



Moreland City Council

NCOS CARBON NEUTRAL PROGRAM

PUBLIC DISCLOSURE SUMMARY



An Australian Government Initiative

1. ORGANISATION INFORMATION

| | |
|--|-------------------------------------|
| Organisation Name: | Moreland City Council |
| Disclosure Period: | 1 July 2011 to 30 June 2012 |
| Date of most recent verification: | 2nd November 2012 |
| Carbon Neutral Disclosure Type: | Organisation |

2. MORELAND CITY COUNCIL

The City of Moreland covers the inner and mid-northern suburbs of Melbourne. It lies between 4 and 14km north of central Melbourne and covers a diverse range of communities. Centrally located on the northern doorstep of Melbourne's CBD, Moreland is undergoing a sustained period of urban regeneration. Moreland has housing choices ranging from restored heritage cottages, modern family homes and stylish inner-urban apartments to recycled industrial buildings.

Moreland's population of 152,255 is forecast to grow to 182,000 by 2031. Significant growth has occurred in last five years (the biggest increase for two decades). The City of Moreland covers the suburbs of Brunswick, Brunswick East, Brunswick West, Pascoe Vale, Pascoe Vale South, Coburg, Coburg North, Hadfield, Fawkner, Glenroy, Oak Park and Gowanbrae. Small sections of the suburbs of Fitzroy North and Tullamarine are also located in the City. Key features of Moreland's regional context include:

- Proximity to Melbourne's Central Business District (CBD); and
- Good transport links to the CBD, ports, airport and industrial areas.

Council spent \$29.31 million on capital works during 2011/12, with childcare centres and kindergartens among the main beneficiaries. Significant improvements were made to shared paths and landscaping along the Merri, Moonee Ponds and Edgars creeks.

Some key statistics that relate to Council's service delivery in 2011-2012 that contributed to our greenhouse gas inventory:

| | |
|---|-------------------------|
| • Street sweeping | 102,580 km's |
| • Weekly garbage and recycling waste collection | 56,000 households |
| • Fortnightly green waste collection | 36,000 households |
| • Total home care service hours | 144,000 |
| • Delivered meals total | 200,980 |
| • Trees and shrubs planted | 11,911 trees and plants |

3. STRATEGIC OVERVIEW AND TARGETS

COUNCIL PLAN 2009-2013

Our Purpose

The Council Plan describes our strategic objectives in four focus areas and the key initiatives to be implemented to achieve them. Moreland City Council delivers good governance to achieve a more socially and environmentally just and sustainable city.

Our Vision

Moreland City Council will partner the community to be a city that is lively, proud, celebrates its diversity and cares for and respects all of its citizens.

Our Strategic Statement

Moreland City Council will be recognised as an accountable, innovative and collaborative organisation that delivers Council's vision for the city.

Our Strategic Focus Areas

A Sustainable & Just City, a Proud City, a Healthy & Educated Community, and a Responsive Organisation.

Climate Action Plan / Carbon Management Strategy

In April 2007, Council endorsed the Climate Action Plan, which included a commitment to the goal of zero net emissions for Council's corporate emissions by 2020 and the goal of zero net emissions for the Moreland community by 2030.

In December 2008, the incoming Mayor's Speech took the corporate goal further to state that Council will achieve zero net emissions by 2012. To respond to this direction, Council developed a Carbon Management Strategy (CMS) that provided a pathway for Council to meet its commitment of carbon neutrality for Council's corporate operations by 2012. The CMS brought together the Climate Action Plan, the Building Operating Plan and the Sustainable Buildings Program and included a strategic energy efficiency program to provide a road map to move forward in a positive direction towards zero net emissions by 2012.

4. CORPORATE EMISSIONS SCOPE

Defining the scope of emissions is an important step in understanding responsibility and control, establishing a baseline, and monitoring performance. Moreland City Council has to date adopted the ICLEI Cities for Climate Protection (CCP) reporting protocol, a convention shared by many local governments across Australia active on climate change, however Council now aligns with the *National Greenhouse and Energy Reporting Act 2007* (NGER Act), as well as the Greenhouse Gas Protocol's Corporate Accounting and Reporting Standard.

