



*Ministry for the*  
**Environment**  
*Manatū Mō Te Taiao*

# **Carbon Neutral Public Service Programme**

**Emissions Reduction Plan  
for the Ministry for the Environment**

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# Carbon Neutral Public Service Programme Reduction Plan for the Ministry for the Environment

The Government has committed to moving towards a Carbon Neutral Public Service.

The Ministry for the Environment is one of the six core public service agencies that will lead the way in achieving carbon neutrality by the year 2012.

Reducing emissions is an important step in the context of carbon neutrality. Having measured emissions, it is necessary to undertake reduction activities that will reduce emissions as much as practical and as cost-effectively as possible.

The role of the reduction plan is to identify and record opportunities and initiatives that help reduce emissions. The remaining emissions across the public service will then be offset.

## Organisational overview

The Ministry's functions under the Environment Act can be summarised as:

- to advise the Minister on all aspects of environmental administration
- to obtain information, and conduct and undertake research
- to advise the Government and its agencies on:
  - environmental legislation
  - assessment and monitoring of environmental impacts
  - pollution management and control
  - identification and reduction of natural hazards
  - control of hazardous substances
- to assist in resolving conflict regarding policies and proposals that may affect the environment
- to provide and disseminate information and services
- to promote environmental policies, including education and mechanisms for promoting participation in environmental planning.

The Ministry for the Environment had approximately 280 full-time equivalent (FTE) staff during the 2006/07 financial year in its Auckland, Wellington and Christchurch offices.

## The Ministry for the Environment's current position

The Ministry for the Environment's Carbon Neutral Public Service (CNPS) Report, dated 21 September 2007, indicated a current footprint of 912 tonnes carbon dioxide-equivalent units (CO<sub>2</sub>e). Transport was responsible for the majority of emissions (Table 1).

This is the first year of the carbon neutral public service reporting on emissions. Differences exist between previous measurements, such as our annual report data and the verified data presented in the 2006/07 CNPS Inventory. This is due to more robust and precise measurement methodologies required by Cabinet under the CNPS programme such as updated emission factors and the inclusion of taxi travel and electricity distribution line losses. Moreover, previous inventories have not been independently verified.

The Ministry for the Environment intends focussing on the reduction of electricity use and business travel as these account for 99.6% of total emissions. The measures in this reduction plan are primarily focussing on using behaviour change to reduce emissions from our business activities, encouraging a culture of resource efficiency, and secondly on cost effective measures to improve our operational efficiency.

**Table 1: Ministry for the Environment carbon emissions 2006/07**

Emission source	Unit	2006/07		
		Quantity	Tonnes CO <sub>2</sub> -e	Percentage of total emissions
Fleet vehicle petrol use	litre	2,079	5	1
Electricity	kWh	705,607	148	16
Transmission and distribution line losses	kWh	705,607	14	2
Domestic air travel	km	1,746,548	314	34
International air travel	km	3,683,176	405	44
Taxi travel	km	54,162	13	1
Business travel in rental cars	km	42,170	10	1
Waste to landfill	tonne	2	3	0
Total	tonne		912	

- The main emissions sources are transport (81%) and energy (18%).
- The Ministry for the Environment will set reduction targets as part of its Travel and Energy Implementation Plans.
- The key sponsor for the Carbon Neutral Public Service within the Ministry for the Environment is the Sustainable Business Group. The group is also responsible for the overall delivery of the CNPS programme for the Ministry.

## Supporting policies and tools

Listed below are the policies, plans and resources the Ministry for the Environment has in place that will help address/support reducing greenhouse gas emissions.

- Govt<sup>3</sup> Action Plan – The Govt<sup>3</sup> Action Plan is the umbrella document for implementing sustainability measures within the Ministry for the Environment. Contributing plans include the CNPS Reduction Plan and the Ministry’s Travel Plan. The Govt<sup>3</sup> Action Plan is due for review in May 2008.

- The Ministry's Annual Report – Information collected under the Govt<sup>3</sup> Plan (including CNPS data) is summarised and reported through the Annual Report process each year against a series of key targets and commitments. These targets and commitments will be updated for the 2008/09 year.
- Monitoring our performance will provide information that informs us about progress in our plans and effectiveness of current policy eg, travel policy and procurement policy.

## Energy

Energy accounts for 17.7% of the Ministry for the Environment's greenhouse gas emissions. Our 2007/08 target is a 5% reduction in electricity use per full time equivalent staff member by 30 June 2008. This target is to be achieved through improved electronic reporting to allow effective, timely changes to be made to our operational energy efficiency and through staff behaviour change.

The Ministry is aiming to keep its Wellington office energy efficiency within the low EECA benchmark of 120kWh per m<sup>2</sup> (the 2006/07 measure was 117kWh per m<sup>2</sup>). Energy efficiency improvements in our Auckland and Christchurch offices are being targeted through staff behaviour change.

Initiatives already underway include:

- increasing the 'ideal' temperature band for the building management system to operate within from 2 degrees to 4 degrees
- encouraging the reduction of energy use from turning off PCs by educating staff through the use of 'Switch off' stickers
- moving all users to multi-functional print devices to reduce toner, energy use and resource use
- setting a default stand-by mode where appropriate on equipment
- setting hibernation mode as compulsory on all PCs (sleep and lockout after 10 minutes of non-use).
- a cost analysis for the installation of daylight sensors in open plan offices. These will be installed on Level 3 of Environment House as part of a trial
- a cost/benefit analysis for the installation of micro-wind, photo-voltaic power and solar hot water power in our head office building was completed in 2007. The results indicated that these measures are not feasible due to the high installation costs.

