

National Carbon Offset Standard Carbon Neutral Program Public Disclosure Summary



CITY OF MELBOURNE An Australian Government Initiative

CITY OF MELBOURNE

01 July 2014 – 30 June 2015

Declaration

To the best of my knowledge, the information provided in this Public Disclosure Summary is true and correct and meets the requirements of the National Carbon Offset Standard Carbon Neutral Program.

Ben Rimmer

Chief Executive Officer

30 October 2015

Type of carbon neutral certification: Organisation

Verification

Date of most recent external verification/audit: 29 October 2015

Auditor: Mathew Nelson Ernst & Young

Auditor assurance statement link:



Australian Government

Department of the Environment

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1. Carbon neutral information

Introduction

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

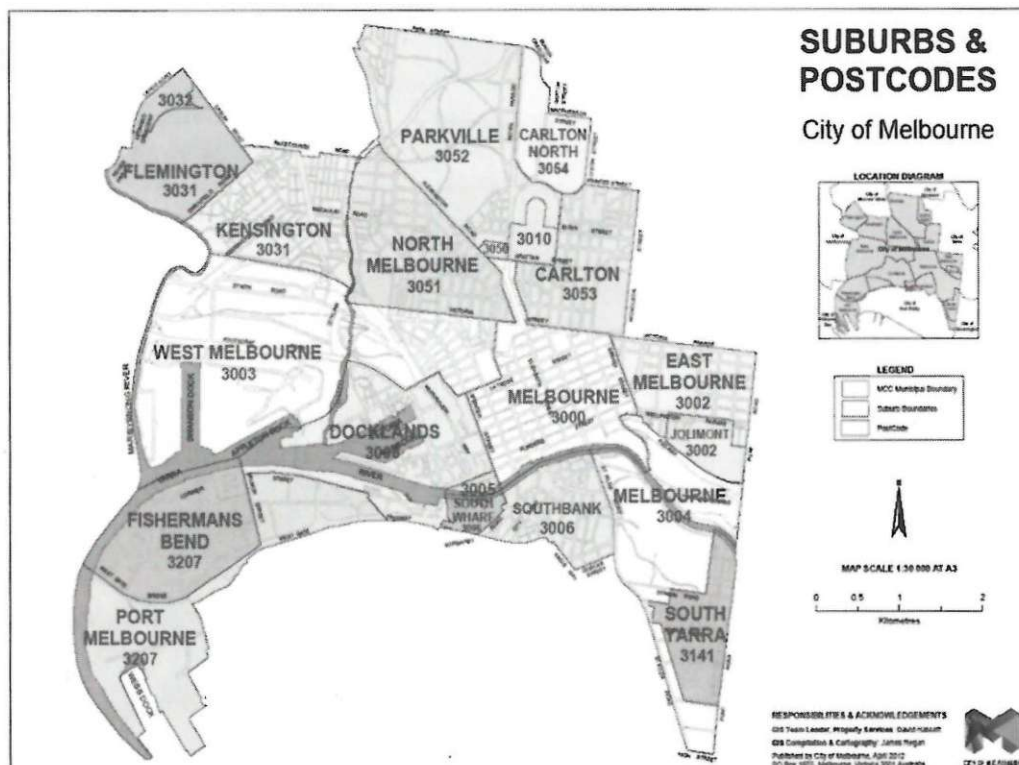
The City of Melbourne is the local government authority responsible for the Melbourne city centre and fourteen surrounding inner-city suburbs.

The City of Melbourne sits at the heart of Greater Melbourne, the state capital of Victoria and is Australia's second largest city. The municipality covers 37.7 square kilometres and has a residential population of 122,207. 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.

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

To lead the city towards this vision, the City has focused on reducing its own environmental impact, and the organisation is certified carbon neutral for council operations. This certification covers all City facilities, as well as major contracts and services.

Figure 1: City of Melbourne geographical boundary



Services and Facilities

The City of Melbourne is responsible for maintaining an extensive range of facilities and delivering a diverse range of services. The community infrastructure maintained by the City includes roads, bridges, drains, town halls, libraries, recreation facilities, child care 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 2014-15:

- 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

Inventory

CoM greenhouse gas emissions inventory has been prepared according to the National Carbon Offset Standard. The emissions boundary is consistent with the GHG Protocol *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 2).
- *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 (see Figure 3).