Council's emissions boundary has been established to include the following:

Scope 1 Emissions released directly at a facility e.g. emissions from a gas boiler.

Scope 2 Emissions released offsite due to energy consumption at the facility e.g. emissions from electricity.

Scope 3 Emissions generated in the wider economy as a consequence of the corporation's activities e.g. waste disposal, air travel.

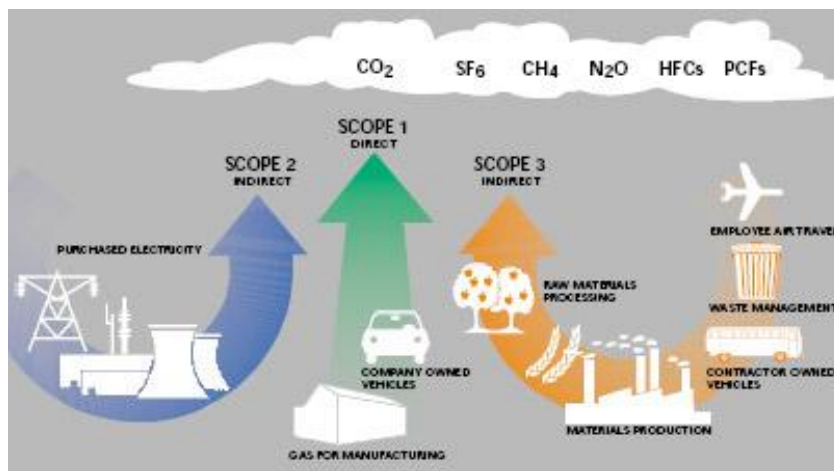


Figure 1 Emissions Scope

Buildings

Council currently has 275 buildings within its portfolio. Council's nine largest facilities are responsible for 85% of total building emissions. Greenhouse emissions resulting from building use of electricity and gas which both result in greenhouse emissions either onsite or related to the production of electricity and gas.

Fleet

Council's fleet emissions and associated fuel costs have increased since 2005 and it is anticipated that fleet costs will continue to increase due to peak oil issues related to reducing oil supplies. Heavy vehicles, community transport, open space and staff vehicles make up the majority of the fleet. Greenhouse emissions result from the use of transport fuels such as petrol, diesel and LPG.

Plant

Fuel is used in small equipment and plant for Council activities. Combustion of both diesel and petrol contribute to greenhouse gas emissions.

Refrigerants

Direct greenhouse gas emissions result from the direct leak of hydrocarbons into the atmosphere.

