# National Carbon Offset Standard Carbon Neutral Program

Public Disclosure Summary







**An Australian Government Initiative** 

# 1. Organisation and Product Information

Table 1 Organisation and Product Information

| Organisation Name                    | City of Melbourne             |  |  |
|--------------------------------------|-------------------------------|--|--|
| Name of the subject of certification | City of Melbourne             |  |  |
| Type of certification                | ☑ Organisation                |  |  |
| Reporting year period                | From 01/07/2012 To 30/06/2013 |  |  |
| Emissions in this reporting year     | 49,030 t CO <sub>2</sub> -e   |  |  |
| Base year period                     | From 01/07/2011 To 30/06/2012 |  |  |
| Emissions in the base year           | 52,059* t CO <sub>2</sub> -e  |  |  |

<sup>\*</sup>Base year emissions changed from previously reported 51,996 t CO2-e due to changes in methodology and the addition of new emission sources.



# 2. Description of Organisation Activities

**SUBURBS & POSTCODES** City of Melbourne PARKVILLE ! CARLTON LEMINGTON 3054 KENSINGTON 3010 NORTH <3050 3031 MELBOURNE CARLTON 3051 3053 WEST MELBOURNE **EAST** 3003 LEGEND MELBOURNE MELBOURNE 3002 3000 DOCKEANDS JOLIMONT MELBOURNE WHARE SOUTHBANK 3004 **FISHERMANS** 3006 BEND PORT SOUTH YARRA MELBOURNE 3141 RESPONSIBILITIES & ACKNOWLEDGEMENTS GIS Team Leader, Property Services: David H GIS Compilation & Cartography: James Rega Published by City of Melbourne, April 2012 PO Box 1603. Melbourne, Victoria 3001 Australia

Figure 1 City of Melbourne Municipal Boundary

Melbourne is the state capital of Victoria and is Australia's second largest city.

The City of Melbourne ('the City') is the local government authority responsible for the Melbourne city centre and fifteen surrounding inner-city suburbs. The municipality covers 37.7 square kilometres and has a residential population of over 100,000 (Annual Report 2012-13). On an average weekday, more than 800,000 people work in or visit the city, and Melbourne hosts over a million international visitors each year.

The City of Melbourne is formally known as the Melbourne City Council and is one of 79 city and shire councils in Victoria operating as a public statutory body incorporated under the Victorian *Local Government Act 1989*.

As a local government authority, the City of Melbourne strives to achieve its community's vision of a bold, inspirational and sustainable city – a great place for people to live, work and visit.

### Services and Facilities

The City of Melbourne is responsible for maintaining an extensive range of facilities and delivering a large and diverse number of services. The community infrastructure maintained by the City includes roads, bridges, drains, town halls, libraries, recreation facilities, childcare centres, community hubs, event venues, parks and gardens.

The majority of the City's operations are run out of three main administrative buildings in the central business district including the Melbourne Town Hall, Council House 1 and Council House 2.

Additional operations are run out of a number of external sites and facilities located throughout the municipality. The City owns and/or operates more than 350 buildings, parks, gardens and other facilities.

The services provided by the City include property, economic, human, recreational and cultural services. The City also enforces state and local laws relating to matters such as land use, planning, environment protection, public health, traffic and parking and animal management.

Below is an overview of the services and operations undertaken by the City of Melbourne during 2012-13:

- Animal management
- Community and cultural services
- Event management and sponsorship
- Health services
- Local laws
- Parks, gardens and open space
- Planning and building
- Recreation services
- Roads and parking
- Strategic planning
- Sustainability
- Waste management

### **Strategies**

In April 2012, Melbourne City Council endorsed the *Carbon Neutral Strategy for Council Operations*. In 2013 the City achieved carbon neutral certification for the 2011-12 financial year.

In addition to the above strategy, the *Zero Net Emissions by 2020 (ZNE)* strategy launched in 2002 set an aspirational target for the municipality to become carbon neutral by the year 2020. This strategy has been reviewed and the updated strategy is awaiting endorsement at the time of writing this report.