Based on an operational consolidation approach, the entities included are:

- Administration Buildings
- Child Care Centres
- Community Facilities
- Libraries
- Parks
- Public Lighting
- Recreation Centres
- Sports Grounds

Greenhouse Gases

The following greenhouse gases have been considered in the City's accounts:

| | |
|---|-----------------|
| CO ₂ | Carbon dioxide |
| CH ₄ | Methane |
| N ₂ O | Nitrous oxide |
| HFCs, SF ₆ , CF ₄ , C ₂ F ₆ | Synthetic gases |

Emission sources within certification boundary

Quantified sources

The following emission sources have been included:

| 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 and volunteer travel | 3 |

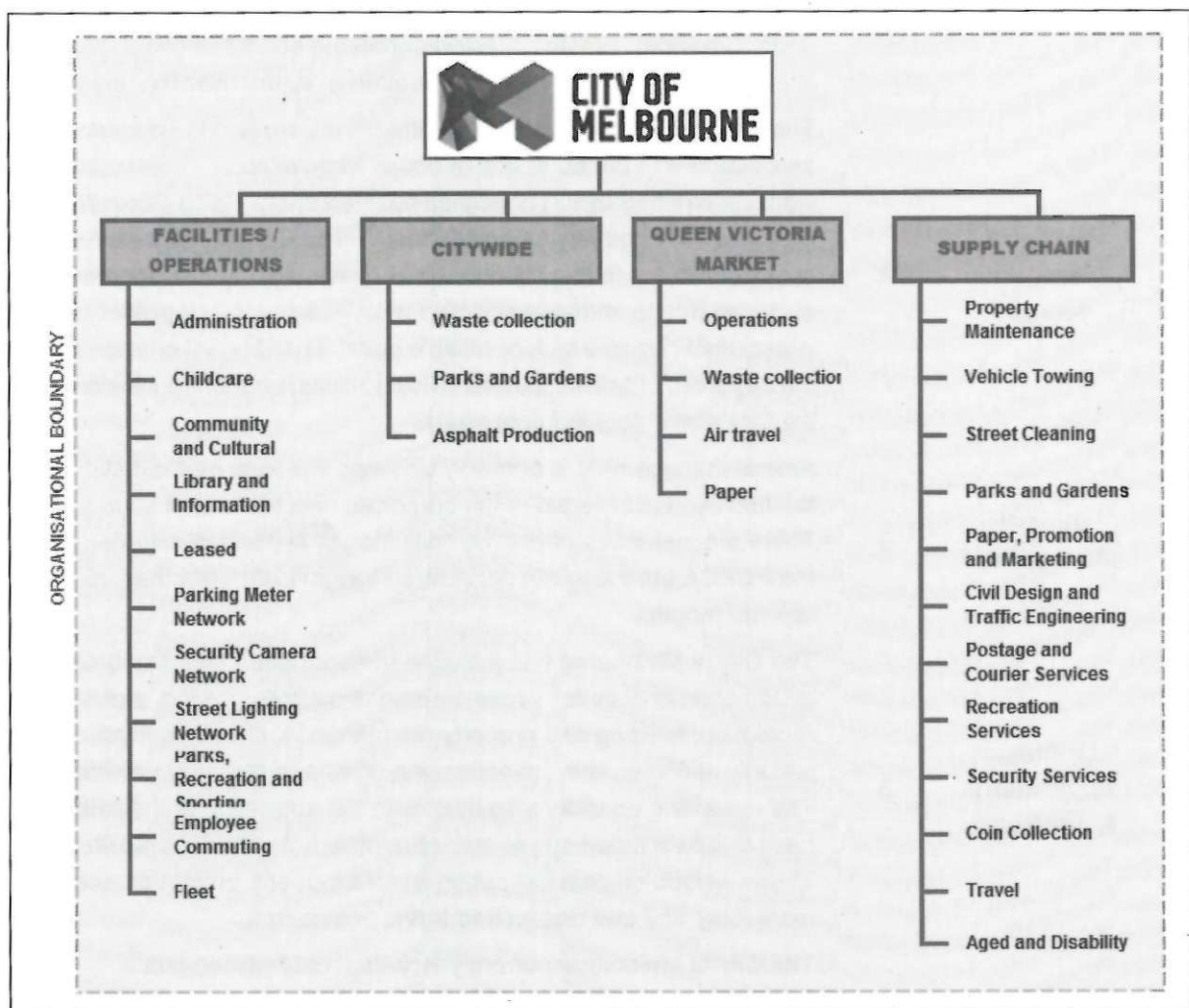
Non-quantified sources

| Emission source | Scope | Justification for exclusion & overall implications for footprint |
|--|-------|--|
| Citywide | 3 | 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 22.12% of Citywide's emissions as this is the proportion of Citywide's revenue associated with service provision to CoM (e.g. waste collection). This is consistent with the method used for all contractors. |
| Waste | 3 | The City of Melbourne includes emissions associated with waste generated during the course of Council business, ie 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 | 3 | 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 two emissions sources identified in this process: animal management is excluded due to immateriality (see below), and artists/speaker travel is excluded due to a lack of reliable data. The City will engage with the suppliers of artists/speaker travel to collect data for inclusion in the City's inventory in future years. |
| Animal Management | 3 | Animal management is primarily serviced in-house by CoM staff and the fuel used is included in the corporate fleet emissions source. There are instances where the collection of animals is undertaken by the RSPCA but these are considered insignificant (less than 10 pick-ups per month). |
| Upstream transportation & distribution | 3 | The City of Melbourne has included transportation and distribution of goods and services for seven emissions sources; towing, parks and recreation, building and property maintenance, street cleaning, security services, coin collection and aged and disability services. 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, and civil design and traffic engineering. |
| Business travel | 3 | The City of Melbourne currently includes metropolitan public transport use by staff, 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 & 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 |
| Franchises | The City of Melbourne is not franchised. |

Diagram of certification boundary

Figure 2: Organisational boundary – list of all activities CoM has full operational control over.



2. Emissions reduction measures

Part A. Emissions over time

| Emissions Summary | Year | tCO ₂ e |
|--------------------------|---------|--------------------|
| Baseline Year | 2011-12 | 52,059 |
| Current Reporting Period | 2014-15 | 50,841 |

| | 2011-12 | 2014-15 |
|--------------|---------------|---------------|