Lubricants

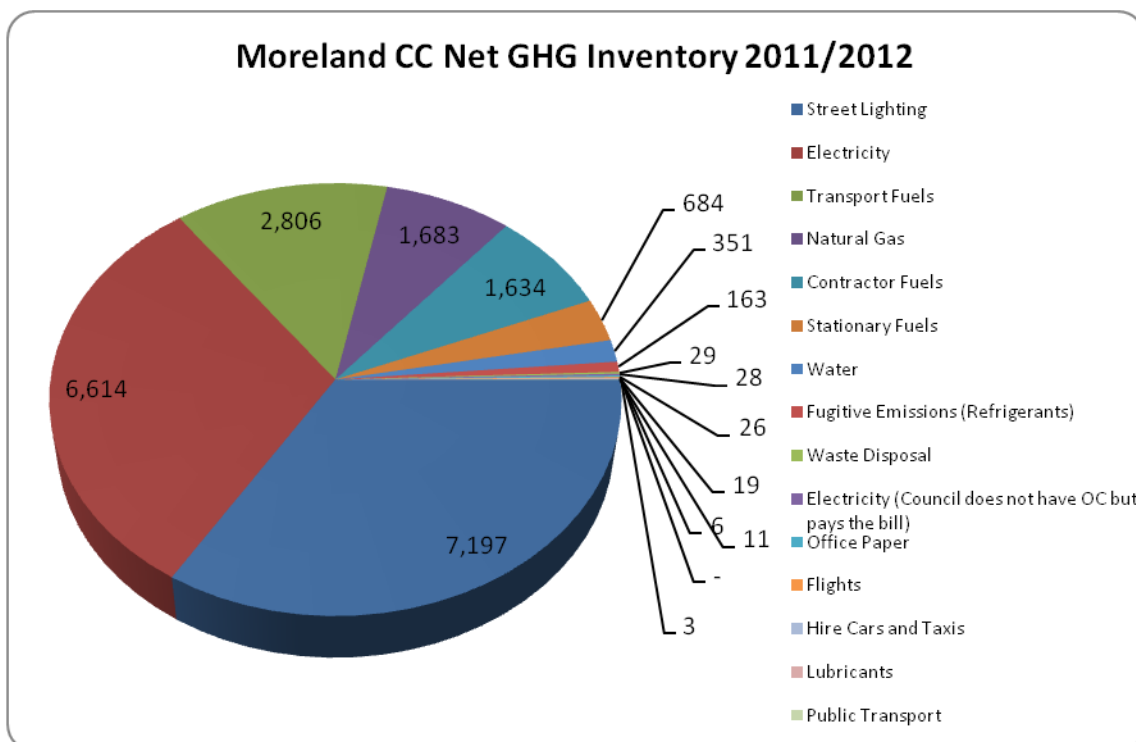
Greenhouse gas emissions result from the partial combustion of petroleum based oils and greases used in vehicles and plant

Waste

Greenhouse emissions result from the disposal of waste to landfill. Corporate waste emissions are considered to be from all Council owned facilities and exclude waste collected in the community.

- Lighting** Public Lighting represents one of the largest components of Council's carbon footprint. Council is responsible for funding all public lighting across the municipality. Council has operational control over some minor lighting but not major street lighting.
- Water** Greenhouse emissions result from the use and disposal of water from Councils buildings and facilities. These corporate emissions exclude water use and disposal from the community.
- Flights** Greenhouse gas emissions result from Council employees using air travel.
- Contractors** Greenhouse gas emissions result from both major and minor contractor transport fuel use.
- Paper** Office paper used by Council has embodied greenhouse gas emissions associated with its manufacture and disposal.
- Hire Cars & Taxis** Council use taxis and hire cars for travelling. Greenhouse gas emissions result from the combustion of transport fuels.
- Public Transport** Council use various forms of public transport including; trains, buses and trams. Greenhouse gas emissions result from the combustion of transport fuels associated with these forms of transport.