In the ten years since the launch of the ZNE strategy, the City has built strong foundations to reduce the carbon footprint of Council operations as well as implementing programs to encourage carbon emission reductions for the municipality as a whole.

This work has included collaborating with residents and businesses through leading outreach programs like 1200 Buildings and Smart Blocks to support and incentivise the active retrofitting of Melbourne's built environment.

The City has also designed and built its own low emissions buildings such as Council House 2, the East Melbourne Library, and the Docklands Library. These actions allow the

City to reduce emissions from its operations, while also showcasing and promoting innovative green building designs.

To continuously improve the performance of existing buildings, the City has entered into a significant energy performance contract (EPC) to increase the efficiency of a number of its buildings. More detail of these actions can be reviewed in Section 9 *Emission Reduction Measures*.

## 3. Organisational Boundary

### The City of Melbourne Emissions Boundary

To determine its emissions boundary, the City has applied the GHG Protocol's *Corporate Accounting and Reporting Standard*:

- Organisational boundary: The City uses the operational control approach for measuring and reporting on the organisation's emissions. The City includes emissions from all activities over which we have full operational control (as shown in Figure 3).
- Operational boundary: The emissions inventory includes direct emissions sources (scope 1), emissions from purchased energy (scope 2) and other measurable indirect sources (scope 3) that are material to the City's operations.

### **Summary of emissions sources**

A summary of the City of Melbourne's emissions sources by scopes are listed in Table 2.

Table 2 Emissions sources by scope

| EMISSIONS SOURCE  | SCOPE |
|-------------------|-------|
| Natural gas       | 1, 3  |
| Transport fuels   | 1, 3  |
| Stationary fuels  | 1, 3  |
| Refrigerants      | 1     |
| Grid electricity  | 2, 3  |
| Transport         | 3     |
| Waste disposal    | 3     |
| Reticulated water | 3     |
| Subsidiaries      | 3     |
| Supply chain      | 3     |
| Staff travel      | 3     |

### **Emissions methodology**

Quantitative data from our contractors was used wherever possible. Where no data was received, CoM's financial data was used to estimate the emissions. Emissions based on financial data accounted for 10.83% of total emissions.

### Melbourne's emission sources

Aligned with the emissions boundary, the City of Melbourne has included all measurable scope 1 and scope 2 emissions within its organisational boundary, and a number of scope 3 emissions that are material to the City.

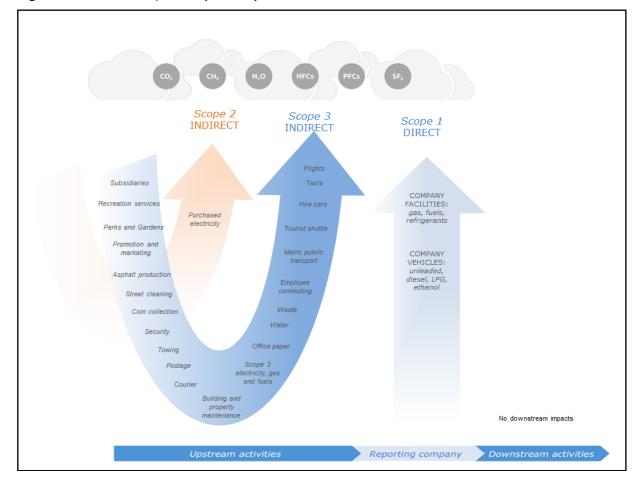


Figure 2 Emissions reported by the City Of Melbourne

### Emissions Excluded

Table 3 lists emissions sources that have been excluded from the final inventory.

