

National Carbon Offset Standard Carbon Neutral Program Public Disclosure Summary



An Australian Government Initiative



LOWCARBON
AUSTRALIA

City of Sydney, 2011/12

1. Organisation and Product Information

Table 1: Organisation and Product Information

Organisation Name	City of Sydney	
Name of the subject(s) of certification	City of Sydney Council Operations	
Type of certification (tick all applicable)	<input checked="" type="checkbox"/> Organisation	<input type="checkbox"/> Product/service
	<input type="checkbox"/> Part of organisation	<input type="checkbox"/> Event
Reporting year period	From 1/07/2011	To 30/06/2012
Emissions in this reporting year	46,701 t CO ₂ -e ¹	
Base year period ^{2,3}	From 1/07/2009	To 30/06/2010
Emissions in the base year	50,030 t CO ₂ -e	

2. Description of Organisation Activities

The City of Sydney is the local government authority responsible for the city centre and more than 30 suburbs. The City of Sydney's role is to provide services for our 183,616 residents as well as for the daily influx of 376,000 workers and 483,000 visitors. On any given day, Sydney's population swells to more than a million people. The City of Sydney is also the main consent authority for new development in most parts of our LGA.

The core functions for Local Government in NSW are defined by the Local Government Act 1993. A high level plain-English overview of the City of Sydney operations and services include:

- Aquatic centres.
- Community centres, services and facilities.
- Development planning approval.
- Domestic waste service.
- Economic development.
- Events and sponsorships.
- Health inspections.

¹ Total emissions rounded up to nearest tonne CO₂-e

² First year for which the GHG Inventory has been completed – this will be considered to be the base year against which emission reduction activities will be measured.

³ For events, a reference case can be provided against which emissions may be compared.

- Infrastructure, i.e. roads, footways, drainage.
- Parking services.
- Parks and open space.
- Provision of street lighting.
- Strategic planning.
- Sustainability.

The City owns more than 230 buildings, many of which are tenanted. The City also owns 8,599 street lights and there are a further 13,000 street lights owned by the electricity network provider but deemed to be within the City's control. The City's operations are mostly run out of two main administration buildings, multiple depots, parks, venues and community centres. The City's main office is located at 456 Kent Street, Sydney behind the Sydney Town Hall. In 2010/11 there were a total of 1,863 staff working for Council.

Sustainable Sydney 2030, developed in 2008 with the most consultation ever undertaken by the City of Sydney, set ambitious targets including 70% reduction of 2006 greenhouse gas emissions, no-reliance on coal fired electricity, and for 30% of electricity to come from renewable sources by 2030. Sustainable Sydney 2030 proposes a Green, Global and Connected city and has significantly increased the expectations and service delivery by the City of Sydney.

3. Organisational & Geographic Boundary/ Scope & system Boundary

Boundary consolidation approach:

Description of the boundary of the subject of certification (also describe exclusions from the boundary):

Operational control

The City of Sydney local government area (LGA) covers 26.15 square kilometres of inner Sydney from Sydney Harbour at Rushcutters Bay to Glebe and Annandale in the west, Sydney Park and Rosebery in the south, and Centennial Park and Paddington in the east.



Figure 1 – Local Government Boundary

In 2007 the City of Sydney Council resolved to become carbon neutral for its own properties and operations. The City's initial emissions boundary was based on the GHG Protocol's Corporate Accounting and Reporting Standard 2004 and included all Scope-1 and Scope-2 emissions, as well as a range of Scope-3. In 2011, the emissions boundary was reviewed with some minor modifications, such as the inclusion of paper, to ensure that it met requirements of the National Carbon Offset Standard (NCOS).

The definitions for Scope-1, Scope-2 and Scope-3 emissions have been interpreted from the National Carbon Offset Standard (NCOS) Version 2, May 2012, National Greenhouse and Energy Reporting Guidelines 2008, and the GHG Protocol's Corporate Accounting and Reporting Standard 2004. This is depicted in the diagram below from the National Greenhouse and Energy Reporting Guidelines 2008.