COUNCIL'S GHG EMISSIONS 2011/2012



5. ORGANISATION DESCRIPTION AND BOUNDARY

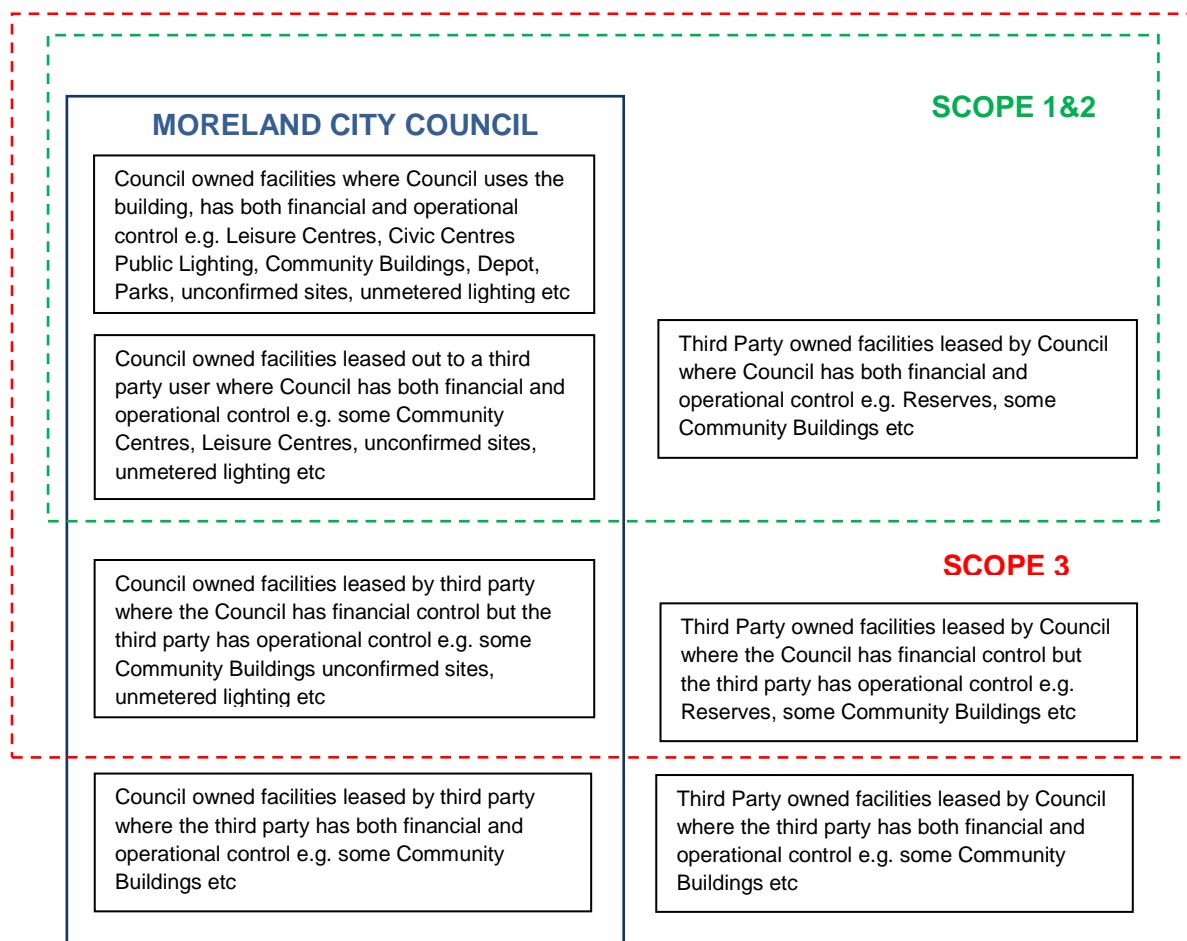
Moreland City Council currently has 275 buildings within its portfolio including; Civic Centres, Aquatic and Sports Leisure Centres, Community Centres, Pavilions, Maternal/ Child Care Centres, Kindergartens, Libraries, Depot, as well as other facilities including; Public Lighting and Parks and Reserves. The majority of these buildings/facilities are used by Council however some are leased by a third party. As well as this Council leases some third party buildings/facilities to provide various community services.

Moreland City Council established its greenhouse gas emissions boundary based on the *National Greenhouse and Energy Reporting (Measurement) Determination* and AS ISO 14064.1–2006 Specification with guidance at the organisational level for quantification and reporting of greenhouse gas emissions and removals.

Setting the boundary of the greenhouse gas emissions inventory involved determining inclusions and exclusions with regard to both the organisational and operational boundary of the assessment.

The organisational boundary is depicted in Figure 1.

Figure 1: Organisational Boundary



Boundary Overview

Council consolidated its facility-level GHG emissions and removals based on financial control. However it also assessed operational control to derive a better understanding of Council's broader responsibilities outside its financial control. Financial and operational control was assessed at all Council facilities and buildings which included those;

- Council owned and operated facilities
- Council facilities leased out to third party
- Facilities Council leased from a third party

Financial Control

Council's baseline inventory included GHG emissions and removals from facilities for which Council has financial control (*AS ISO 14064.1-2006*). Financial control was determined based upon whether Council was paying the utility costs for the facility.

All facilities where Council was deemed to have financial control were included in the scope of this greenhouse gas inventory.