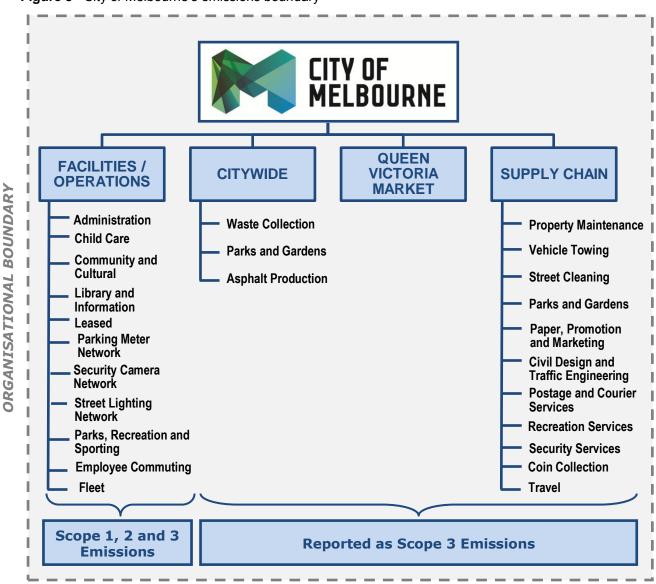
Generally they have been excluded due to lack of reliable data or methodology to quantify the emissions or the City does not have any emissions associated with the activity. These activities have been identified by the GHG Protocol's *Corporate Value Chain (Scope 3)*Accounting and Reporting Standard and listed for consideration in the National Carbon Offset Standard.

 Table 3
 Emissions sources excluded from the City of Melbourne (CoM) inventory

| EMISSIONS<br>SOURCE                            | REASON FOR EXCLUSION   |
|--|--|
| Citywide                                       | Citywide emissions not associated with CoM usage have been excluded. Citywide is a wholly owned subsidiary that is not under CoM operational control. CoM includes 22.35% of Citywide's emissions as we are responsible for that percentage of their business (based on financial data). This is consistent with the method used for all contractors.  |
| Refrigerants 134A,<br>R401A, R410A             | It was noted in the audit for 2011-12 that a site tour of a selection of Council facilities identified refrigerants 134A, R401A, R410A. These refrigerants have not been measured and are assumed to be immaterial. However, CoM is continuing to seek quotes to conduct an audit of refrigerants across all sites with the aim of including these emissions in future years.  |
| Waste  | The City of Melbourne includes emissions associated with waste generated during the course of Council business, i.e. within the operational control of the City. The emissions associated with waste generated by residents and businesses (municipal, commercial, industrial, construction and demolition waste streams) have been excluded as these waste streams are not under the City's operational control. However it should be noted the City collects and transports a portion of this waste which is included in our emissions (reported under Citywide). Waste collected during the course of street cleaning is excluded as the City has no operational control over this waste. |
| Purchased goods and services                   | The City of Melbourne currently includes 11 emissions sources associated with the purchase of goods and services. These sources were determined by the principles outlined in the <i>Value Chain (Scope 3) Accounting and Reporting Standard.</i> The City has excluded three emissions sources identified in this process due to lack of reliable data. They are emissions associated with animal management, artists/speaker travel, and aged and disability services. The City will engage with the suppliers of these services to collect data for inclusion in the City's inventory in future years.  |
| Upstream<br>transportation and<br>distribution | The City of Melbourne has included transportation and distribution of goods and services for six emissions sources; towing, parks and recreation, building and property maintenance, street cleaning, security services and coin collection. The remaining emissions sources with transportation and distribution have been excluded due to lack of reliable data from suppliers. These include office paper, animal management, promotion and marketing, aged and disability services and civil design and traffic engineering.   |
| Business travel                                | The City of Melbourne currently includes metropolitan public transport, hire cars, taxis, flights and use of its own fleet. Business travel undertaken by regional public transport or in employee vehicles are excluded due to lack of reliable data.   |
| Downstream transportation and distribution     | The City of Melbourne does not sell products.  |
| Processing of sold products                    | The City of Melbourne does not sell products   |
| Use of sold products                           | The City of Melbourne does not sell products   |
| End-of-life treatment of sold products         | The City of Melbourne does not sell products   |

# 4. Diagram of the Boundary of the Subject of Certification

Figure 3 City of Melbourne's emissions boundary



# 5. Purchase of GreenPower and Retirement of GreenPower Eligible Large-Scale Generation Certificates (LGCS)

Table 4 GreenPower

| Туре       | Volume | Unit | t CO <sub>2</sub> -e | Status    |
|------------|--------|------|----------------------|-----------|
| GreenPower | 4,023  | MWh  | 5,310                | Purchased |