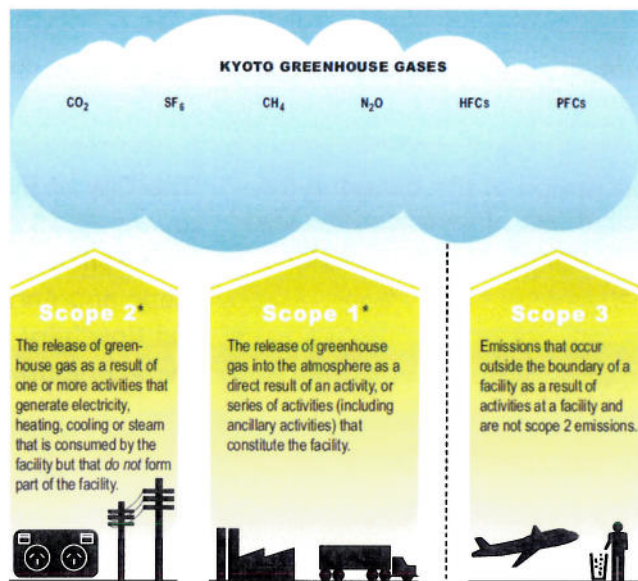


Figure 2 – GHG Emissions scopes

The City of Sydney greenhouse gas emissions inventory includes the Kyoto gases: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorinated carbons (PFCs) and sulphur hexafluoride (SF₆) and refrigerants controlled under the Montreal Protocol.

The City of Sydney greenhouse gas emissions

organisational boundary includes emissions sources where the City is considered to have operational control as defined by the National Greenhouse and Energy Reporting Act 2008 for emissions resulting in the delivery of services required by the Local Government Act and Sustainable Sydney 2030. This includes core business, statutory responsibilities, service provision, Council facilities and services, buildings and other assets where it is considered that the City has operational control capacity to implement environmental policies as depicted in Figure 3.

In accordance with the National Greenhouse and Energy Reporting Act, Section 11 the City includes all Scope-1 and Scope-2 emissions based on aggregated data for facilities and core activities. It is noted that definition of control as described by NGERs is not completely applicable to carbon neutrality, as it will result in scope 3 emissions being excluded.

Operational control is the selected control approach as described above). In addition the City has chosen to add in other sources which are within its financial control for emissions which may not otherwise be included within organisational operational control. This includes emissions resulting from major contractors and the New Year's Eve event.

The City's greenhouse gas emissions boundary is outlined in Figure 4.

The following emissions sources are included within the City of Sydney inventory:

- Combustion of fuel which results in greenhouse gas emissions directly by the City of Sydney for transport and stationary energy.
- Fugitive emissions from commercial buildings air conditioning.
- Combustion of fuel offsite to provide electricity for the City's buildings (including aquatic centres), parks and street lighting.
- Business travel of employees.
- Emissions from the disposal of waste generated by the organisation.
- Emissions from use of paper in the course of its business.

- Extraction, production and transport of purchased fuels.
- Combustion of fuel from major outsourced activities including:
 - Waste and recycling collection.
 - Graffiti removal.
 - Parks and Living Colour display maintenance.
 - Water feature maintenance.
 - Parking meter maintenance.
 - Facilities Management.

(note: Emissions from these outsourced activities have been included on the basis they could be considered as critical by key stakeholders. In addition, these are services required under the NSW Local Government Act 1993 and in some instances the public may not differentiate where these services are provided by City of Sydney staff or contractors).

- Emissions resulting from the Sydney New Year's Eve event.

In accordance with Section 4.2.3 (e) - (f) of the National Carbon Offset Standard, some Scope 3 emissions sources were excluded for the following reasons:

1. the emissions are likely to be negligible (relative to other Scope 3 emissions);
2. determining the emissions is not currently possible given available technology;
3. determining the emissions will be very costly relative to their likely significance; or
4. there is insufficient data.

The following emissions sources are excluded within the City of Sydney inventory:

- Employee commute to and from work (reasons 3 & 4).
- Transportation of purchased materials or goods (reasons 3 & 4).
- Outsourced activities, *excluding those outsourced services that are considered material and are included within the City's*

emissions inventory (reasons 1-4).

- Fuel emissions from the transportation of City of Sydney operations waste (reason 1).
- Waste from tenancies (reasons 3 & 4).
- Impact of equipment, consumables, repairs, maintenance and communications (reasons 2-4).
- Events except NYE (reasons 1,3 & 4).
- Scope-3 emissions from ethanol and biodiesel consumption (reason 4).
- Business travel by public transport (reasons 3 & 4).
- Embodied energy of road and building materials (reasons 2 & 4).
- Rail, public transport and freight (reasons 2 & 4).

