

City of Port Phillip

# Toward Zero

## Annual Progress Report

### Year 4



For 2010-11 Financial Year

Prepared by the Sustainability Department  
February 2012

## Overview

In 2007, the City of Port Phillip introduced a revised environmental agenda and approach for the municipality and Council operations through its umbrella environment strategy, **Toward Zero Sustainable Environment Strategy**. Toward Zero outlines nine key sustainability challenges for the City of Port Phillip, with targets and a 2020 timeline for some key challenges.

The **Toward Zero Annual Progress Report** aims to provide the following.

For Council operations -

- o Progress over the last year on the following key sustainability targets – Council's carbon emissions, potable water use, waste and sustainable purchasing
- o What has influenced reductions and increases against key targets in the last year
- o Progress over the last year on key sustainability initiatives for Council operations.

For community -

- o Community participation rates in Council sustainability programs over the last year
- o An at-a-glance view of reductions in community emissions, water use and waste from Council-run programs over the last year
- o Community carbon emissions (estimated), water use and waste to landfill in the last year.

## Influences

Over the last 5 years, there has been:

- o An increase of approximately 25% in Council's utility (electricity, gas, fuel and water) costs
- o Extended drought resulting in prolonged water use restrictions
- o An increase of approximately 12% in Council full time equivalent staff
- o An increase of approximately 1.2% in Port Phillip's residential population.

## Scope & Methodology for Council Operations

**Carbon emissions** – Council's zero emissions target by 2020 specifically covers Council's electricity, gas, fuel use and waste to landfill emissions only. It is estimated that Council's remaining emissions through contracts and materials purchase could be as much as a further 50% of Council's total carbon footprint. Council aims to target these indirect emissions for reduction after 2020. In the meantime, Council is establishing baselines and is increasing sustainability specifications for contracts and materials to reduce these indirect emissions.

Council's total annual emissions are audited and verified by independent carbon auditors (Genesis Now) to the standards of the Australian Greenhouse Protocol and National Carbon Offset Standard (NCOS).

**Water use** – Council's water use target covers all Council potable water use. Council's annual water use is audited and verified by independent auditors (Genesis Now). Project specific water quality benefits are estimated utilising MUSIC, a specialist software used to model urban stormwater management schemes.

**Waste** – At the end of 2010-11, Council initiated an independent audit and verification of its annual waste to establish a baseline in 2011-12. As such, next year's Toward Zero Annual Progress Report will, for the first time, carry information on Council's waste patterns and key actions to achieve reductions.

**Sustainable Purchasing** – Council currently quantifies the level of annual expenditure on sustainable alternatives, as a percentage of total expenditure.

## Scope & Methodology for Community

**Carbon emissions** – Community carbon emissions are estimated based on 2006 data (a combination of community electricity and gas consumption data from energy retailers, Census 2006 transport data and waste collection services data from Council contractors). The methodology utilises a 'top-down' approach in that it takes into account national and regional patterns of travel and energy use. Emissions are extrapolated from this dataset on the basis of population growth. Confidentiality requirements of electricity retailers and distributors mean that Councils often cannot gain access to sector emissions except as a municipal-wide figure. This means that while the data provides an indicator of likely local emissions, its breakdown into where and why usage occurs is not likely to be truly reflective of current community emissions patterns.

**Water use** – Community water consumption data is provided regularly by the relevant local water corporations and generally represents actual current usage.

**Waste** – Council's annual waste collection services allow Council to provide good data for waste collected in the municipality by Council. This is broken down into waste to landfill, recycling and green waste. This data does not include private waste collection services that are additionally used by many businesses and high rise apartment blocks in the municipality. Additionally, the municipal waste data does not include information about other activities such as waste from renovations or construction, or from beach cleaning. As such, the community waste data provided does not cover 100% of all waste collected in the city.

