# FUTURE MELBOURNE (ECO-CITY) COMMITTEE REPORT

Agenda Item 5.2

#### **CARBON NEUTRALITY – COUNCIL OPERATIONS**

17 April 2012

Presenter: Krista Milne, Manager Sustainability

#### Purpose and background

- 1. The purpose of this report is to seek approval of a strategy to achieve carbon neutrality for Council operations for 2010-11 and each following year, as outlined in this report and at Attachment 2- Carbon Neutral Strategy for Council Operations.
- 2. In 2002 Council committed to achieving Zero Net Emissions (for Council operations) before 2020. This commitment was reaffirmed when Council released its Greenhouse Action Plan in 2006.
- 3. Since Council made this commitment, the Australian Government has developed a standard for organisations aiming to claim carbon neutrality (the commonly used term for "zero net emissions"). The National Carbon Offset Standard (NCOS) defines carbon neutrality as when "emissions associated with an organisation's activities are equal to zero through the reduction of emissions and the acquisition and cancellation of carbon offsets that meet stringent criteria, to offset the remaining emissions."

# **Key issues**

- 4. The key elements for achieving carbon neutrality as an organisation are:
  - 4.1. develop a strategy;
  - 4.2. establish an inventory;
  - 4.3. reduce emissions associated with Council's activities;
  - 4.4. neutralise remaining emissions (offset);
  - 4.5. communicate approach and engage the community; and
  - 4.6. evaluate progress and review approach.
- 5. The Strategy, and in particular, the decision making principles, will inform Council's investment decisions in the different options to first reduce emissions, then neutralise remaining emissions over time.
- 6. One of the 'essential' decision making principles is timeliness. It is proposed that Council fast track its commitment to become carbon neutral, and achieve NCOS Carbon Neutral Compliance in September 2012 for the emissions produced by Council operations in 2010-11. The neutralisation must always be based upon historical data, generally the preceding financial year. In future years the Council may wish to reduce the lag effect by neutralising two years of emissions.
- 7. It is proposed that Council use the decision making principles to decide, on an annual basis through its budget, which offset products to purchase, including GreenPower. Attachment 3 provides an example.

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# **Recommendation from management**

- 8. That the Future Melbourne Committee:
  - 8.1. approves the Carbon Neutral Strategy for Council Operations attached to this report;
  - 8.2. authorises the Chief Executive Officer to achieve carbon neutrality for Council operations in September 2012 for 2010-11 and each following year; and
  - 8.3. recommends the allocation of the same amount as the 2011-12 budget for GreenPower to the 2012-13 budget for the purchase of neutralisation options.

#### Attachments:

- 1. Supporting Attachment
- 2. City of Melbourne Carbon Neutral Strategy (Council Operations)
- 3. Example assessment of emissions neutralisation options in March 2012 using draft decision making principles

#### SUPPORTING ATTACHMENT

#### Legal

1. The proposed approach is in accordance with the Australian Government standard.

#### **Finance**

- 2. Council currently neutralises approximately 50 per cent of its greenhouse gas emissions through the purchase of GreenPower at a cost of approximately \$600,000.
- 3. Based on the current offsets market, Council can reallocate this budget to achieve carbon neutrality more efficiently.
- 4. In addition to annually purchasing products to neutralise our residual GHG emissions, CoM will also need to allocate approximately \$50,000 per year to external verification and certification against NCOS.

#### **Conflict of interest**

5. No member of Council staff, or other person engaged under a contract, involved in advising on or preparing this report has declared a direct or indirect interest in relation to the matter of the report.

#### Stakeholder consultation

- 6. The attached strategy has been peer reviewed by representatives of other carbon neutral organisations and by leading carbon management organisations Climate Works and Monash University.
- 7. The attached strategy includes the development of a communications and community engagement plan. The key objectives of the plan will be to:
  - 7.1. deliver transparent information detailing the greenhouse gas emissions impact of the City of Melbourne (CoM) operations on an annual basis;
  - 7.2. clearly communicate the approach undertaken by CoM, and all assumptions made, in becoming carbon neutral for CoM operations; and
  - 7.3. engage CoM employees in decision-making across CoM to align with Council's carbon neutral priorities.

### **Relation to Council policy**

8. This recommendation implements a commitment within Council's Zero Net Emissions Strategy by 2020 for the municipality. It is also consistent with the Council Plan goal of managing our resources well.