It is not considered that these Scope 3 activities compromise the overall integrity of the reported inventory. The City of Sydney has publicly tested our emissions reduction targets, programs and carbon neutral assertions within the media, local and international events and programmes such as the C40 Cities Climate Leadership Group and the CDP Cities Carbon Disclosure Project. Review of other local and international Governments at varying stages of carbon neutrality has not revealed any material emissions sources which are not reported on by the City of Sydney.

4. Diagram of the Boundary of the Subject of Certification

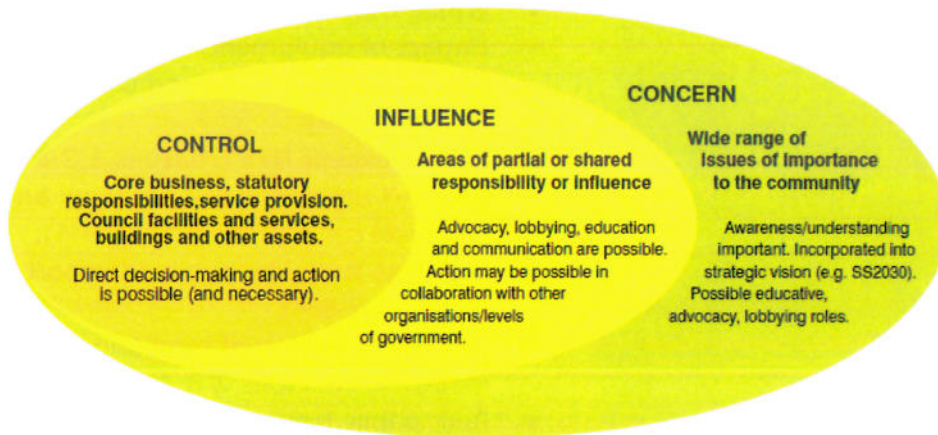


Figure 3 – Sustainable Sydney 2030 implementation pathways.

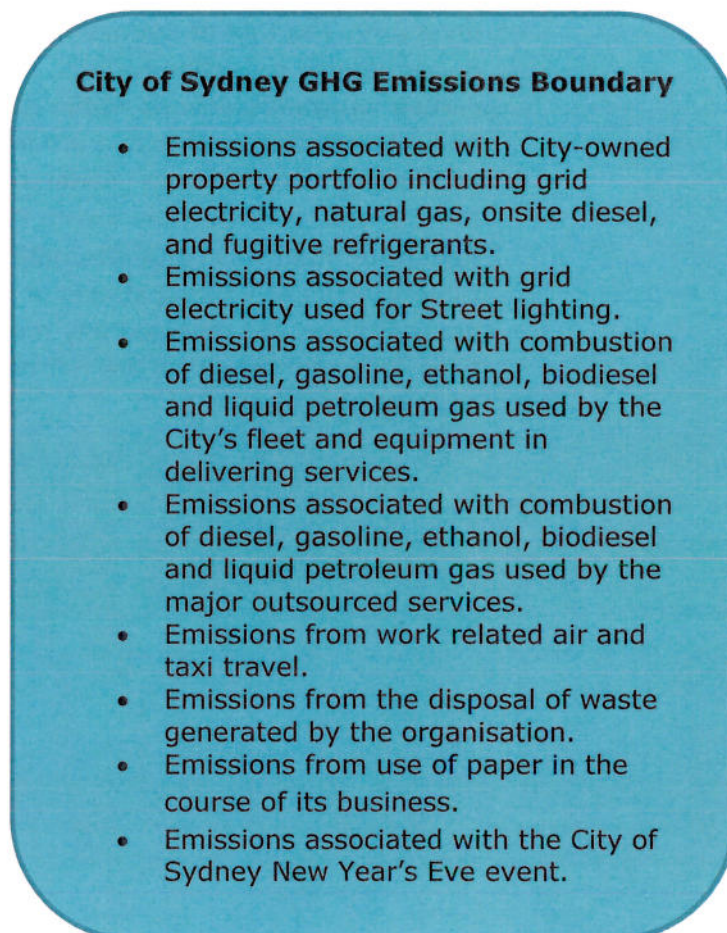


Figure 4 – Organisational Boundary - determined based on the City's operational control capacity to implement environmental policies.