Table 5 LGCs Surrendered

| Details of LGCs Voluntarily Surrendered |            |  |
|---|------------|--|
| Quantity                                | Serial No. |  |
| None                                    | N/A        |  |

## 6. Purchase of NCOS Carbon Neutral Products

**Table 6** Carbon Neutral Products

| Product/service | Company | Quantity | Units           | t CO <sub>2</sub> -e (if known) |
|-----------------|---------|----------|-----------------|---------------------------------|
| Paper           | Reflex  | 5,354    | A4 80 gsm reams | 21.57                           |
| Paper           | Staples | 894      | A4 80 gsm reams | 2.90                            |
|                 |         |          | Total           | 24                              |

# 7. Total Carbon Footprint

 Table 7
 Total footprint, 2012-13

| Total footprint in tonnes CO <sub>2</sub> -e | 49,030 t CO <sub>2</sub> -e |
|--|-----------------------------|
| ·  |                             |

 Table 8
 Emissions summary comparison to 2011-12

|  | 2012-13 2011-12                     |                  | 11-12                               |                  |
|--|-------------------------------------|------------------|-------------------------------------|------------------|
| Emissions Source   | Emissions<br>(t CO <sub>2</sub> -e) | Contribution (%) | Emissions<br>(t CO <sub>2</sub> -e) | Contribution (%) |
| Scope 1  |                                     |                  |                                     |                  |
| Natural gas  | 1,067                               | 2.18%            | 1,114                               | 2.15%            |
| Transport fuels (diesel, unleaded, LPG)  | 324                                 | 0.66%            | 322                                 | 0.62%            |
| Refrigerants   | 3.14                                | 0.01%            | 13                                  | 0.03%            |
| Stationary fuel (diesel)   | 0.21                                | 0.00%            |                                     |                  |
| Scope 2  |                                     |                  |                                     |                  |
| Electricity  | 16,705                              | 34.07%           | 16,964                              | 32.70%           |
| Scope 3  |                                     |                  |                                     |                  |
| Scope 3 electricity, gas and fuels   | 14,937                              | 30.46%           | 17,060                              | 32.93%           |
| Supply chain   | 4,447                               | 9.07%            | 5,001                               | 9.20%            |
| Citywide (subsidiary)  | 3,897                               | 7.95%            | 5,098                               | 9.83%            |
| Water  | 2,790                               | 5.69%            | 1,566                               | 3.02%            |
| Queen Victoria Market (subsidiary)   | 2,280                               | 4.65%            | 2,143                               | 4.13%            |
| Transport (flights, taxis, public transport, hire cars, tourist shuttle, employee commute) | 1,557                               | 3.18%            | 1,724                               | 3.32%            |
| Waste disposal   | 973                                 | 1.98%            | 1,007                               | 1.94%            |
| Office paper   | 51                                  | 0.10%            | 47                                  | 0.09%            |
| Total emissions  | 49,030                              |                  | 52,059                              |                  |
| Less GreenPower™   | -5,310                              |                  | -13,232                             |                  |
| Less offsets   | -55,000                             |                  | -44,020                             |                  |
| Total net emissions  | 0*                                  |                  | 0*                                  |                  |

### City of Melbourne's emissions inventory 2012-13 (49,030 t CO<sub>2</sub>-e)

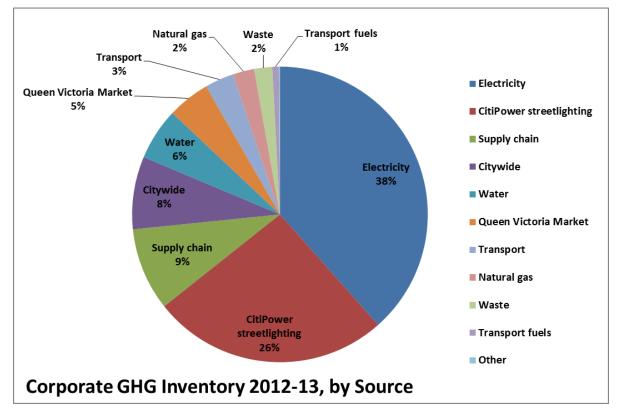


Figure 4 Corporate inventory summary by source

# Carbon Offset Purchases and Retirement for this Reporting Period

55,000 t CO2-e of offsets have been bought for 2012-13 financial year. The City of Melbourne, in general, will seek to purchase a 5% surplus of offsets. This buffer covers any potential margin of error in inventory or carbon offset calculations. These offsets will not be banked for future years. Any offsets purchased above and beyond the 5% surplus may be applied to subsequent years.

