

National Carbon Offset Standard Carbon Neutral Program Public Disclosure Summary



An Australian Government Initiative

City of Sydney, 2012/13



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	
Reporting year period	From 1/07/2012	To 1/07/2013
Emissions in this reporting year	43,318 t CO ₂ -e	
Base year period	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 residents as well as for the daily influx of workers and 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.

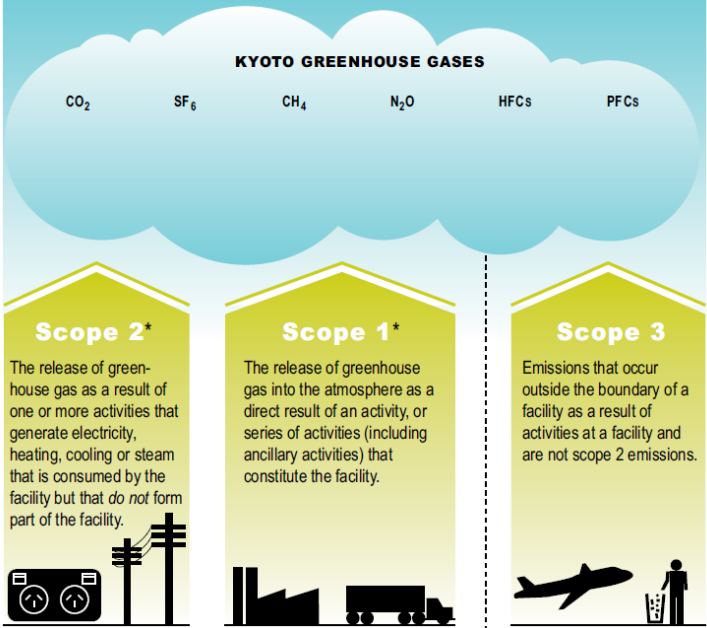
The core functions for Local Government in NSW are defined by the Local Government Act 1993. An overview of City of Sydney services and facilities include:

- Aquatic centres
- Community centres, services and facilities
- Domestic waste service
- Economic development
- Events and sponsorships
- Health and building inspections
- Infrastructure (roads, footways, drainage)
- Parking services
- Parks and open space
- Strategic planning and development consent
- Street lighting
- 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 a main administration building, multiple depots, parks, libraries, venues and community centres. The City's main office is located at 456 Kent Street, Sydney behind the Sydney Town Hall.

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

<p>Boundary consolidation approach:</p>	<p>Operational control</p>
<p>Description of the boundary of the subject of certification (also describe exclusions from the boundary):</p>	<p>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. Since 2011, the emissions boundary has met requirements of the National Carbon Offset Standard (NCOS).</p> <p>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.</p>  <p>The diagram illustrates the three scopes of GHG emissions. At the top, a cloud labeled 'KYOTO GREENHOUSE GASES' contains icons for CO₂, SF₆, CH₄, N₂O, HFCs, and PFCs. Below this, three house-shaped boxes represent the scopes: <ul style="list-style-type: none"> Scope 2*: 'The release of greenhouse gas as a result of one or more activities that generate electricity, heating, cooling or steam that is consumed by the facility but that do not form part of the facility.' It is illustrated with an electrical meter and power lines. Scope 1*: 'The release of greenhouse gas into the atmosphere as a direct result of an activity, or series of activities (including ancillary activities) that constitute the facility.' It is illustrated with a factory and a truck. Scope 3: 'Emissions that occur outside the boundary of a facility as a result of activities at a facility and are not scope 2 emissions.' It is illustrated with an airplane and a person with a trash bin. </p> <p>Figure 1 – GHG Emissions scopes</p> <p>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.</p>

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.

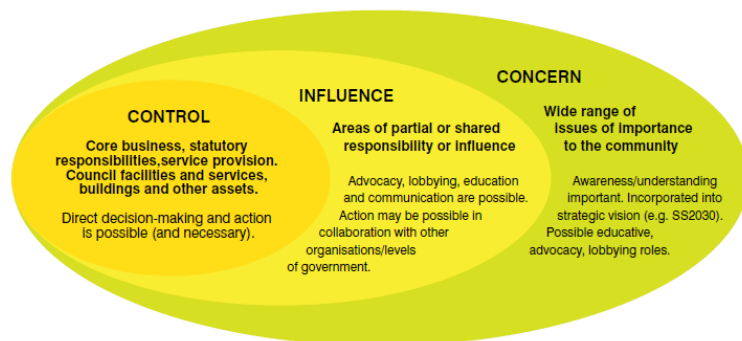


Figure 2 – Sustainable Sydney 2030 implementation pathways

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 it financial control for emissions which may not otherwise be included within organisational operational control.