| Scope 1 | 1,449 | 1,410 |
| Scope 2 | 16,964 | 14,459 |
| Scope 3 | 33,646 | 34,972 |
| Total | 52,059 | 50,841 |

Part B. Emissions reduction strategy

City of Melbourne Carbon Neutral Strategy (Council Operations) (2012) outlines the City's approach to achieving and maintaining carbon neutrality, including the essential and important principles that guide decision making in emissions management, as well as key focus areas for reducing emissions.

Zero Net Emissions by 2020 strategy (2014) sets an emissions reduction target for council operations of 10% by 2018 (based on baseline year 2010-11).

To ensure we reach the target, the City is developing a 5-Year Emission Reduction Plan which will identify and prioritise the emissions reduction opportunities across the organisation. It is expected to be finalised in early 2016.

Part C. Emissions reduction actions

Public Lighting

Designing a sustainable city is a key theme identified in City of Melbourne's Public Lighting Strategy 2013. In practice this means promoting efficient technology, responsible management practices and other forms of energy conservation. It calls for large scale replacement of inefficient mercury vapour lighting with more efficient and longer-lasting technologies. The program of works is expected to take approximately three years to complete. So far, 1,075 mercury vapour and metal halide lights have been replaced with LEDs, with an estimated emissions saving of 365 tonnes CO₂-e per year.

Waste Reduction

A waste audit was undertaken across CoM's three main administration buildings in February 2014. The audit found many improvements that could be made, specifically around improving recycling and contamination rates, improving contractor waste practices and reducing organics to landfill. Subsequently, contractor education has been improved, signage updated, and worm farms are being trialled to manage organics (see below).

Worm farms

Seven worm farms are now in operation around the City of Melbourne's offices (four in Council House 1 and three in Council House 2), transforming organic waste into 'worm juice' and compost. Staff are encouraged to take a bottle of 'worm juice' home and the surplus is given to community gardens.

Paper

CoM has initiated a new paper reduction campaign called Paper Wise Heroes. In the eight months it ran in the 2014-15 reporting period, the organisation used 383 fewer reams of paper compared to the same time last year. This paper campaign has a target of 5 reams of paper per employee per year.

Events

Events Branch, in collaboration with the Sustainability Branch, measured the greenhouse gas emissions impact of a premier event of the City. For 2014-15, the impact of Moomba was measured, and opportunities to reduce the environmental impact have also been identified and will be incorporated into the event planning in future years.

Energy Performance Contract

The Energy Performance contract signed by CoM guaranteed savings of 1,560 t CO₂-e per year. This contract exceeded their savings targets for electricity by 47%, for gas by 50%, and for water 25%. This contract has now ended.

