



Ministry of  
**Fisheries**  
Te Tautiaki i nga tini a Tangaroa

**Emissions Inventory Report**  
**1 July 2006 – 30 June 2007**



<b>Prepared by</b>	Kim Hughes – Corporate Monitoring Unit In accordance with Part 7.3.1 of ISO 14064 (7.3.1 p)
<b>Date</b>	November 2007
<b>For the period</b>	1 July 2006 to 30 June 2007 (7.3.1 c)
<b>Background</b>	Government policy is for the public sector to move towards carbon neutrality. The initiative is centred on reducing emissions in a cost effective way, to demonstrate active leadership on sustainability and climate change, and to reduce the environmental impact of government business.
<b>Approval</b>	Wayne McNee Chief Executive, Ministry of Fisheries

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## Emissions Inventory Summary

Type of emission	Tonnes CO <sub>2</sub> -e*
<b>Direct (Scope 1) emissions</b>	
Petrol use	215
Diesel use	276
LPG use	N/A
Natural gas in owned buildings and leased buildings where the agency is the sole tenant	N/A
Coal use	N/A
<b>Total Direct (Scope 1) Emissions</b>	<b>491</b>
<b>Indirect (Scope 2) Emissions</b>	
All purchased electricity in owned buildings and leased buildings where the agency is the sole tenant	142
Purchased electricity for lighting and utility/appliance power in leased space where the agency is not the sole tenant	273
<b>Total Indirect (Scope 2) Emissions</b>	<b>415</b>
<b>Indirect (Scope 3) Emissions</b>	
Transmission and distribution line losses for all purchased electricity	44
Air travel (international and domestic)	962
Business travel in Rental cars / taxis	52
NIWA vessel use (diesel)	1,951
Waste to landfill	7
<b>Total Indirect (Scope 3) Emissions</b>	<b>3,016</b>
<b>Total Emissions</b>	<b>3,922</b>

Area	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
<b>Scope 1</b>				
Petrol Use	214.9330587	1.2723 28305	1.449429118	217.3012236
Diesel Use	276.62495	0.3207999	4.6235126	281.530928
<b>Total</b>	<b>491.5580087</b>	<b>1.593128205</b>	<b>6.0729417</b>	<b>498.832</b>

Emissions Exclusions	Reason for Exclusion
Electricity usage from storage facilities	This data is not included in the base year calculations as it is not recorded by our current provider. The amount is also very small.
Business travel in employee owned cars	This figure is not accurately maintained within our systems so has been excluded. The amount of this would be very small.
Air travel by consultants	Where consultants purchase their own flights and are reimbursed the amount will not be measured by our travel provider Orbit. This is only a very minor amount.
Activities on NZDF vessels	NZDF have a requirement under their output plan to be out on the water a set amount of hours regardless of what activities have been carried out, therefore emissions are included in the NZDF inventory.
Activities on NZDF aircraft	Activities on NZDF aircraft were not required to be included in the 2006/07 emissions inventory

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Staff commuting to work in personal cars	This is considered to fall under the personal foot print of the employee, rather than the agency.
Purchased goods and services	These emissions make up the direct emissions of the supplier and should be included in their footprint.
Carbon embodied within buildings	The production of cement and other building materials make up the direct emissions of the supplier and would be included in their carbon footprint.
Disposal of corporate waste (i.e. furniture)	These items are over and above the normal daily waste that is sent to landfill so have not been included.
IT Services	IT services outsourced to a third part have been excluded.
Refrigerant emissions	Emissions from refrigerants are excluded from the 2006/07 emissions inventory.
Outsourced registry services (FishServe)	This is a core service provided by a third party, who also provide services to a range of clients. Information will not be collected for 2006/07 as material to difficult to collect.

## 1. Introduction

This emissions inventory report has been prepared and written in accordance with Part 7.3.1 of ISO 14064-1 and is designed to be used in the process of being on the path to carbon neutrality by 2012.

## 2. Statement of intent

The Ministry of Fisheries is one of the 28 stage two core public service agencies that will be on the path to carbon neutrality by the year 2012. This programme will be broken down into three key stages which are set out below;

- Measure emissions;
- Reduce emissions; and
- Offset unavoidable emissions.<sup>1</sup>

## 3. Organisation description (7.3.1 a)

The role of the Ministry of Fisheries is to act as the Government's principle advisor on New Zealand's fisheries management and the impacts of fishing on the aquatic environment, including issues that may impact on the continued viability of fisheries or other marine resources.

