

# **Carbon Neutral Public Service Programme**

## **Emission Inventory Report**

Emissions Inventory Report

Ministry for the Environment  
Crown Law

Prepared by

Donna Cassidy  
In accordance with Part 7.3.1 of ISO 14064 (7.3.1 p)

Date

9 October 2007

For the period

1 July 2006 to 30 June 2007 (7.3.1 c)

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## Emissions Inventory Summary (7.3.1 e)

| Type of emission   | Tonnes CO <sub>2</sub> -e* |
|--|----------------------------|
| <b>Total Direct (Scope 1) Emissions</b>  | <b>0.00</b>                |
| <b>Indirect (Scope 2) Emissions</b>  |                            |
| Purchased electricity for lighting and utility/appliance power in leased space where the agency is not the sole tenant | 188.01117                  |
| <b>Total Indirect (Scope 2) Emissions</b>  | <b>188.01117</b>           |
| <b>Indirect (Scope 3) Emissions</b>  |                            |
| Transmission and distribution line losses for all purchased electricity  | 23.67717                   |
| Purchased electricity for base building power in leased buildings where the agency is not the sole tenant              | 63.30341                   |
| Air travel   | 172.55814                  |
| Business travel in Rental cars / taxis / Crown owned cars  | 13.37114                   |
| Waste to landfill  | 30.93300                   |
| <b>Total Indirect (Scope 3) Emissions</b>  | <b>303.84286</b>           |
| <b>Total Emissions</b>   | <b>491.85403</b>           |

## **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**

Crown Law 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 emissions<sup>1</sup>

## **3. Organisation description (7.3.1 a)**

Crown Law provides legal advice and representation to the Crown in matters affecting the executive government, particularly in the areas of criminal, public and administrative law. Crown Law is situated on levels 9, 10, 11 and 12 of the Unisys House building located at 56 The Terrace, Wellington. As at 30 June 2007 Crown Law employed 172.6 full-time equivalent staff members.

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

Dr David Collins QC, Solicitor General and Chief Executive has overall responsibility for the emissions inventory of Crown Law.

Donna Cassidy, Support Services Manager, has collated and approved documentation for the carbon neutral programme and has prepared the Emission Inventory Report.

Angelene Shannon, Support Officer Facilities, has been involved in obtaining various data for the emissions inventory.

## **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.

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

## 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 |
|--|-------------------|
| 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           |
| Purchased electricity for base building power in leased buildings where the agency is not the sole tenant              | Scope 3           |
| International air travel   | Scope 3           |
| Domestic air travel  | Scope 3           |
| Taxi travel  | Scope 3           |
| Business travel in rental cars   | Scope 3           |
| Business travel in crown owned cars  | Scope 3           |
| Waste to landfill  | Scope 3           |

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

## 7. Emission sources exclusions (7.3.1 h)

| Emission Source                          | Emission Level Scope |
|--|----------------------|
| Staff commuting to work in personal cars | Indirect (Scope 3)   |

For each of the sources which have been excluded there should be Justification to show the reason why they have not been counted.

**Justification:** 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.

## 8. Base year selected (7.3.1 j)

This is Crown Law's 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   |
|---|----------------------|----------------------------|---|
| <b>Scope 2 emissions</b>  |                      |                            |   |
| Purchased electricity   | KWh                  | 0.0002091                  | New Zealand Energy Greenhouse Gas Emissions 1990-2006 (Ministry of Economic Development, 2007)  |
| <b>Scope 3 emissions</b>  |                      |                            |   |
| Transmission and distribution line losses for all purchased electricity | KWh                  | 0.0000197                  | New Zealand Energy Greenhouse Gas Emissions 1990-2006 (Ministry of Economic Development, 2007)  |
| Purchased electricity for base building power                           | KWh                  | 0.0002091                  | New Zealand Energy Greenhouse Gas Emissions 1990-2006 (Ministry of Economic Development, 2007)  |
| International air travel  | Km                   | 0.00011                    | Mobile Combustion CO2 Emissions Calculation Tool, Emissions based on distance Worksheet (WBCSD/WRI GHG Protocol Initiative - available from the GHG Protocol website) |
| Domestic air travel   | Km                   | 0.00018                    | Mobile Combustion CO2 Emissions Calculation Tool, Emissions based on distance Worksheet (WBCSD/WRI GHG Protocol Initiative - available from the GHG Protocol website) |
| Taxi travel   | Km                   | 0.0002373                  | New Zealand Energy Greenhouse Gas Emissions 1990-2006 (Ministry of Economic Development, 2007). Fuel economy rate sourced from Ministry of Transport (2007)           |
| Business travel in Rental cars  | Km                   | 0.0002373                  | New Zealand Energy Greenhouse Gas Emissions 1990-2006 (Ministry of Economic Development, 2007). Fuel economy rate   |

|                                      |       |           |  |
|--------------------------------------|-------|-----------|--|
|                                      |       |           | sourced from Ministry of Transport (2007)  |
| Business travel in Crown owned cards | Km    | 0.0002373 | New Zealand Energy Greenhouse Gas Emissions 1990-2006 (Ministry of Economic Development, 2007). Fuel economy rate sourced from Ministry of Transport (2007)              |
| Waste to landfill                    | Tonne | 0.9       | 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)

Crown Law has achieved no significant emissions reductions for this reporting period as this is the first reporting period and established Crown Law's baseline year emissions.