#### **Environmental sustainability**

9. CoM will implement a best practice approach to achieving carbon neutrality for its own operations, therefore neutralising its greenhouse gas emissions. This approach will include the robust measurement of emissions, ongoing activities to reduce emissions as much as possible, engaging with its stakeholders about its approach and achievements and continually reviewing and updating its approach to ensure it remains relevant.

# City of Melbourne Carbon Neutral Strategy (Council Operations)<sup>1</sup>

City of Melbourne (CoM) will implement a best practice approach to achieving carbon neutrality for its own operations which will include robust measurement of emissions, reducing its impact as much as possible, engaging with its stakeholders about its approach and achievements, continually reviewing and updating its approach to ensure it remains relevant and leading by example. The key steps the CoM will take to achieve carbon neutrality are;

- 1. Plan approach
- 2. Measure emissions impact
- 3. Reduce emissions
- 4. Offset remaining emissions
- 5. Communicate & engage
- 6. Evaluate

Launched in 2002, CoM's original carbon strategy outlined the activities that would be undertaken to achieve carbon neutrality for CoM operations by 2020. The plan was reviewed and a second version was released in 2006. By implementing these plans CoM has learnt a great deal about its emissions reduction opportunities, many of which are well underway. Some of these actions include developing low emissions buildings, entering into an energy performance contract to upgrade its largest buildings, greening its corporate fleet and incorporating innovative green features into existing buildings, such as cool roofs.

# Plan approach

The key principles which will guide our overall approach are:

#### 1) Compliance with NCOS Carbon Neutral Standard

The Australian Federal Government's National Carbon Offset Standard (NCOS) has an associated Carbon Neutral Standard. This is considered the Australian Standard for achieving and claiming carbon neutrality for an organisation or product. CoM will seek NCOS certification for its approach to achieving and verifying carbon neutrality.

#### 2) Social responsibility

CoM must consider the social impact of all decisions to reduce carbon emissions and in the purchase of offsets. Decisions that have positive social outcomes will be prioritised.

#### 3) Timeliness

CoM will seek to become carbon neutral as soon as possible (prior to 2020) without compromising cost effectiveness or the quality of our approach. During 2012 CoM will establish, and publically release, a new timeline for achieving carbon neutrality.

The following principles – *in priority order* – will be used to inform emissions reduction and offsetting decisions made by CoM:

#### 1) Certainty in emissions reduction

CoM will prioritise investing in activities and offsets which deliver a high level of confidence in the resulting emissions reductions.

#### 2) Transparency in what we do

CoM will be transparent to stakeholders about our emissions impact, how we go about reducing that impact and all associated decision making processes and assumptions.

#### 3) Cost Effectiveness

CoM will prioritise actions which achieve the greatest emissions reduction at the lowest cost.

#### 4) Leadership by example

CoM will seek to deliver an approach to carbon neutrality that demonstrates leadership to the Melbourne community.

#### 5) Biodiversity

CoM will prioritise actions which have a positive impact on biodiversity in Melbourne, Australia and overseas.

<sup>&</sup>lt;sup>1</sup> This work should be distinguished from City of Melbourne's (CoM) *Zero Net Emission by 2020* Strategy which focuses on achieving carbon neutrality across the Melbourne municipality as a whole. This plan focuses solely on CoM's operations however achievement of carbon neutrality for our own activities will contribute to the municipal wide Zero Net Emissions target.

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#### 6) Transparency of suppliers

CoM will encourage our suppliers to be transparent about their emissions impacts, what actions they take to minimise their impacts and their associated decision making processes and assumptions.

The **essential principles** form the basis of this strategy, and must be incorporated into every step of the program. Therefore, this strategy ensures CoM's approach towards achieving carbon neutrality for its organisational operations is always NCOS Carbon Neutral Standard compliant, socially responsible and undertaken in a timely manner.

Important principles will be taken into consideration for all decisions made, in priority order, where feasible.

# **Measure emissions impact**

CoM will continue to develop and release an annual Greenhouse Gas (GHG) Inventory from the 2009-10 financial year onwards. CoM's corporate inventory will be aligned to the *Greenhouse Gas Protocol* - *Corporate Accounting and Reporting Standard*, which is the globally accepted standard for the development of a GHG emissions inventory. CoM's GHG Inventory will also be developed in line with the requirements of the *Australian National Carbon Offset Standard's Carbon Neutral Standard*.

The Principles for developing an emissions inventory inline with the GHG protocol are:

- Relevance
- Completeness
- Consistency
- Transparency
- Accuracy

CoM's inventory will include all direct emissions sources (scope 1) and emissions from electricity (scope 2). It will also include all other significant, or material, indirect emissions sources (scope 3). Material sources are generally defined as those sources which by their inclusion or exclusion will influence the outcome.

