



Emission Inventory Report

Emissions Inventory Report

New Zealand Food Safety Authority

Prepared by

Lilli Ficko, Manager Business Services
In accordance with Part 7.3.1 of ISO 14064 (7.3.1 p)

Date

31 October 2007

For the period

1 July 2006 to 30 June 2007 (7.3.1 c)

Contents

Emissions Inventory Summary

- 1. Introduction**
- 2. Statement of intent**
- 3. Organisation description**
- 4. Persons responsible**
- 5. Organisational boundaries included for this report period**
- 6. Emissions sources inclusions**
- 7. Emission sources exclusions**
- 8. Base year selected**
- 9. Data collection**
- 10. Emission reductions and removals**
- 11. Uncertainties**
- 12. Verification of the GHG Inventory**

Emissions Inventory Summary (7.3.1 e)

Type of emission	Tonnes CO ₂ -e*
Direct (Scope 1) emissions	
Petrol-Regular use	319.77
Petrol-Premium use	30.84
Diesel use	
LPG use	--
Natural gas in owned buildings and leased buildings where the agency is the sole tenant	--
Coal use	--
Total Direct (Scope 1) Emissions	350.61
Indirect (Scope 2) Emissions	
All purchased electricity in owned buildings and leased buildings where the agency is the sole tenant	
Purchased electricity for lighting and utility/appliance power in leased space where the agency is not the sole tenant	184.49
Total Indirect (Scope 2) Emissions	184.49
Indirect (Scope 3) Emissions	
Transmission and distribution line losses for all purchased electricity	19.50
Air travel	1040.93
Business travel in rental cars / taxis	55.17
Business travel in employee owned cars	00.02
Waste to landfill	9.51
Total Indirect (Scope 3) Emissions	1125.13
Total Emissions	1660.23

(7.3.1 e)

Area	CO ₂	CH ₄	N ₂ O	HFCs	PFC's	SF ₆	CO ₂ e
Scope 1							
From company owned and leased vehicles:							
Petrol-Regular	319.77	1.90	2.16				323.74
Petrol-Premium	30.84	.18	.21				30.91
Total	350.61	2.08	2.37				354.65

1. Introduction (7.3.1 p)

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

New Zealand Food Safety Authority (NZFSA) 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
- offset unavoidable emissions¹

3. Organisation description (7.3.1 a)

NZFSA operates to:

- protect and promote public health and safety
- facilitate access to markets for our food and food-related exports.

The administers legislation covering:

- food for sale in New Zealand
- primary processing of animal products and official assurances related to their export
- exports of plant products and the controls surrounding registration, and
- use of agricultural compounds and veterinary medicines.

NZFSA is the New Zealand controlling authority for imports and exports of food and food-related products.

NZFSA has eight business groups which are:

Policy, Joint Food Standards, NZ Standards, Exports Standards/Market Access, Science, Approvals & Agriculture Compounds and Veterinary Medicines (ACVM), Verification Agency and Communications and Infrastructure.

NZFSA has just over 450 FTEs in 45 locations. Over half of the FTEs are located at head office in Wellington. Just under half of the FTEs are part of the Verification Agency veterinarians, who are located in meat premises across the country, with the others located in satellite offices.

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

4. Persons responsible (7.3.1 b)

- the Chief Executive has overall responsibility for the emissions inventory
- the Deputy Chief Executive, Sandra Daly has authorised this document
- the Manager, Business Services, Lilli Ficko coordinated the preparation of this document

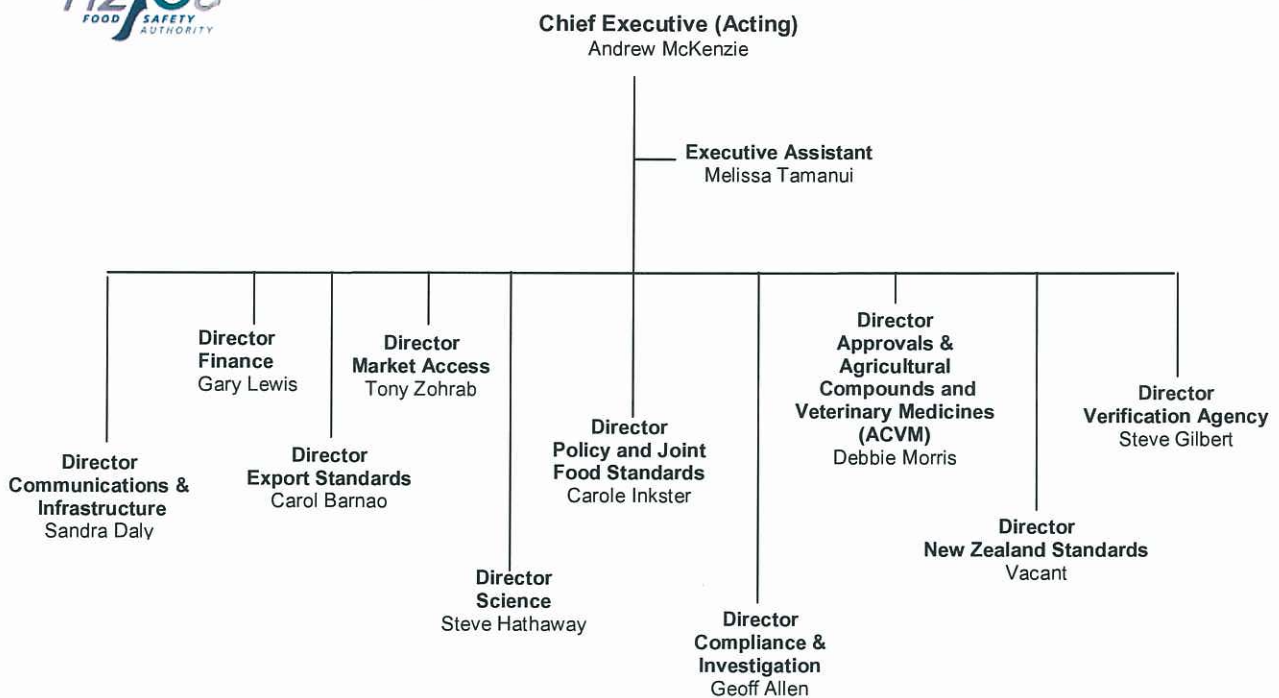
5. Organisational boundaries included for this report period (7.3.1 d)

