse gas emissions, assess opportunities for reductions, and take action to achieve these reductions.	2008/09 Ongoing	Environmental Policy and Information Management  Contractor
Set up a robust data collection and reporting process for the community's emissions, including fuel, electricity and waste.	2008 onwards	Environmental Policy, Information Management and external advisors.  Data input contractor

<b>3. Communication</b>	<b>When</b>	<b>By who</b>
Develop a communications/education strategy. Show the Council's commitment to reducing greenhouse gas emissions.	2008/09	Public Communications and Environmental Policy
Implement the communications/education strategy.	2009/10 onwards	Environmental Policy

<b>4. Solar initiatives</b>	<b>When</b>	<b>By who</b>
Carry out a feasibility study to assess the costs and benefits of installing solar energy systems in Nelson, and how best to encourage their installation, through such things as an adaptation of the Council's Clean Heat Warm Homes scheme that reduces the burden of the up front cost of solar systems.	2008/09	Environmental Policy
Waive cost for building consent when installing solar water heating (current cost is \$100 per consent).	2008/09 onwards	Building Consents
Assess feasibility of solar water heating for Council facilities.	2008/09	Environmental Policy

<b>5. Community partnership</b>	<b>When</b>	<b>By who</b>
Establish a Sustainability Forum for greater collaboration between interested agencies and groups, to facilitate joint projects, and to make funding applications.	2008/09 onwards	Environmental Policy
Encourage organisations to register with the Council what they are doing, and plan to do to reduce emissions.	2008/09 onwards	Environmental Policy
Promote sustainable business, provide an award for this as a category in the existing small business awards.	2009/10 onwards	Organised by Nelson Tasman Chamber of Commerce

<b>6. Eco Design Advisor</b>	<b>When</b>	<b>By who</b>
Eco Design Advisor position established (for residential, commercial and industrial sustainable building design advice).	2008/09 and 2009/10	Environmental Policy
Eco Design Advisor – aim for shared position with Tasman District Council	2010/11 onwards	Environmental Policy

<b>7. Sustainable Business Advisor</b>	<b>When</b>	<b>By who</b>
Develop a Sustainable Business Advisor Proposal in collaboration with other organisations.  This position would include promotion of waste minimisation and encourage businesses to have energy audits.	2008/09	Environmental Policy
Sustainable Business Advisor – field officer to provide initial audits of energy, water and waste. Link with Tasman District Council and other business services available, including the Sustainable Business Network, Nelson Tasman Tourism, Cawthron, and the Nelson Tasman Chamber of Commerce.	2009/10 onwards	Sustainable Business Advisor

<b>8. Waste</b>	<b>When</b>	<b>By who</b>
Additional waste minimisation initiatives: - preschool programme - promoting recycling of commercial service when it is available - encouraging home composting - recycling at events	2008/09 onwards	Environmental Policy
Make it a condition for using or leasing Council facilities/reserves that recycling facilities are available.	Ongoing	Community Services
Work with retailers to promote use of reusable bags.	Ongoing	Environmental Policy

<b>9. Carbon Reduction Reward Scheme</b>	<b>When</b>	<b>By who</b>
Establish a Carbon Reduction Reward Scheme to encourage the community to reduce greenhouse gas emissions.	2008/09 onwards	Led by Nelson Environment Centre, supported by Environmental Policy

## 8) Investigative Actions

Sector	Investigation	When	By who
Water supply	A hydro-generation scheme associated with the water supply from the Maitai River.	2008 onwards	Technical Services
Water supply	Develop a water demand management strategy to limit water use.	2009/10	Environmental Policy and Infrastructural Assets, and external advice
Sewerage system	Investigate the establishment of an anaerobic digestion plant when the Bells Island wastewater treatment plant is upgraded. This would produce and capture methane.	Upgrade of Bells Island sewerage treatment system	Infrastructural Assets
Street lights	Options for progressive replacement of energy inefficient streetlights with more efficient bulbs, (e.g. LED) starting with the least efficient.	Ongoing	Infrastructural Assets
Facilities	Investigate the cost-benefit of measures to reduce greenhouse gas emissions from existing Council facilities, including the Civic House renovation. For instance, converting the diesel heating system to a lower carbon footprint alternative.	2008 onwards	Community Services Infrastructural Assets Corporate Services
Facilities	Investigate making new Council facilities state of the art eco-buildings with passive solar design, energy efficiency, and solar power e.g. the proposed Performing Arts Centre.	2008 onwards	Community Services Corporate Services
Facilities	Investigate making Council buildings net energy producers when mass-produced thin-film photovoltaics and other technological advances are made.	2008 onwards	Community Services
Land management and facilities	Detailed planning by Parks and Facilities staff to find ways to reduce greenhouse gas emissions caused by their activities.	2008/09	Parks and Facilities
Land management and facilities	Eco burials, as part of the overall cemetery operation.	2008/09	Parks and Facilities
Land management	Opportunities for carbon sequestration and earning carbon credits will be investigated when making land management decisions, including decisions on future re-vegetation and forestry land use.	2008 onwards	Parks and Facilities