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

Type	Volume	Unit	t CO ₂ -e	Status
GreenPower	0	MWh	0	Purchased

Details of LGCs Voluntarily Surrendered

Quantity	Serial No.
0	Not applicable

6. Purchase of NCOS Carbon Neutral Products

Product/service	Company	Quantity	Units	t CO ₂ -e (if known)
Paper	Staples A4 Carbon Neutral Paper	730	Reams	3
Paper	Staples A3 Carbon Neutral Paper	48	Reams	0.4
Paper	Reflex A4 Carbon Neutral Paper	25	Reams	0.1
Total				3.5

7. Total Carbon Footprint

Scope	Emission source	t CO ₂ -e ⁴
2	Electricity used in buildings	17,622
3	Electricity used in buildings (extraction, transmission and distribution losses)	3,604
2	Electricity used in parks	2,048
3	Electricity used in parks (extraction, transmission and distribution losses)	419
2	Electricity used in street lighting	12,164
3	Electricity used in street lighting (extraction, transmission and distribution losses)	2,488
1	Natural gas used in buildings	1,507
3	Natural gas used in buildings (extraction, transmission and distribution losses)	417
1	Natural gas used in parks	0

⁴ Total carbon footprint in tonnes CO₂-e

Scope	Emission source	t CO ₂ -e ⁴
3	Natural gas used in parks (extraction, transmission and distribution losses)	0
1	Diesel used in fleet services	2,258
3	Diesel used in fleet services (extraction, transmission and distribution losses)	171
1	Gasoline used in fleet services	237
3	Gasoline used in fleet services (extraction, transmission and distribution losses)	19
1	Liquid petroleum gas used in fleet services	8
3	Liquid petroleum gas used in fleet services (extraction, transmission and distribution losses)	1
1	Biodiesel used in fleet services	15
1	Ethanol used in fleet services	0
3	Diesel used in contractor services	938
3	Diesel used in contractor services (extraction, transmission and distribution losses)	71
3	Gasoline used in contractor services	192

Scope	Emission source	t CO ₂ -e ⁴
3	Gasoline used in contractor services (extraction, transmission and distribution losses)	15
3	Liquid petroleum gas used in contractor services	23
3	Liquid petroleum gas used in contractor services (extraction, transmission and distribution losses)	2
1	Ethanol used in contractor services	0
3	Emissions from business journeys by plane	21
3	Emissions from business journeys by taxi	37
1	Refrigerant leakage from air conditioning in buildings	618
1	Diesel used in back-up generators and fire pumps	5
3	Diesel used in back-up generators and fire pumps (extraction, transmission and distribution losses)	0
3	Emissions from disposal of waste produced by City of Sydney operations	1,489

t CO₂-e⁴

Scope	Emission source	t CO ₂ -e ⁴
3	<ul style="list-style-type: none"> • Gasoline • Ethanol • Diesel oil for transportation and stationary energy • Electricity • Fireworks combustion and embodied energy • Paper • Catering food and packaging • Flights • Accommodation • Waste • Passenger car and public transportation • Scope-3 electricity and fuel 	255

NYE 2011 emissions inventory developed by the company Emissions Statement available on City of Sydney website.

3	Emissions associated with A4 paper usage	51
3	Emissions associated with A3 paper usage	4
3	Emissions associated with plotter paper usage	1

Total Footprint 46,701⁵

⁵ Total emissions rounded up to nearest tonne CO₂-e

8. Carbon Offset Purchases and Retirement for this Reporting Period

The City of Sydney procures offsets at the end of the reporting year once it has developed and verified its greenhouse gas emissions inventory which is used as the basis to request quotations for offsets. The provider retires the offsets on behalf of the City of Sydney and provides details such as certificate numbers and registry information.

The City has developed a set of stringent criteria to ensure that offsets are real, additional, and result in greatest emissions reductions with least environmental impacts.