The City's greenhouse gas emissions boundary is outlined in Figure 3.

City of Sydney GHG Emissions Boundary

- Emissions associated with City-owned property portfolio including grid electricity, natural gas, onsite diesel, and fugitive refrigerants.
- Emissions associated with grid electricity used for Street lighting.
- Emissions associated with combustion of diesel, gasoline, ethanol, biodiesel and liquid petroleum gas used by the City's fleet and equipment in delivering services.
- Emissions associated with combustion of diesel, gasoline, ethanol, biodiesel and liquid petroleum gas used by the major outsourced services.
- Emissions from work related air and taxi travel.
- Emissions from the disposal of waste generated by the organisation.

Figure 3 – Organisational Boundary - based on operational control capacity to implement environmental policies.

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).

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

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

The following emissions sources are excluded from 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 (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 and carbon neutral assertions within the media, local and international events and programs 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

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

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

Table 2: GreenPower

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

Table 3: LGCs Surrendered

Details of LGCs Voluntarily Surrendered	
Quantity	Serial No.
0	Not applicable

6. Purchase of NCOS Carbon Neutral Products

Table 42: Carbon Neutral Products

Product	Company	Quantity	Units	t CO ₂ -e (if known)
Paper	Staples A4 Carbon Neutral Paper	6,330	Reams	20.6
Paper	Staples A3 Carbon Neutral Paper	462	Reams	3
Total				23.6

7. Total Carbon Footprint

Organisations that have completed a GHG inventory are to provide a summary of the total footprint from Section 4 of the GHG Inventory here. Organisations that have completed an LCA and are seeking carbon neutral certification for products or services are to include a summary of Section 11 of the LCA.

Table 5: Emission sources, scopes and quantities

Scope	Emission source	t CO ₂ -e
2	Electricity used in buildings	16,562
3	Electricity used in buildings (extraction, transmission and distribution losses)	3,617
2	Electricity used in parks	1,803
3	Electricity used in parks (extraction, transmission and distribution losses)	394
2	Electricity used in street lighting	11,269
3	Electricity used in street lighting (extraction, transmission and distribution losses)	2,461
1	Natural gas used in buildings	1,335
3	Natural gas used in buildings (extraction, transmission and distribution losses)	333
1	Natural gas used in parks	1
3	Natural gas used in parks (extraction, transmission and distribution losses)	0
1	Diesel used in fleet services	1,949
3	Diesel used in fleet services (extraction, transmission and distribution losses)	148
1	Gasoline used in fleet services	218
3	Gasoline used in fleet services (extraction, transmission and distribution losses)	17

Scope	Emission source	t CO ₂ -e
1	Liquid petroleum gas used in fleet services	5
3	Liquid petroleum gas used in fleet services (extraction, transmission and distribution losses)	0
1	Biodiesel used in fleet services	34
1	Ethanol used in fleet services	0
3	Diesel used in contractor services	783
3	Diesel used in contractor services (extraction, transmission and distribution losses)	59
3	Gasoline used in contractor services	135
3	Gasoline used in contractor services (extraction, transmission and distribution losses)	11
3	Liquid petroleum gas used in contractor services	5
3	Liquid petroleum gas used in contractor services (extraction, transmission and distribution losses)	0
1	Ethanol used in contractor services	0
3	Emissions from business journeys by plane	21
3	Emissions from business journeys by taxi	29
1	Refrigerant leakage from air conditioning in buildings. PFC's and SF6 were not included as there were no sources used by the City.	625
1	Diesel used in back-up generators and fire pumps	7

Scope	Emission source	t CO ₂ -e
3	Diesel used in back-up generators and fire pumps (extraction, transmission and distribution losses)	1
3	Emissions from disposal of waste produced by City of Sydney operations	1,460
3	Emissions associated with A4 paper usage	30
3	Emissions associated with A3 paper usage	5
3	Emissions associated with plotter paper usage	0
Total footprint		43,318

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 2012/13 reporting year were purchased in June 2014. 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/Carbon

Table 3: Offset Cancellations

Offset type	Registry	Serial number	Quantity (t CO ₂ -e)
VCU	APX VCS Registry	2337-97800479-97844402-VCU-001-MER-IN-1-173-01042008-30092008-0	43,924

Total

43,924

See: <https://vcsregistry2.apx.com/myModule/rpt/CertificateInfo.asp?rhid=9430&ftType=PR> and <https://vcsregistry2.apx.com/myModule/rpt/myrpt.asp>

9. Emission Reduction Measures

In 2011 the City of Sydney became the first Carbon Neutral government in Australia certified under the National Carbon Offset Standard using a 2009/10 emissions base year. Prior to this certification, the City had unofficially been carbon neutral by reducing and offsetting its greenhouse gas emissions since 2006/07.