The planned initiatives listed in Table 2 aim to:

- increase awareness among staff of energy saving measures and create a culture of energy efficiency
- maintain energy efficiency within the low EECA benchmark of 120kWh per m<sup>2</sup> for head office
- highlight areas of energy inefficiency for ongoing improvement.

**Table 2: Planned energy initiatives**

Action	Responsibility	Timeframes	Measure of success
Upgrade building management system to allow real-time reporting on energy use	Senior Adviser Internal Govt <sup>3</sup> / Executive Officer, Corporate and Community Group	completed	5% reduction in electricity consumption per FTE
A comprehensive level 3 energy audit of the Wellington office building	Senior Adviser Internal Govt <sup>3</sup> / Executive Officer, Corporate and Community Group	May 2008	A completed energy audit with recommendations that can be implemented to reduce emissions
Complete level 2 energy audit of Christchurch and Auckland buildings	Senior Adviser Internal Govt <sup>3</sup> / Executive Officer, Corporate and Community Group	June 2008	A completed energy audit with recommendations that can be implemented to reduce emissions
Implement recommendations from energy audits	Senior Adviser Internal Govt <sup>3</sup> / Executive Officer, Corporate and Community Group	30 June 2008	5% reduction in electricity consumption per FTE
Awareness campaign for staff	Senior Adviser Internal Govt <sup>3</sup> / Executive Officer, Corporate and Community Group	30 June 2008	5% reduction in electricity consumption per FTE

## Transport

Transport is responsible for 81% of the Ministry for the Environment's greenhouse gas emissions. The two main contributors, comprising 78% of the Ministry for the Environment's emissions in 2006/07 were domestic and international air travel (34% and 44% respectively). A reduction in travel related emissions will be the main focus in the 2007/08 year.

Initiatives already underway include:

- a Travel Plan is being drafted and is due for completion in February 2008
- 10-trip concession tickets for buses are available for use by staff to reduce taxi use
- a dedicated video-conference room has been approved and will be available by May 2008.

Other initiatives are contained within the Ministry's Travel Plan.

Planned travel initiatives listed in Table 3 aim to:

- reduce the carbon emissions associated with our workplace travel by 6% in year 1 (2007/08)
- improve systems for monitoring travel
- create tighter decision-making processes for domestic and international travel
- encourage staff to use more sustainable modes of transport for business travel.

**Table 3: Planned travel initiatives**

Action	Responsibility	Timeframes	Measure of success
Develop and implement workplace travel plan	Senior Adviser Internal Govt <sup>3</sup>	Completed	A reduction in travel leading to a reduction in emissions associated with travel
Review air travel approval process to include carbon accounting	Senior Adviser Internal Govt <sup>3</sup> / Executive Officer, Corporate and Community Group	May 2008	Improved procedures for approving travel
Develop systems for regular reporting of travel to managers to be reviewed regularly at the monthly managers' meeting	Senior Adviser Internal Govt <sup>3</sup> / Group Leaders/ Managers	June 2008	Detailed information on business travel
Staff education on the need for air travel to encourage the use of video conferencing and teleconferencing	Senior Adviser Internal Govt <sup>3</sup> / Group Leaders/ Managers	Ongoing	A reduction in travel leading to a reduction in emissions associated with travel
Construction of a fit-for-purpose video conference facility on the ground floor of Environment House	Senior Adviser Internal Govt <sup>3</sup> / Executive Officer, Corporate and Community Group	May 2008	6% reduction in domestic air travel in year 1 (2007/08) leading to a reduction in associated emissions

Note: The employee commute is not included in these reduction plans as it is outside the scope of the Carbon Neutral Public Service programme. It is however addressed through the Ministry for the Environment's Govt<sup>3</sup> action plan.

## Waste to landfill

Waste to landfill accounts for 0.33% of the Ministry for the Environment's greenhouse gas emissions. We are therefore focusing on low cost behaviour change initiatives to reduce waste to landfill. It is expected that the benefits from this behaviour change will flow on to other aspects of the Ministry's operations.

Initiatives already underway include:

- a comprehensive recycling programme is in place
- annual waste audits are carried out in all three Ministry offices to determine new waste reduction targets.

Planned waste reduction targets listed in Table 4 aim to:

- reduce total waste produced by the Ministry for the Environment.

**Table 4: Planned waste initiatives**

Action	Responsibility	Timeframes	Measure of success
Two waste audits annually	Govt <sup>3</sup> Waste Adviser	December 2007 (completed) and May 2008	Completion of two annual waste audits and a reduction in total waste
Inclusion of recycled paper in waste audits. ALL waste produced within the Ministry will be weighed at an audit	Govt <sup>3</sup> Waste Adviser	December 2007 (completed) and May 2008	Detailed data on paper to enable improved reporting and a reduction in paper waste
Establishment of Govt3 working group to create and promote new waste reduction initiatives and revised waste reduction targets	Senior Adviser Internal Govt <sup>3</sup>	April 2008	Working Group meets 12 times annually; new initiatives implemented; revised waste reduction target set
Improve the packaging clauses in our procurement guidelines	Senior Adviser Internal Govt <sup>3</sup>	Ongoing	Reduced packaging in waste stream
Audit of paper use by floor and publication of results on intranet monthly	Information Management / Senior Adviser Internal Govt <sup>3</sup>	Ongoing	Reduction in paper use identified through waste audits and a reduction in the purchase of copy paper
Staff awareness campaign reintroduced into staff inductions	Govt <sup>3</sup> Waste Adviser	Ongoing	Increased awareness of new staff