Offsets for the 2011/12 reporting year were purchased in 2013. The City's planned offset strategy is to continue to use independently verified greenhouse gas emissions inventories as the basis to annually purchase offsets via request for quotation. Information about the City's carbon neutral program including offset certificates is available at www.cityofsydney.nsw.gov.au

Offset type	Registry	Serial number	Quantity (t CO ₂ -e)
VCU	Markit	2459-105019928-105036807-VCU-008-MER-CN-1-882-26122009-25122010-0	16,680
VCU	Markit	2459-105052356-105082355-VCU-008-MER-CN-1-882-26122009-25122010-0	30,000
VER	Markit	GS1-1-TW-472-12-2009-46-65138 to 65144	7
VER	Markit	GS1-1-TW-472-12-2009-46-66395 to 66408	14
Total			46,701

VCU and Gold Standard certificate details can be viewed using the link below.
<http://mer.markit.com/br-reg/public/index.jsp?q=city%20of%20sydney&s=cr>

9. Emission Reduction Measures

Emission source	Reduction Measure	Scope	Status	Reduction t CO ₂ -e
Electricity used in buildings	<p><u>Strategic Project – Energy and Water Retrofit</u></p> <p>Approximately 22% of an Energy and Water retrofit of 45 of the City's largest energy and water using sites was installed in 2011-12. The retrofit is an output tender specification which requires a 20% reduction of energy used by City of Sydney properties based on 2006 levels. The emissions reduction reported here includes only the component implemented in 2011-12 and includes scope 2 and 3 emission reductions</p>	2	Implemented this reporting period	1,476
Electricity used in buildings	<p><u>Strategic Project – Energy and Water Retrofit</u></p> <p>Remaining 78% of Energy and Water retrofit of 45 of the City's largest energy and water using sites to be implemented post 2011-12. The emissions reduction reported here includes scope 2 and 3 emission reductions.</p>	2	Planned for future reporting period	5,235
Electricity used in parks and street lighting	<p><u>Strategic Project – LED lighting upgrade</u></p> <p>Approximately 7% of an LED retrofit tender was installed in 2011-12. This tender will replace 6,448 lights owned by the City and save 2,101MWh per annum. The emissions reduction reported here includes scope 2 and 3 emission reductions. Savings calculated by subtracting 2011-12 street lighting electricity emissions from 2009-10 base year.</p>	2	Implemented this reporting period	196
Electricity used in parks and street lighting	<p><u>Strategic Project – LED lighting upgrade</u></p> <p>Remaining 93% of LED retrofit of the City owned</p>	2	Planned for future reporting period	2,620

6,448 street lights to be implemented post 2011-12. The emissions reduction reported here includes scope 2 and 3 emission reductions.

	<u>Strategic Project – LED lighting upgrade</u>			
Electricity used in parks and street lighting	LED retrofit of 12,400 Ausgrid owned street lights to be implemented post 2011-12. The emissions reduction reported here includes scope 2 and 3 emission reductions.	2	Planned for future reporting period	5,415
	<u>Strategic Project – Renewable gases</u>			
Natural gas used in buildings	The City of Sydney has committed to replace natural gas with renewable gas for use in trigeneration by 2030. The emissions reduction reported here includes scope 2 and 3 emission reductions. Savings calculated by assuming 100% of natural gas used by buildings in 2011-12 is replaced by renewable gases.	1	Planned for future reporting period	1,924
	<u>Strategic Project – Fleet savings</u>			
Fuel used in fleet services	Savings calculated by subtracting 2011-12 fleet emissions from 2009-10 base year. The emissions reduction reported here includes scope 1 and 3 emission reductions.	1	Implemented this reporting period	490
	<u>Strategic Project – Reduce fugitive emissions</u>			
Refrigerant leakage from air conditioning in buildings	Savings calculated by assuming 50% reduction of 2011/12 emissions through best practice maintenance and replacement of existing refrigerants with low GWP refrigerants and use of zero GWP thermal energy outputs from trigeneration to replace high GWP refrigerants used in existing electrical chillers.	1	Planned for future reporting period	309
Emissions from disposal of waste produced by City of	Assumes a conservative 50% reduction in 2011/12 emissions by sending waste	3	Planned for future reporting	744

Sydney operations to an Advanced Waste Treatment facility. period

Total emission reductions implemented in this reporting period	2,162
Total expected emission reductions in future reporting periods	16,247

11. 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.

Kim Woodbury



Name of Signatory

Signature

Chief Operations Officer

Position / Title of Signatory

12/11/2013

Date