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.



New Zealand Food Safety Authority



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.
- 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 use	Scope 1
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
Business travel in rental cars	Scope 3
Business travel in taxis	Scope 3
Business travel in employee owned cars	Scope 3
Waste to landfill	Scope 3
Purchased electricity for lighting and utility/appliance power in leased space where the agency is not the sole tenant	Scope 3

No biomass is used in NZFSA operations so no emissions from the combustion of biomass are included.

7. Emission sources exclusions (7.3.1 h)

Emission Source	Emission Level Scope
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.	Indirect (Scope 3)
Emission from waste to landfill: the Auckland and leased offices are not included – rubbish removal is part of the lease agreements and figures are not obtainable.	Scope 3
Electricity: shared space in leased offices– we are not primary lease holders and shared space is 95% below 200m ² .	Scope 2 & 3
The Verification Agency Veterinarian staff located in meat works that are commercial entities which NZFSA has no control over. This report only includes their air travel and fuel usage. Electricity and waste from this staff are not included as the majority work within 1 or the more than 50 meat works [slaughter houses] across the country providing 24/7 coverage. The VA staff typically are only 2 to 4 of about 200+ staff and as such is immaterial on an individual basis. In addition we have VA staff that work across the country on rotations or circuits providing services to another 50+ businesses. Again obtaining the necessary information would not be feasible.	Scope 1, 2 & 3

8. Base year selected (7.3.1 j)

This is NZFSA first report, and as such 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 CO₂e 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*
Vehicle fuel:	litres		
Regular		0.0022870	1
Premium		0.0023610	1
Electricity	Kw	0.0002090	1
Domestic air travel	Km	0.0001800	3
International air travel	Km	0.0001100	3
Taxi travel	Km	0.0002370	4
Rental cars	Kw	0.0023730	4
Waste to Landfill	Tonnes	0.5330451	5

* References for emission factor source

1. New Zealand Energy Greenhouse Gas Emissions 1990-2006 (Ministry of Economic Development, 2007).
2. CO₂ emission factor sourced from: New Zealand Energy Greenhouse Gas Emissions 1990-2006 (Ministry of Economic Development, 2007). CH₄ and N₂O emission factors sourced from: Calculation Tool for Direct Emissions from Stationary Combustions Calculation worksheets, Non-CO₂ Emission Factors Worksheet (WBCSD/WRI GHG Protocol Initiative - available from the GHG Protocol website).
3. Mobile Combustion CO₂ Emissions Calculation Tool, Emissions based on distance Worksheet (WBCSD/WRI GHG Protocol Initiative - available from the GHG Protocol website).
4. New Zealand Energy Greenhouse Gas Emissions 1990-2006 (Ministry of Economic Development, 2007). Fuel economy rate sourced from Ministry of Transport (2007).
5. Emission factor methodology from Ministry for the Environment. Based on data from: New Zealand's Greenhouse Gas Inventory 1990-2005 (Ministry for the Environment, 2007).

10. Emission reductions and removals (7.3.1 g)

This is NZFSA's first report and as such there is no significant emission reduction to report against the baseline year emissions.

NZFSA will have a management plan in place for managing and reducing emissions by early 2009 with the aim to be on the path to carbon neutrality by 2012.

11. Uncertainties (7.3.1 o)

There needs to be a description of the impact of uncertainties on the accuracy of the GHG emissions and removals data.

Emission Scope	Emission Source	Uncertainties
Scope 1	Domestic flights	It is assumed that records supplied by Air New Zealand are complete and accurate
Scope 1	Vehicle fuel	Consultant/contractor use
Scope 2	Electricity	Accurate to within 95% based on cross checking and assumptions
Scope 3	Waste to landfill	Only NZFSA head office is included.
Scope 3	Air travel	Where this is paid for by other Ministries, or a secondment

12. Verification of the GHG Inventory (7.3.1 q)

This is NZFSA first report and as such we are not required to have our reports verified.