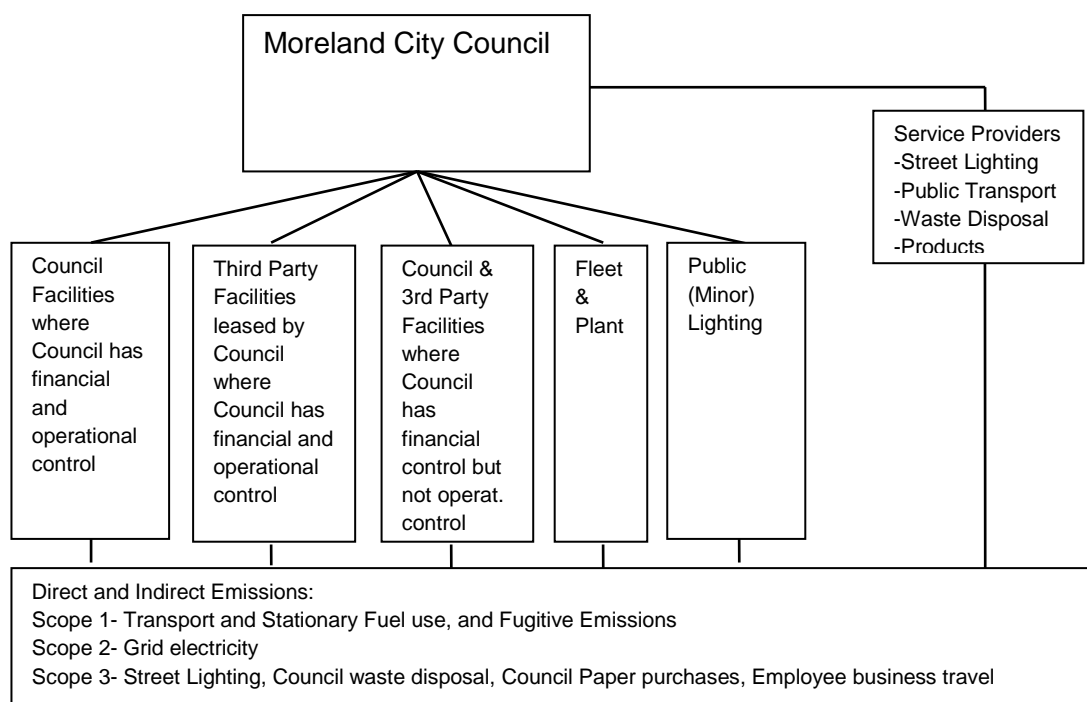
All facilities where Council was not deemed to have financial control were not included in the scope of this greenhouse gas inventory.

Operational Control

An analysis of Council's building stock confirmed that all sites that are owned and operated by Council or are leased from 3rd parties and operated by Council are under Council's operational control as well as Council's financial control.

All sites where Council facilities were leased to third parties were assigned operational control based on their ability to set operating policies, health and safety policies and environmental policies (as defined by NGER). Only those facilities however, where Council has financial control were included in the scope of this inventory. The operational boundary is depicted in Figure 2.

Figure 2: Operational Boundary



The direct and indirect emissions included in the boundary of this inventory are as follows:

Scope 1 emissions

- Stationary fuel usage (natural gas, diesel, unleaded petrol, liquid petroleum gas, lubricants and greases)
- Transport fuel usage (diesel, unleaded petrol, liquid petroleum gas)
- Fugitive emissions (refrigerants)

Scope 2 emissions

- Grid electricity from facilities where Council has financial and operational control (buildings, unconfirmed sites, public/minor and unmetered lighting)

Scope 3 emissions

- Street lighting
- Employee business travel (public transport, flights, hire cars, taxis)
- Paper consumption
- Reticulated Water
- Disposal of Council waste
- Grid electricity from facilities where Council does not have operational control but has financial control (unconfirmed sites and unmetered lighting)
- Natural gas fuel usage (facilities where Council does not have operational control but pays bill)
- Contractor fuel use
- Reticulated water use and disposal

6. EMISSIONS SOURCES

Council's greenhouse gas emissions boundary includes:

- Scope 1 and 2 emission sources for which Council has both operational control as defined by the *National Greenhouse and Energy Reporting Act 2008* and financial control as defined by *Greenhouse gases Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals AS ISO 14064.1-2006*.
- Scope 3 emission sources for which Council has financial control but does not have operational control e.g. *waste disposal, paper disposal etc.*

Table 1 identifies all included emissions sources from Council activities and the reasons for inclusion within Moreland's organisational boundary:

Table 1: Council's Emission Sources Summary

| Scope | Description | Examples | Reason for Inclusion |
|-------------------------------|---|---|---|
| Scope 1 Direct emissions | i. Generation of electricity, heat or steam | Use of natural gas to heat buildings, hot water and pools | Scope 1 emission source -Required by NCOS |
| | ii. Stationary fuel combustion | Unleaded petrol and diesel used for plant and other Council vehicles not used for transportation | Scope 1 emission source -Required by NCOS |
| | iii. Petroleum based lubricants | Oils and greases used for stationary and transport uses | Scope 1 emission source - Required by NCOS |
| | iv. Transportation of materials, products, waste, and employees | Unleaded petrol, LPG and diesel used in fleet and other Council vehicles | Scope 1 emission source -Required by NCOS |
| | v. Fugitive emissions | Hydrofluoro-carbons emissions during the use of refrigeration and air-conditioning equipment | Scope 1 emission source - Required by NCOS |
| Scope 2 Indirect emissions | vi. Upstream grid electricity use | Electricity used in buildings, unconfirmed sites, public/minor and unmetered lighting that Council has financial and operational control. | This Scope 2 emission source occurs as a result of Council activities |

| Scope | Description | Examples | Reason for Inclusion |
|-------------------------------|---|--|--|
| Scope 3 Indirect emissions | vii. Upstream grid electricity use | Street lighting | This Scope 3 emission source occurs as a result of Council activities |
| | viii. Employee business travel | Air flights, use of public transport, taxi use and hire cars | This Scope 3 emission source occurs as a result of Council activities |
| | ix. Paper use | Emissions generated in the extraction, production and transport of office paper used in Council buildings | This Scope 3 emission source occurs as a result of Council activities |
| | x. Disposal of waste generated by the organisation | Emissions from waste produced from Council's buildings | This Scope 3 emission source occurs as a result of Council activities |
| | xi. Reticulated water use and disposal | Emissions resulting from the procurement and treatment of water for use within Council buildings or for irrigation of parks/reserves | This Scope 3 emission source occurs as a result of Council activities and has high materiality |
| | xii. Generation of electricity, steam, heating/cooling purchased by the organisation but not under the Operational Control (OC) of the organisation | Electricity use, purchased from the national grid | This Scope 3 emission source has high materiality and Council pays bills |
| | xiii. Generation of electricity, heat or steam purchased by the organisation but not under the OC of the organisation | Use of natural gas to heat buildings | This Scope 3 emission source has high materiality and Council pays bills |
| | xiv. Contractor fuel use | Citywide contract – waste collection and minor contractors e.g. tradespeople | This Scope 3 emission source occurs as a result of Council activities |

| Scope | Description | Examples | Reason for Inclusion |
|-------|---|---|---|
| | xv. Indirect emissions from the transport and distribution of electricity and gas | All electricity and natural gas consumption | This Scope 3 emission source occurs as a result of Council activities or Council pays bills |
| | xvi. Indirect emissions from the transport and distribution of transport and stationary fuels | All diesel, unleaded petrol and liquid petroleum gas fuel use | This Scope 3 emission source occurs as a result of Council activities or Council pays bills |

7. PURCHASE OF GREENPOWER™ OR NCOS CARBON NEUTRAL PRODUCTS AND/OR CANCELLATION OF GREENPOWER™ ELIGIBLE RENEWABLE ENERGY CERTIFICATES (RECS)

GreenPower™: 2890.43 MWh (3,902 tonnes CO₂-e)