Our decision to be carbon neutral is to reduce impacts of climate change, meet public and staff expectations, show leadership, influence sustainable market processes, and reduce costs through energy savings.

Our strategy is to apply recognised carbon principles whereby priority is given to reducing energy, energy efficiency and renewable energy. The major strategic projects underway include an LED lighting upgrade, energy and water retrofits of buildings, fleet savings, and large scale installation of solar photovoltaics. NCOS recognised offsets are purchased for emissions that cannot be avoided within each annual reporting period equivalent to 100 per cent of the City's emissions.

Sustainable Sydney 2030, the City's Vision for a Green, Global and Connected future, developed through the most consultation ever undertaken by the City, contains many targets and strategies to reduce greenhouse gas emissions which apply to the local government area and the City of Sydney as an organisation. Sustainable Sydney 2030 was endorsed by Council in June 2008 as the City's Strategic Plan which guides our four yearly Corporate Plan and annual unit Business Plans. Sustainable Sydney 2030 can be viewed at www.cityofsydney.nsw.gov.au.

The City of Sydney has adopted the following corporate greenhouse gas emissions reduction and energy targets within Sustainable Sydney 2030, the City of Sydney Environmental Management Plan, and the Corporate Plan:

- Reduce 2006 emissions 70% by 2030
- Reduce 2009 fleet emissions 20% by 2014

The base year of the City's NCOS carbon neutrality is 2009/10. The reduction targets above equate to the following against the 2009/10 base year emissions:

- Reduce 2009/10 emissions 68% by 2030
- Reduce 2009/10 fleet emissions 20% by 2013/14

2009/10 Verified Base Year Emissions (tCO ₂ -e)	2012/13 Emissions (tCO ₂ -e)	2030 Emissions Target (tCO ₂ -e)
50,030	43,318	15,892

Reporting on progress toward targets is undertaken quarterly and publically available through twice yearly Green Reports. These reports outline the status of projects and any shortfalls to meeting targets which informs future program development.

Table 7: 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 35% of an Energy and Water retrofit of 45 of the City's largest energy and water using sites was installed in 2012/13. 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 2012/13 and includes scope 2 and 3 emission reductions. These emissions savings build on 22% implemented in the previous reporting year.</p>	2	Implemented this reporting period	2,349
Electricity used in buildings	<p><u>Strategic Project – Energy and Water Retrofit</u></p> <p>Remaining 43% of Energy and Water retrofit of 45 of the City's largest energy and water using sites to be implemented post 2012/13. The emissions reduction reported here includes scope 2 and 3 emission reductions.</p>	2	Planned for future reporting period	2,886
Electricity used in parks and street lighting	<p><u>Strategic Project – LED lighting upgrade</u></p> <p>Approximately 8% of an LED retrofit tender was installed in 2012/13. 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. These emissions savings build on 7% implemented in the previous reporting year.</p>	2	Implemented this reporting period	184
Electricity used in parks and street lighting	<p><u>Strategic Project – LED lighting upgrade</u></p> <p>Remaining 85% of LED retrofit of the City owned 6,448 street lights to be implemented post 2012/13. The emissions reduction reported here includes scope 2 and 3 emission reductions.</p>	2	Planned for future reporting period	1,893

Electricity used in parks and street lighting	<p><u>Strategic Project – LED lighting upgrade</u></p> <p>LED retrofit of 12,400 Ausgrid owned street lights to be implemented post 2012/13. The emissions reduction reported here includes scope 2 and 3 emission reductions.</p>	2	Planned for future reporting period	5,415
Natural gas used in buildings	<p><u>Strategic Project – Renewable gases</u></p> <p>The City of Sydney has committed to replace natural gas with renewable gas 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 2012/13 is replaced by renewable gases.</p>	1	Planned for future reporting period	1,669
Fuel used in fleet services	<p><u>Strategic Project – Fleet savings</u></p> <p>Savings calculated by subtracting 2012/13 fleet emissions from 2009/10 base year. The emissions reduction reported here includes scope 1 and 3 emission reductions.</p>	1	Implemented this reporting period	853
Refrigerant leakage from air conditioning in buildings	<p><u>Strategic Project – Reduce fugitive emissions</u></p> <p>Savings calculated by assuming 50% reduction of 2012/13 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.</p>	1	Planned for future reporting period	312
Emissions from disposal of waste produced by City of Sydney operations	<p>Assumes a conservative 50% reduction based on 2012/13 emissions by sending waste to an Advanced Waste Treatment facility.</p>	3	Planned for future reporting period	730
Total emission reductions implemented in this reporting period				3,386
Total expected emission reductions in future reporting periods				12,905

10. Other Information [Optional]

n/a

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

6/06/2014

Date