The Ministry of Fisheries:

- Advises Government on the development of fisheries policies;
- Develops laws to manage fisheries;
- Administers the Quota Management System that regulates New Zealand commercial fishing activity;
- Promotes fishers acting within fisheries laws; and
- Gives effect to the principles of the Treaty of Waitangi as they relate to fisheries.

The main business groups of the Ministry of Fisheries are:

- Policy;
- International;
- Fisheries Operations;
- Fisheries Compliance;
- Science;
- Finance;
- Legal; and
- Corporate Development

There Ministry of Fisheries has 19 offices located around the country these are:

- Kaitaia;
- Whangarei;
- Auckland;
- Whitianga;
- Hamilton;

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<sup>1</sup> The term "unavoidable emissions" should be understood to include a cost-benefit analysis of the reduction measures.

- Tauranga;
- Opotiki;
- New Plymouth;
- Gisborne;
- Napier;
- Masterton;
- Petone;
- Wellington (Head Office);
- Nelson;
- Blenheim;
- Christchurch;
- Chatham Islands;
- Dunedin; and
- Invercargill.

As at 30 June 2007 there were 453 employees, 433 of which were full time employees, and 445 FTE's.

#### **4. Persons responsible** (7.3.1 b)

- The Chief Executive (Wayne McNee) of the Ministry of Fisheries has overall responsibility for the emissions inventory.
- Roland Daysh, Manager Corporate Monitoring has approved the documents for the carbon neutral programme.
- This emissions inventory was put together by Kim Hughes.

#### **5. Organisational boundaries included for this report period** (7.3.1 d)

The Agency uses the financial control based approach to defining organisational boundaries. Due to the legally prescribed nature of the core public service, the application of either the control or equity approach is likely to have the same effect, as government agencies do not have subsidiaries, associate companies in the same manner that private sector companies have group structures, or complex lease arrangements.

The organisational boundaries of an agency are defined by statute and for the purposes of the GHG inventory include core agency activities only.

#### **6. Emissions sources inclusions** (7.3.1 e)

Emission sources were identified with reference to the methodology described in the GHG Protocol and the ISO 14064-1 (2006) standard. Identification of emissions sources was achieved using the specific guidance on Scope 3 factors included in the Cabinet Paper POL (07) 131: Towards a Sustainable New Zealand: Carbon Neutral Public Service. Further guidance was obtained from the Ministry for the Environment.

These emissions have then been classified into three categories. The definition of each has been adapted from the GHG Protocol; the three types of emissions are;

- Direct emissions (Scope 1): emissions from sources that are owned or controlled by the agency;
- Indirect emissions (Scope 2): emissions from the generation of purchased electricity consumed by the agency; and

- Indirect emissions (Scope 3): emissions that occur as a consequence of the activities of the agency, but occur from sources not owned or controlled by the agency. Inclusions of these are determined on case by case basis, and relate to the agency's aims of the programme.

**Actual emissions**

Emission source	Scope of Emission
Petrol for vehicles	Scope 1
Diesel for vehicles	Scope 1
Petrol for boats	Scope 1
Petrol for equipment	Scope 1
All purchased electricity in owned buildings and leased buildings where the agency is the sole tenant	Scope 2
Purchased electricity for lighting and utility/appliance power in leased space where the agency is not the sole tenant	Scope 2
Transmission and distribution line losses for all purchased electricity	Scope 3
Domestic air travel	Scope 3
International air travel	Scope 3
Taxi travel	Scope 3
Business travel in rental cars	Scope 3
NIWA vessel use	Scope 3
Waste to landfill	Scope 3

No biomass is used in Ministry of Fisheries operations and therefore no emissions from the combustion of biomass are included. (7.3.1 f)

The Ministry of Fisheries has not imported electricity, heat or steam, so no there are no emissions associated with this type of consumption. (7.3.1 i)

**7. Emission sources exclusions**

Emission Source	Emission Level Scope
Electricity usage from storage units	Indirect (Scope 2)
Business travel in employee owned cars	Indirect (Scope 3)
Air travel by consultants	Indirect (Scope 3)
Activities in NZDF vessels	Direct (Scope 1)
Staff commuting to work in personal cars	Indirect (Scope 3)
Purchased goods and services	Direct (Scope 1)
Carbon embodied within buildings	Direct (Scope 1)
Disposal of corporate waste	Indirect (Scope 3)
IT Services	Direct (Scope 1)
Refrigerant emissions	Direct (Scope 1)
Outsourced registry services	Indirect (Scope 3)

**Justifications;**

**Electricity Usage from Storage Units**

This data is not included in the base year calculations as it is not recorded by our current provider. The amount would be very small.