## Summary Council Progress to Key *Toward Zero* Targets in 2010-11

Table 1 – Summary Council Progress Toward Targets in 2010-11					
Target	Baseline	2009/10	2010/11	% Total Increase/Reduction from Previous Year	% Total Increase/Reduction since Baseline
Net Carbon Emissions (excluding waste) in tonnes CO <sub>2</sub> -e <i>Zero by 2020</i>	16,333 (1996-97)	11,513	10,360	10% ↓	36.6% ↓
Potable Water Use in megalitres <i>70% reduction by 2020</i>	518 (2000-01)	141	116	22.7% ↓	77.6% ↓
Waste in tonnes <i>80% reduction by 2020</i>	NA	NA	Establishing baseline (2011-12)	NA	NA
Sustainable Purchasing as % of total spend <i>70% purchase of sustainable alternatives by 2020</i>	0.04% of total spend (2006/07)	4% of total spend	5% of total spend	1% ↑	5% ↑

**Council's Carbon Emissions excluding waste** – In 2010-11, Council's total net carbon emissions excluding waste emissions, was 10,360 tonnes of carbon dioxide equivalent (t.CO<sub>2</sub>-e). Council has achieved a 36.6% reduction in its total emissions since 1996-97, and a 10% reduction in total emissions over the last year. Reductions in the past year were achieved largely through energy efficiency retrofit measures in Council buildings and public lights. This is a significant achievement because for the first time since the introduction of *Toward Zero*, Council has achieved substantial emissions reductions primarily through energy efficiency rather than GreenPower purchase.

**Council's Water Use** – In 2010-11, total water use for Council operations was 116 ML. Council has achieved and maintained its water use reduction target, with a 77.6% reduction in total water use since 2000-01, and a 22.7% reduction in total water use over the last year. This annual reduction reverses the trend of a slight annual increase in water use over the previous two years (2008-09, 2009-10), and is largely as a result of it being a wetter (La Nina) summer. Over the past year, the Parks and Open Space Department has also finalised planning for stormwater harvesting and water sensitive urban design works in Council's 10 year Capital Works Plan, which will provide up to 40% alternative water sources for this sector. With some of these projects underway, this is a significant achievement.

**Council's Waste** – At the end of 2010-11, Council initiated an audit of waste generated in operational buildings. This audit will establish a baseline for waste to landfill, recycling rates, and waste emissions in 2011-12. Once waste emissions are added, all the sectors contributing to Council's zero emissions target by 2020 will have been captured. Resulting waste emissions are expected to make up less than 1% of Council's calculated carbon emissions.

**Council's Sustainable Purchasing** - In 2010-11, Council completed its 5<sup>th</sup> annual EcoBuy Cavort Report. which demonstrates the percentage increase in annual green product spending as a total of Council budget. In 2010-11, about 5% of all Council purchasing was of sustainable alternatives, up 1% from the previous year. This can be attributed to the increased awareness of green purchasing provided through financial training (Computron) over 2010.

## Summary Community Progress to Key *Toward Zero* Targets in 2010-11

Table 2 – Community Progress Toward Aspirational 2020 Targets in 2010-11				
Aspirational Reduction Targets	Baseline	2009/10	2010/11	% Total Reduction or Increase since Baseline
Net Carbon Emissions (tonnes CO <sub>2</sub> -e) (estimated) 50% reduction by 2020	1,412,639 (2007-08)	----	1,600,000	13% ↑
Potable Water Use (mega litres) 50% reduction by 2020	10,307 (2000-01)	8,345	8,108.5	21.5% ↓
Municipal Waste to landfill (tonnes) 75% by 2020 (State target – <i>Towards Zero Waste Strategy</i> )	19,531 (2005-06)	20,104	21,518	10.2% ↑ ( 6.7 % increase from previous year)

**NOTE 1:** Community greenhouse emissions are extrapolated from 2006/07 data and estimated on population

**NOTE 2:** Community waste does not include private waste collection services.

**NOTE 3:** Waste Baseline data corrected to 19,531 tonnes - previously reported in error as 30,831 tonnes

**Community Carbon Emissions** – In 2010-11, the estimated total net carbon emissions for the Port Phillip community (residents and businesses) was 1.6 million tonnes. This represents approximately a 13% rise in total emissions since the 2007-08 base year. No more detailed analysis is being provided on this data as it is recognised as an estimate extrapolated from 2006/07 energy data from energy retailers, ABS transport data and municipal waste to landfill emissions (excluding private waste services).