3. Emissions summary

| Table 2. Emissions Summary | | |
|-----------------------------------|------------------------|---------------------------|
| Scope | Emission source | t CO₂-e |
| 1 | Natural Gas | 995 |
| 1 | Fuel | 260 |
| 1 | Refrigerants | 155 |
| 2 | Electricity | 14,459 |
| 3 | Electricity | 1,838 |
| 3 | Natural Gas | 76 |
| 3 | Fuel | 20 |
| 3 | Waste | 1,002 |
| 3 | Water | 1,154 |
| 3 | Chemicals | 28 |
| 3 | Subsidiaries | 12,296 |

| | | |
|----------------------------|--------------|---------------|
| 3 | Supply Chain | 18,559 |
| Total Gross Emissions | | 50,841 |
| GreenPower or retired LGCs | | 10 |
| Total Net Emissions | | 50,831 |

4. Carbon offsets

Part A. Offsets summary

| Table 3. Offsets Summary | | | | |
|--|--------------|---------------|--|--|
| Offset type and registry | Year retired | Quantity | Serial numbers | |
| Improved Household Charcoal Stoves in Mali <i>Gold Standard Voluntary Emissions Reductions (VER) credits, Markit registry.</i> | 2015 | 15,488 | GS1-1-ML-GS414-18-2012-1274-40671 to 100670 | |
| Solar Power Project in China <i>Gold Standard Voluntary Emissions Reductions (VER) credits, Markit registry.</i> | 2015 | 8,642 | GS1-1-CN-GS3028-12-2014-3480-177 to 8818 | |
| | 2015 | 7,404 | GS1-1-CN-GS3028-12-2014-3481-152 to 7555 | |
| Wind Power Project in Turkey <i>Gold Standard Voluntary Emissions Reductions (VER) credits, Markit registry.</i> | 2015 | 40,000 | GS1-1-TR-GS971-12-2013-2912-191472 to 231471 | |
| TOTAL | | 71,534 | | |
| Total offsets retired* | | | 53,373 | |
| Net emissions | | | 0 | |
| Total offsets held in surplus for future years: <i>Wind Power in Project in Turkey (GS1-1-TR-GS971-12-2013-2912-191472 to 231471)</i> | | | 18,161 | |

* CoM retires an additional 5% buffer. Total emissions offset for 2014-15 come to 50,831 + 5% = 53,573

Part B. Offsets purchasing and retirement strategy

City of Melbourne purchases offsets according to the principles set out in our City of Melbourne Carbon Neutral Strategy (Council Operations):

Essential principles

- Compliance with NCOS
- Social responsibility
- Timeliness

Important principles

- Certainty
- Transparency
- Cost effectiveness
- Leadership
- Biodiversity

Offsets are purchased and retired on an annual basis at the end of the reporting period after the inventory has been completed. CoM purchases and retires an additional 5% buffer to account for any uncertainty.

Part C. Offset projects (Co-benefits)

City of Melbourne has voluntarily surrendered and cancelled 53,373 t CO₂-e offsets for 2014-15.

Our emissions were offset through the following projects:

| Project | Offsets (tCO ₂ -e) | % of CoM inventory |
|---|----------------------------------|-----------------------|
| Improved Household Charcoal Stoves (Mali) By replacing high polluting traditional cookstoves with fuel-efficient stoves, the Mali Cookstove Project reduces CO ₂ emissions through reducing demand for wood and charcoal. At the same time, it cuts household fuel costs and dangerous pollutants in the home. This improves users' livelihoods, especially those of women and children. | 15,488 | 29% |
| Balikesir Wind Project (Turkey) The Balikesir Wind Farm is a Gold Standard accredited renewable energy project located in Turkey that prevents 250,000 tonnes of CO ₂ emissions each year and also contributes to social and economic improvement by supporting schools and improving local infrastructure. | 16,046 | 30% |
| Yongran Solar PV Project (China) The Yongran Solar PV project is a Gold Standard accredited renewable energy project located in Yunnan province, China. The use of photovoltaics spread across the hillside generates renewable energy and prevent 56,000 tonnes of CO ₂ emissions annually. | 21,839 | 41% |

5. Have you done more?

The City of Melbourne is committed to continuously improving our inventory.

Improvements this year include:

- Updating the refrigerant data – this was collected by contractors visiting every facility and documenting the type and quantity of refrigerant used in all refrigeration and air conditioning units.
- Fuel use by our Aged and Disability contractors, which we have been working towards for some time.
- Back casting – where appropriate we have included new emissions sources or recalculated (based on methodology changes) our previous years' inventories in order to accurately measure our emissions trend.