Scope 3 emissions data (those associated with supply chain activities) has not been effectively collated and clearly communicated by CoM in the past. CoM will include the following scope 3 emissions in its first emissions inventory;

- Contractor fuel use (where it can be accurately quantified)
- Flights
- Paper consumption
- Public lighting
- Staff transport
- Waste
- Water

CoM will research and identify additional scope three emissions sources which are material to its operations and work to quantify these emissions.

CoM will also develop an associated annual GHG Inventory Management Plan. The GHG Inventory Management Plan will outline in detail how CoM collects data and quantify emissions from each source in its inventory.

External, independent verification of CoM's inventory and carbon neutral standard will be undertaken annually.

#### **Reduce emissions**

Within the context of the principles outlined above, CoM will continue to strive for best practice approaches in achieving emissions reductions. CoM will prioritise reducing emissions though improvements to its operations over purchasing offsets. Activities such as reducing electricity demand and avoiding the need for energy/fuel use, improving energy efficiency, and switching to less carbon intensive fuel sources will result in CoM saving GHG emissions and reducing financial costs. In order to continue to reduce our emissions impact CoM will establish appropriate emissions reduction targets within the first year of this strategy.

CoM has already undertaken a significant number of activities to reduce emissions including entering into an Energy Performance Contract (EPC) where CoM is investing more than \$2.5 million in retrofitting 13 CoM buildings. Other initiatives include (but are not limited to) constructing leading buildings (such as CH2, a six GreenStar Building), installing a white roof at Art Play, installing solar water heater at North Melbourne Pool,

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installing solar photovoltaic panels at Queen Victoria Markets, purchasing 50% of electricity for streetlights from GreenPower and establishing sustainability performance indicators in the staff Enterprise Agreement.

Going forward, the decision-making principles outlined above will be incorporated into CoM strategies and policies which have an impact on CoM's emissions. Emissions reduction targets and approaches will focus on all emissions sources (Scope 1, 2 and 3). CoM's emissions reduction strategies will be supported through our 'CoMGreen' program which engages staff in promoting and recognising sustainability initiatives.

Key areas where the principles will be applied include (but are not limited to):

#### Building energy use

CoM will review and release its *Property Services Energy Reduction Plan* which will outline its approach to achieving significant emissions reductions from building energy consumption. CoM will also develop minimum energy and water design standards for the construction of its buildings which will apply to design and construction of new buildings and the retrofit of existing buildings.

#### • IT Infrastructure

CoM will finalise and release its *Green IT Plan* which will explore opportunities to reduce energy used by its IT infrastructure.

#### · Streetlights energy use

CoM will update and release its *Streetlight Action Plan*, which will explore opportunities to reduce energy used by Melbourne's streetlights and approaches to addressing regulatory barriers.

#### Corporate Travel

CoM's adopted *Corporate Travel Strategy* identifies measures to reduce emissions from business related travel including the encouraged use of public transport and bicycles as alternatives to taxi and corporate fleet use. The fleet purchasing strategy requires the procurement of smaller vehicles and has progressively resulted in the reduction in the size of the corporate fleet.

### Printing

CoM's adopted *Council Printing Contract* has identified measures for monitoring its paper consumption and has resulted in a reduction in unnecessary printing of documents. Future revisions of the printing strategy will identify opportunities for reducing paper consumption. CoMGreen will also work to identify opportunities for reducing paper use through staff engagement.

#### • Waste Management

CoM's adopted *Waste Management Plan* sets waste reduction targets for the organisation. Waste audits identify progress towards the targets. CoM's Enterprise Agreement recognises waste reduction targets and ties these to staff pay increases. Future reviews of the waste management plan will identify targets and measures to further reduce waste to landfill and improve recycling.

#### Procurement processes

CoM will review its *Corporate Contract Management System* to improve sustainable procurement outcomes. This will support the CoM's emissions reduction, offsetting principles and other strategies identified above.

# Offset<sup>2</sup> remaining emissions

CoM will make every effort to reduce its emissions prior to purchasing offsets. However, for the foreseeable future, CoM will continue to produce some emissions and will therefore need to purchase offsets to achieve carbon neutrality.

CoM will offset all emissions calculated as its operational impact, including scope 1, 2 and 3 emissions, as required under NCOS. CoM will work with its supply chain to identify scope three emissions sources which are already being offset, to avoid double counting.