Crown Law will have a management plan in place for managing and reducing emissions by early 2008 with the aim to being 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 3        | Waste to landfill | Waste was measured for a total of six working days. The total kilogram weight has been extrapolated to a 50 working week year. The calculation has been made on the assumption of consistent FTE across the year. |
|                |                   |   |
|                |                   |   |

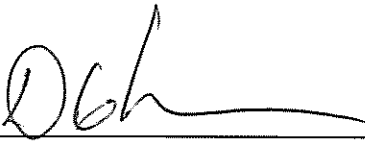
### 12. Verification of the GHG Inventory (7.3.1 q)

This inventory has not been verified.

## Approval

This plan has been approved by:

Signed:

  
\_\_\_\_\_  
(Dr David Collins QC)

Position:

Solicitor General and Chief Executive  
\_\_\_\_\_

Date:

9 October 2007  
\_\_\_\_\_

# Crown Law

## Emissions from Electricity (Scope 2 and 3)

For the year ending 30 June 2007

| Category   | Unit | Quantity   | Emission Factor | Tonnes of CO <sub>2</sub> e |
|--|------|------------|-----------------|-----------------------------|
| Electricity usage (02.01)  |      |            |                 |                             |
| Electricity purchased for lighting and utility/appliance power in leased buildings where the agency is not the sole tenant | kWh  | 899144.77  | 0.0002091       | 188.0111714                 |
| Electricity purchased for base building power in leased buildings where the agency is not the sole tenant                  | kWh  | 302742.29  | 0.0002091       | 63.30341284                 |
| Total electricity usage  | kWh  | 1201887.06 |                 |                             |
| Transmission and distribution line losses for all purchased electricity  | kWh  | 1201887.06 | 0.0000197       | 23.67717508                 |
| Totals for sources   |      | 3605661.18 |                 | 274.9917593                 |

### Data sources

Electricity leased floors - Genesis Energy

Electricity base building power - SOS Property Services Ltd

### Emission factors obtained from

New Zealand Energy Greenhouse Gas Emissions 1990-2006 (Ministry of Economic Development, 2007).

## Crown Law

### Emissions from Travel (Scope 3)

For the year ending 30 June 2007

| Category                            | Unit | Quantity | Emission Factor | Tonnes of CO2e |
|-------------------------------------|------|----------|-----------------|----------------|
| Other Travel (01.03)                |      |          |                 |                |
| Taxi travel                         | Kms  | 21963    | 0.0002373       | 5.2118199      |
| Business travel in rental cars      | Kms  | 32929    | 0.0002373       | 7.8140517      |
| Business travel in Crown owned cars | Kms  | 1455     | 0.0002373       | 0.3452715      |
| Totals for sources                  |      |          |                 | 13.3711431     |

#### Data sources

Taxi - Credit Card charges (incl Taxicharge NZ)  
 Rental cars - Avis New Zealand  
 Crown cars - VIP Transport Service (DIA)

#### Emission factors obtained from

New Zealand Energy Greenhouse Gas Emissions 1990-2006 (Ministry of Economic Development, 2007). Fuel economy rate sourced from Ministry of Transport (2007).

## Crown Law

### Emissions from Waste to Landfill (Scope 3)

For the year ending 30 June 2007

| Category           | Unit   | Quantity | Emission Factor | Tonnes of CO2 |
|--------------------|--------|----------|-----------------|---------------|
| Waste to Landfill  |        |          |                 |               |
| Audited site A     | Tonnes |          |                 | 0             |
| Audited site B     | Tonnes |          |                 | 0             |
| Unaudited sites    | Tonnes | 34.37    | 0.9             | 30.933        |
| Totals for sources |        |          |                 | 30.933        |

#### Data sources

Spotless Cleaning Services

#### Emission factors obtained from

Ministry of Economic Development 2007 Carton Neutral Public Services Emission Inventory Preparation Guidance V1.1

#### Uncertainties over data (Table 11)

Waste calculated over six working days and estimated over 50 weeks per year.

Assumption made re consistent FTEs throughout the year.