**Community Water Use** – Total municipal-wide community mains water consumption was 8,108 ML in 2010/11. This represents a continued mild downward trend, with a 21% reduction since the 2000/01 base year. This is also consistent with the wetter than average climactic conditions, which may have reduced garden watering needs. Water use has decreased or remained steady across all suburbs except for Southbank where an increase of 6.5% (7.5 ML) was recorded.

Household water consumption reduced by 10 ML maintaining a 13% reduction since the base year. Business water consumption achieved a greater reduction of 227 ML resulting in a 6.5% reduction since 2009/10 and a total business sector reduction of 35% since the base year. As such, the commercial sector is continuing to demonstrate strong reductions, in contrast to household water use which has essentially plateaued over the past four years.

**Community Waste** – In 2010-11, total community waste (excluding private waste collection services) disposed to landfill was 21,518 tonnes. This represents approximately a 10.2% increase since the 2005-06 baseline year, and a 6.7% increase from the previous year.

In 2010-11, Port Phillip recycled 13,788 tonnes via kerbside recycling and the Resource Recovery Centre. Community waste diversion levels have remained constant at around 40% compared to 2009-10.

## Summary Community Participation in Council-Initiated Sustainability Action

Table 3 – Community Participation in Council-Initiated Sustainability Action in 2010-11			
Community Action	Baseline 2006/07	2009/10	2010/11
<b>Increase in Community Environment Program Participation</b> (including Showerhead XChange)	106 (440 including Showerhead XChange)	726 (1,928 including Showerhead XChange)	<b>2,918</b> ↑ (3,075 including Showerhead XChange)
<b>Increase in Planning Applications Applying Sustainability</b>	115 (26% of eligible planning applications)	148 (46.5% of eligible planning applications)	<b>182</b> ↑ (58% of eligible planning applications)

**Community participation in Council-provided sustainability actions** – Community participation in Council-run programs (excluding the Showerhead XChange) has again, considerably increased to a total of 2,918 participants across all programs over 2010-11. This represents over a 2,650% increase in community participation since the 2006-07 base year, and over triple (300% increase) the participation rate from the previous year.

These figures demonstrate that Council has completely altered its format for community sustainability engagement, from one program targeting households in 2006-07 to over 10 programs offering a variety of sustainability actions that target both the city's commercial and residential communities. This is a significant achievement as it represents both increased community engagement in sustainability action as well as increased engagement with and through Council-run programs.

**Increase in municipal-wide planning applications considering sustainability** – There has continued to be an increase in eligible planning applications voluntarily applying sustainability. Requirements for sustainability in eligible planning permits are currently voluntary but strongly encouraged by Council through the **Sustainable Design Assessment in the Planning Process** (SDAPP), in place at the City of Port Phillip since 2003. Participation in SDAPP has risen gradually from 7.95% in 2003 (30 of 440 eligible applications) to 46.5% in 2009-10 (148 of 318 eligible applications) and 58% in 2010-11 (182 of 315 eligible applications).

This would suggest that more and more developments and major renovations are applying sustainable design, passive solar orientation, water harvesting, energy efficiency and onsite renewable energy generation. As a result, Council will be initiating formats to –

- o Streamline the operational process for assessing sustainability in planning permits so that Council can efficiently manage the increasing number of applications.
- o Initiate the development of an **Environmentally Sustainable Design Local Planning Policy**, which if implemented, would provide a framework for requiring sustainable design in the city's planning application process (rather than the current approach of encouraging voluntary submissions).

**Municipal-wide sustainable transport outcomes** - Council continued to implement a range of sustainable transport improvements across the city over 2010-11 as follows.

**Walking –**

- o Increased expenditure on improving walkability by over 250% (from \$585,000 in 2009-10 to \$1.5 million in 2010-11)
- o Implemented 10 projects that improved the walkability of the municipality
- o Initiated implementation of the first of several **Speed Limited Local Areas** with a 40kmphr speed limit in the streets bounded by Carlisle, Nelson, Inkerman and Chapel streets.