<b>Sector</b>	<b>Investigation</b>	<b>When</b>	<b>By who</b>
Transport	Investigate providing incentives / disincentives and rewards for staff and councillors to use active transport and car pooling – both to and from work and in the course of work.	2008 onwards	Technical Services and Environmental Policy
Transport and Residential	The Central City Strategy will direct the review of the car parking provisions in the Nelson Resource Management Plan, options for improved pedestrian access, and inner city living.	2008 onwards	Council-wide, led by Environmental Policy
Development	Investigate providing incentives for developers that incorporate sustainability measures to reduce greenhouse gas emissions in their developments.	2008 onwards	Environmental Policy Consents
Residential	Investigate opportunities for bulk purchase of solar power/water heating to reduce the cost per unit.	Ongoing	Environmental Policy
Residential	Investigate methods the Council can use to encourage more use of passive solar energy, insulation and solar water heating.	Ongoing	Environmental Policy
Waste	Feasibility of collecting greenwaste and processing it to capture methane e.g. using an anaerobic digestion plant rather than sending to the landfill.	Waste Management Plan review	Infrastructural Assets
Waste	Investigate banning green waste going to the landfill, including in mixed waste, and especially in wheelie bins, or reducing charges for green waste disposal at the transfer station compared to mixed waste.	Waste Management Plan review	Infrastructural Assets
Waste	Aim to provide a recycling service for the commercial sector. Investigate using the landfill levy to pay for recycling services for the commercial and industrial sectors.	Recycling contract negotiations, November 2008	Infrastructural Assets
Waste	Feasibility of recycling plastics 3-6.	Recycling contract negotiations, November 2008	Infrastructural Assets
Climate Change Adaptation	Most up to date information is used to review impact of climate change and make required changes to planning requirements and service provision.	2008 Ongoing	Environmental Policy and Infrastructural Assets

## Appendix – Other Existing and Scheduled Actions Relevant to this Programme

Leadership	
<b>Existing actions</b>	Sustainability Policy
<b>Next steps</b>	Sustainability action plan developed and implemented.
Water Supply	
<b>Existing actions</b>	Water metering, optimising infrastructure to minimise pump use, and ‘use water wisely’ publicity between 1 January and 30 April each year.  Tracking down water loss from the network.
<b>Next steps</b>	Further design work related to hydro-generation associated with delivery of water to the Tantragee Water Treatment Plan indicates that a 90 kilowatt design is feasible, rather than a 20 kilowatt design as initially thought. The amended project will cost \$150,000 rather than \$100,000 but the Council will proceed with this higher yield design, subject to the additional loan money being available from EECA.
Sewerage System	
<b>Existing actions</b>	Sludge from both sewerage treatment plants is spread around pine trees. This avoids the need for fertiliser and increases tree growth (absorbing more carbon).  Optimising use of infrastructure to use energy more efficiently and minimise pump use.  So far, the Council has retained its existing oxidation ponds (that rely on biological process) which reduces energy demand.  Energy use/efficiency is a key policy in the Wastewater Asset Management Plan and a criterion when making decisions about upgrading sewerage systems.
Lights	
<b>Existing actions</b>	A trial of three different types of streetlights is being done in Todds Valley: Cosmo white lights (60W); Phillips SONS (yellow); and normal SONS lights (yellow light, higher power).  Trial of solar studs to light walkways and cycleways.  More energy efficient streetlights are put in to streets when road upgrades occur.
<b>Next steps</b>	Case by case assessment of lighting for off-road cycle paths.
Council Facilities	
<b>Existing actions</b>	The draft Saxton Field Reserve Management Plan includes sustainability principles, and the Saxton Field Stadium will have efficient heating. Community houses are insulated. The Trafalgar Centre is insulated, and there has been a change to a more efficient form of heating.