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|---------|----------|-----------|-------|--------|---|
| Table 9 | ()ttsets | retired   | and   | nank   | ല |

|                       | Total<br>(t CO <sub>2</sub> -e) | Calculation                           |
|-----------------------|---------------------------------|---------------------------------------|
| Total footprint to be | 12 605                          | total emissions - emissions reduction |
| offset                | 43,695                          | 49,030 - 5,335                        |
| Offsets retired and   | 45.000                          | total footprint + 5 %                 |
| used in 2012-13       | 45,880                          | 43,695 + 2,185                        |
| Offsets banked*       | 0.400                           | offsets bought - offsets retired      |
| Onsets pariked        | 9,120                           | 55,000 - 45,880                       |

<sup>\*</sup> these offsets have been retired and are being banked for use in this program for 2013-14.

Table 10 Offset Cancellations

| Offset type  | Registry           | Serial number   | Quantity<br>(t CO <sub>2</sub> -e) |
|--|--------------------|---|------------------------------------|
| Verified Carbon Standard (VCS)  Wayang Windu Phase 2  Geothermal Power Project | Markit<br>Registry | 2536-108321879-108376878-VCU-<br>009-MER-ID-1-688-04032009-<br>01122010-0 | 55,000                             |
|  |                    | Total   | 55,000                             |

# 9. Emission Reduction Measures

Table 11 Emissions reduction measures

| EMISSIONS REDUCTION MEASURES   |
|--|
| Electricity and water – Honeywell Energy Performance Contract resulted in savings of 1560 t CO <sub>2</sub> -e |
| Overall paper reduction by 216 t CO <sub>2</sub> -e compared to previous financial year                        |
| Employee commuting – behaviour change program resulted in 20% of trips using a more sustainable option         |
| Corporate fleet – another 3 electric cars were purchased taking the total to 5                                 |
| Council House 2 - A timer was placed on the boiler to prevent it running overnight                             |
| Melbourne Town Hall – improvements made to the cooling system  |
| City Square car park – exhaust ventilation speed reduced   |

### Other Information

### Baseline Recalculation

The City of Melbourne has a base year recalculation policy to enable its emissions to be accurately compared over time. The City selected the earliest historical base year for which a verifiable carbon footprint is available; 2011-12 FY. The carbon footprint previously reported for that year was 51,996 t CO<sub>2</sub>-e.

New emissions sources were added in the 2012-13 FY inventory. Specifically, emissions associated with coin collection, security and employee commuting. The 2011-12 carbon footprint has been recalculated to reflect this. The total reported for the 2011-12 financial year is now  $52,059 \text{ t CO}_2$ -e.

### Climate Leadership Awards

The City of Melbourne is an internationally recognised leader in sustainability. The organisation has endorsed strong and ambitious climate mitigation and adaptation policies and initiated world-leading programs to assist property owners to retrofit old buildings, and residents to reduce their use of energy, water and resources within their homes.

In 2013, the City received the Energy Efficient Build Environment award at the C40 & Siemens City Climate Leadership Awards in London. This award recognised the City's significant achievements in adopting policies and implementing programs to reduce emissions from new and existing buildings across the city. The City's initiatives include encouraging environmentally sustainable building projects, retrofitting existing buildings throughout the municipality and pledging to overhaul building standards for energy, water and waste efficiency for new construction projects.

### **Declaration**

To the best of my knowledge and having implemented the quality controls and standards required under the NCOS Carbon Neutral Program and made all appropriate inquiries, the information provided in this Public Disclosure Summary is true and correct.

| Name of Signatory  | Kathy Alexander         |
|--------------------|-------------------------|
| Title of Signatory | Chief Executive Officer |
| Signature          | KAHler ander            |
| Date               | 29 October 2013         |