It is expected that the offset market, both in Australia and overseas, will continue to change significantly in the coming years therefore CoM will use the decision making principles outlined above<sup>3</sup> to make decisions on the type of offsets purchased, at the time of purchase, to offset its remaining emissions.

CoM will only purchase offsets which meet the Australian NCOS Carbon Neutral Standard and demonstrate social responsibility. Currently, these offsets can be procured either from well established international voluntary offset schemes or from the Australian market. The approved international voluntary offset schemes include the VCS (Verified Carbon Standard-<a href="http://v-c-s.org/">http://v-c-s.org/</a>) or the Gold Standard (<a href="http://www.cdmgoldstandard.org/">http://www.cdmgoldstandard.org/</a>).

<sup>&</sup>lt;sup>2</sup> An offset is the purchase of an emissions reduction (usually sold in one tonne carbon dioxide equivalent [CO<sub>2</sub>-e] units) undertaken outside the boundary of your organisation. In purchasing an offset you purchase the rights to claim the reduction.

<sup>&</sup>lt;sup>3</sup> Only 'Important' principles 1, 3, 4 & 5 will be used to assess offset products. Principles 2 & 6, which relate to transparency, will be addressed through the implementation of the overall Strategy.

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Australian offsets which meet NCOS requirements include the Carbon Farming Initiative (CFI) Credits and permits produced through Australia's emissions trading scheme (to begin in 2015). Therefore, in the immediate future, the Australian Carbon Farming Initiative (CFI) will be the primary market for Australian credits. The CFI program is still very new and as a result limited Australian offsets will be available to CoM until the market matures. When available, Australian offset products will be compared to international offset products, using the decision making principles outlined above.

#### **Green Power**

CoM will continue to consider GreenPower as an option to neutralise its electricity emissions. Each year GreenPower will be compared to available offsets in the market. Using the principles outlined above CoM will make an informed decision about which product best meet its objectives and priorities to achieve carbon neutrality.

# Communicate and engage

Achieving carbon neutrality for CoM operations will be a significant contribution towards supporting City of Melbourne to meet its Eco City goal. A communications plan will be developed to support residents and businesses of Melbourne's municipality and CoM employees to understand CoM's approach towards achieving carbon neutrality for CoM operations and how this accomplishment fits within Melbourne's Eco City goal.

The key objectives of the plan will be to:

- Deliver transparent and interactive information detailing the greenhouse gas emissions impact of CoM operations on an annual basis.
- Clearly communicate the approach undertaken by CoM, and all assumptions made, in becoming carbon neutral for CoM operations.
- Lead by example and help support the Melbourne business community to become carbon neutral.
- Support emissions reduction through working with our supply chain.
- Engage CoM employees in decision-making across CoM to align with CoM's carbon neutral priorities.

#### **Evaluate**

CoM is committed to ensuring that its Carbon Neutral approach follows current best practice. In order to maintain this commitment CoM's approach will be annually reviewed and, when appropriate, updated to incorporate new emissions sources, new emissions reduction opportunities, policy changes and other best practice approaches. CoM will work to continually approve its approach to carbon neutrality, including enhancing its data management and information management systems over time.

CoM will review and publically release a summary strategy document annually.

# Example assessment of emissions neutralisation options in March 2012 using draft decision making principles

To decide how to invest Council budget in achieving carbon neutrality, CoM will assess options as demonstrated in the table below. The options will be assessed against each decision making principle and given a score out of five for how that option delivers on that given principle.

In the example below, a number of options to neutralise remaining emissions available in March 2012 are compared. These include GreenPower and various offset products.

In this example, Gold Standard accredited South American fuel switch project would be purchased as it rates the highest when considering all decision making principles.

Decision making principles	GreenPower	Verified Carbon Standard (VCS) Accredited Wind Farm in China	Gold Standard Accredited South America Fuel Switch Project	VCS Tasmanian Avoided Deforestation	GreenFleet Trees
National Carbon Offset Standard	5	5	5	5	1
Social Responsibility	3	3	5	3	3
Timeliness	5	5	5	5	1
Certainty in Emissions Reductions	5	5	5	4	3
Transparency in what we do	NA				
Cost Effectiveness	1	5	4	2	5
Leadership by example	2	2	2	2	2
Biodiversity	2	2	2	4	4
Transparency of suppliers	Our approach to transparency will decide this				
Total	22	27	29	27	18

Scale for total	0 to 13	14 to 27	27 to 35
Scale for principles	1 to 2	3	4 to 5