<b>Staff Transport</b>	
<b>Existing actions</b>	<p>Since 2004 building inspections have been clustered and scheduled to reduce vehicle kilometres travelled. This has reduced car use by the team by about 20%.</p> <p>Fuel efficiency is a key criteria for purchase of new vehicles.</p> <p>Support for the BIKE NOW project encourages staff to cycle to work. Two bikes are available for staff to use to get to meetings in the city.</p> <p>The addition of four more showers for staff supports active transport choices.</p>
<b>Next steps</b>	<p>Ongoing review of remuneration policy of providing cars as part of staff remuneration packages.</p> <p>Ongoing monitoring of air travel needs.</p> <p>Monitoring of the availability and cost effectiveness of biofuels and electric cars.</p> <p>Where there is high demand for training in a certain topic area, bring trainers to Nelson rather than send lots of staff away on courses.</p> <p>Encourage staff to limit travelling to work by car.</p>
<b>Community Transport</b>	
<b>Existing actions</b>	<p>‘The Bus’ service and SBL private bus service between Nelson and Richmond.</p> <p>Draft Regional Land Transport Strategy, Passenger Transport Strategy, Cycle Strategy, Pedestrian Strategy provide for actions that will reduce greenhouse gas emissions.</p> <p>Car pooling scheme.</p> <p>Active Transport Forum.</p>
<b>Next steps</b>	<p>Support the continuation of the active transport forum for greater collaboration of interested agencies and groups.</p>
<b>Council Waste</b>	
<b>Existing actions</b>	<p>In-house recycling scheme at Civic House.</p> <p>Recycling facilities at Council events and in the main street.</p>
<b>Next steps</b>	<p>Extend recycling to other Council facilities.</p>

<b>Community Waste</b>	
<b>Existing actions</b>	<p>Capture of 50% of the methane from York Valley landfill. This has reduced the Hospital's use of coal by 25%. The Council commissioned an investigation to assess the potential to increase methane capture landfill from 50% to 75%. Note: the Council is now receiving \$60,000 per year from the government for its portion of the landfill gas carbon credits.</p> <p>Residential recycling service, funded by the waste minimisation levy.</p> <p>Glass collected through the kerbside recycling programme is now used locally, in roads, rather than being sent to Auckland. This reduces transport costs and the associated carbon emissions.</p> <p>Waste minimisation programmes for businesses and schools.</p> <p>Composting of green waste collected at the transfer station.</p> <p>Waste Management Plan 2005 and Solid Waste Asset Management Plan 2005-2008.</p> <p>Any Council event organiser can book the recycling equipment for their event.</p>
<b>Waste</b>	
<b>Next steps</b>	<p>After the Waste Minimisation Bill has been passed by the Government there will be a review of the Waste Management Plan. Opportunities to reduce emissions associated with waste are identified in the Investigative Actions section of this Action Plan.</p>
<b>Residential</b>	
<b>Existing</b>	<p>Staff are promoting mixed use developments and sustainability measures in current development projects, for example in Marsden Valley.</p> <p>Water and energy conservation and composting are promoted through the annual Ecofest and the Home &amp; Garden Show and other Environmental Advocacy work.</p> <p>The Create Your Own Eden programme encourages the growing of vegetables and fruit in home and community gardens.</p>
<b>Next steps</b>	<p>Changes to the Nelson Resource Management Plan to promote more compact and resource efficient development. These plan changes will require better urban design and encourage less use of cars.</p>
<b>Industrial/Commercial Sectors</b>	
<b>Existing</b>	<p>Monitoring of industry emissions.</p>

Adaptation Measures	
<b>Existing actions</b>	<p>Minimum ground and floor level requirements in low lying areas.</p> <p>The Council considers the impacts of climate change when preparing assessments of environmental effects as part of resource consent applications made on behalf of the Council, and in any plan changes to the Nelson Resource Management Plan.</p> <p>The Hearings Committee takes the impacts of climate change into account when hearing resource consent applications.</p>