8. TOTAL CARBON FOOTPRINT

From the most recent verified 2011/2012 GHG Inventory

| | |
|--------------------|--------------------------------|
| Total Gross | 21,254 CO₂-e |
| GreenPower | (-) 3,902 |
| Total Net | 17,352 CO₂-e |

9. OFFSET PURCHASE / CANCELLATION

Council seeks to position itself as a carbon neutral organisation and to recognise this through an accreditation process. Accreditation requires the purchase of verified carbon offsets. In June 2012 Council endorsed its Carbon Offset policy which outlines Council's approach and criteria to the purchase of carbon offsets. This policy establishes a framework for purchasing carbon offsets, which includes procurement process and criteria for offset selection.

In July 2012 Council established a panel of preferred suppliers for carbon offsets to ensure that Council can purchase NCOS accredited offsets every year to meet its carbon neutral commitment. Council has selected offset providers who will purchase and cancel offsets to ensure we meet the requirements set out by NCOS.

In November 2012, Council purchased 17,354 CO₂-e of offsets from ACXArgyle (Australian Co2 Exchange Pty Ltd) who subsequently retired/cancelled the credits through the APX registry.

| Offset Type | Registry | Serial Numbers | Offset Quantity (Tonnes CO ₂ -e) |
|---|--|--|---|
| VCU - Waste Heat Electricity Generation. Visakhapatnam, India | VCS - APX Registry ID VCSPD387 | 686-31266394- 31273747- VCU-001- APX-IN- 1-387- 23052005-11072007-0 | 7,354 |
| VCU - Waste Heat Electricity Generation. Visakhapatnam, India | VCS - APX Registry ID VCSPD387 | 686-31256394- 31266393- VCU-001- APX-IN- 1-387- 23052005-11072007-0 | 10,000 |

10. EMISSION REDUCTION MEASURES 2012/2013

Moreland City Council is currently undertaking a number of key actions to reduce existing emissions. The table below outlines some of the major projects for 2012/2013.

| Building energy efficiency project | Expected greenhouse gas and dollar savings |
|---|--|
| Install cogeneration unit at the Fawkner Leisure centre. | Annual Dollar savings - \$37,900 (includes entire project savings) Annual GHG savings - 559 tonnes CO ₂ -e |
| Install double glazing at Fawkner Leisure centre. | Annual Dollar savings - \$2,819 Annual GHG savings - 18 tonnes CO ₂ -e |
| Install new heating and cooling system at the Fawkner Senior Citizens centre. | Annual Dollar savings - \$6,500 Annual GHG savings - 62 tonnes CO ₂ -e |
| Install new heating and cooling system at the Fawkner Library. | Annual Dollar savings - \$7,800 Annual GHG savings - 75 tonnes CO ₂ -e |
| Install double glazing at the Coburg Leisure centre. | Annual Dollar savings - \$4,755 Annual GHG savings - 30 tonnes CO ₂ -e |
| Install pool blankets at the Coburg Leisure centre. | Annual Dollar savings - \$5,800 Annual GHG savings - 65 tonnes CO ₂ -e |
| Upgrade the chiller at the Brunswick Town Hall. | Annual Dollar savings - \$8,200 Annual GHG savings - 180 tonnes CO ₂ -e |
| Install new Building Management System (BMS) at the Brunswick Town Hall | Annual Dollar savings - \$12,500 Annual GHG savings - 85 tonnes CO ₂ -e |

| | |
|--|---|
| <p>Install new heating and cooling system at the Brunswick Town Hall.</p> | <p>Annual Dollar savings - \$9,500 Annual GHG savings - 70 tonnes CO₂-e</p> |
| | <p><i>Buildings Projects summary:</i> <i>Average return on investment across all projects = 14.4 years</i> <i>Annual Greenhouse gas reductions = 1,144 tonnes CO₂-e</i></p> |
| <p>Street Lighting represents one of the largest components of Council's carbon footprint. In 2012/13 Council intends to replace two thirds of the lights - 5,500 lights.</p> | <p><i>Annual Greenhouse gas reductions = 2,180 tonnes CO₂-e</i></p> |