**Business Travel in Employee Owned Cars**

This data is not accurately maintained within our internal systems so has been excluded. The amount of this would be very small.

**Air Travel by Consultants**

Although some of this has been recorded in data gathered from the Ministry's travel provider Orbit, a small minority of travel by consultants may not go through our normal process, in which case it will not be measured or included in the inventory.

**Activities in NZDF Vessels**

NZDF have a requirement under their output plan to be out on the water a set amount of hours regardless of what activities have been carried out, therefore emissions that NZDF while undertaking work for the Ministry will not be included in our emissions inventory.

**Staff Commuting to Work in Personal Cars**

This is considered to fall under the personal carbon foot print of the employee as the agency has little control over where people choose to live; therefore this is outside the Scope. Work will be undertaken to produce travel plans to help reduce this effect under a further scheme.

**Purchased Goods and Services**

The emissions associated with purchased goods and services make up the direct emissions of suppliers and should be included in their footprint. The initiatives towards sustainable procurement will help change the way the Ministry of Fisheries procures goods and services.

**Carbon Embodied within Buildings**

The production of cement and other building materials make up the direct emissions of suppliers and would be included in their carbon footprint. The government procurement strategy as mentioned above will ensure sustainability considerations are taken into account when procuring office accommodation.

**Corporate Waste**

These items are over and above the normal daily waste that is sent to landfill.

**IT Services**

IT services outsourced to a third party are excluded.

**Refrigerant Emissions**

Emissions from refrigerants are excluded from the 2006/07 emissions inventory.

**Outsourced Registry Services**

This is a core service provided by a third party, who also provide services to a range of clients. Information will not be collected for 2006/07 as information will be difficult to obtain, as it is not currently measured.

## 8. Base year selected (7.3.1 j)

This is the Ministry of Fisheries first report. The chosen base year calculated for this report is the year from 1 July 2006 to 30 June 2007.

## 9. Data collection quantification of methodologies (7.3.1 l and n)

The table below details the sources of the relevant data and the emission factors which have been used. All the factors have been approved by the Ministry for the Environment. The amount of CO<sub>2</sub>e has been calculated by multiplying the activity data sourced by the agency by the relevant emission factor. As this is the first year that the agency has produced these figures there have not been any changes in methodology to report. (7.3.1 k)

Emission or Removal Source	Data Collection Unit	Emission or Removal Factor	Factor Source
International travel	Kms	0.00011	3
Domestic travel	Kms	0.00018	3
Petrol (regular)	Litres	0.0023154	1
Petrol (premium)	Litres	0.0023666	1
Petrol (average)	Litres	0.0023263	1
Diesel	Litres	0.0026512	1
Electricity	KWh	0.0002091	1
Transmission and distribution line losses for all purchased electricity	KWh	0.0000197	1
Air travel on NZDF Aircraft	Litres	0.0025195	1
Taxi travel	Kms	0.0002373	4
Rental cars	Litres	0.0023263	1
NIWA vessel use	Litres	0.0026327	1
Waste to landfill	Tonnes	0.5330451	5

## 10. Emission reductions and removals (7.3.1 g)

The Ministry of Fisheries has achieved no significant emissions reductions for this reporting period as this is the first reporting period and established the Ministry of Fisheries baseline year emissions.

The Ministry of Fisheries will have a management plan in place for managing and reducing emissions by early 2008 with the aim of being on the path towards carbon neutrality by 2012.

## 11. Uncertainties (7.3.1 o)

Emission Scope	Emission Source	Uncertainties
Scope 1	Fuel Purchases	It is assumed that internal accounting systems have accurately captured fuel purchase data
Scope 2	Electricity Purchases	It is assumed that records supplied by SmartPower are complete and accurate. Some data has been estimated based on monthly invoices, and two sites have not been recorded as the amount is immaterial, and too difficult to compile.
Scope 3	Domestic and International flights	It is assumed that records supplied by Orbit are complete and accurate
Scope 3	Taxi Travel	It is assumed that records supplied by Taxicharge, and internal capture of information is complete and accurate
Scope 3	Waste to Landfill	General emission factor used as breakdown information not accurate