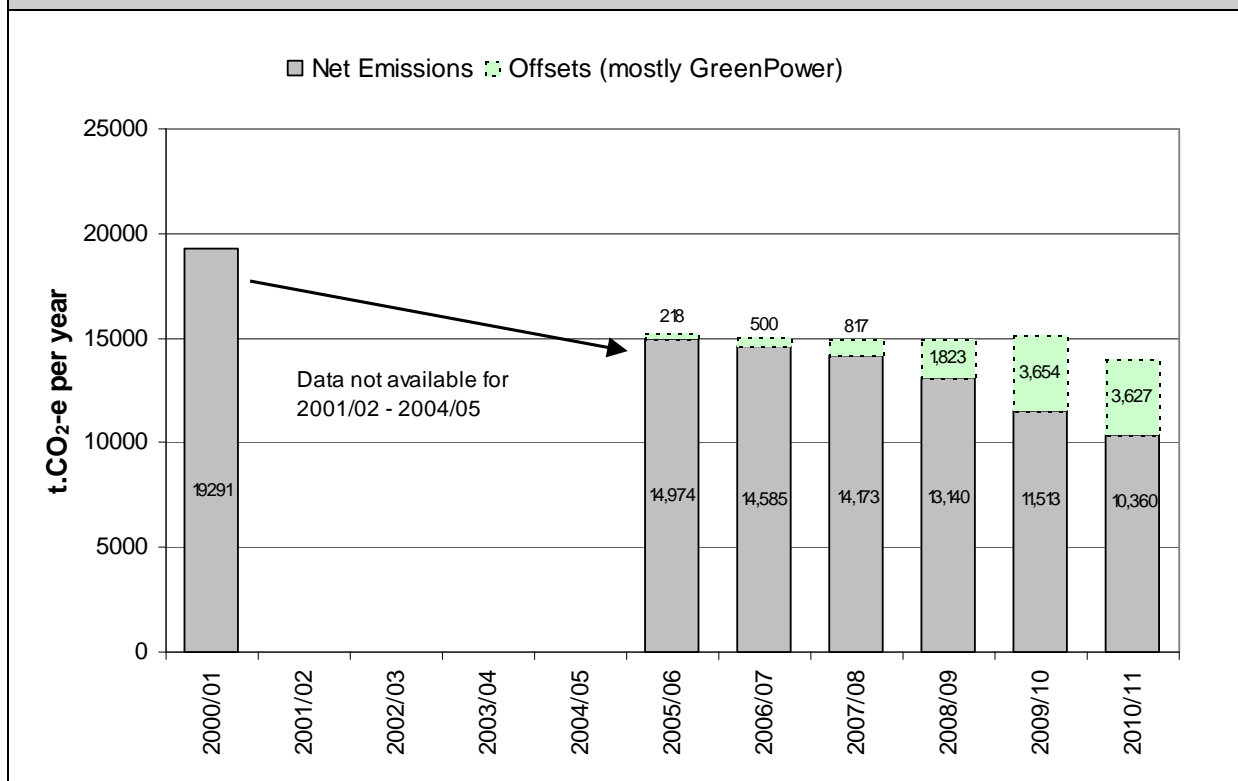
**Bike Riding –**

- o Expenditure on bike riding was \$350,000 in 2010-11
- o Completion of the Beaconsfield Parade bike lane along the outbound side. This involved the construction of the so called 'missing link bike lane' between pedestrian operated signals just south of Langridge Street and Mary Street, a length of 730m. The implementation of this project created a continuous bike lane in the outbound of Beach Road from Bay Street in Port Melbourne to Shelley St in Elwood
- o Stage one of the Cecil Street bike route between Whiteman and York streets was funded and implemented by VicRoads.



## Council's Carbon Emissions

Figure 1 – Corporate Carbon Emissions History 2000- 2011



**Overview** - Council's total net emissions (including GreenPower) has reduced by 10% (1,153 tonnes CO<sub>2</sub>-e) since the previous year, and 46.3% since 2000/01. Council's net emissions still do not include waste emissions, however, two waste audits over 2011-12 will establish the baseline for Council waste, as well as allow Council to complete its emissions profile of the sectors targeted under Toward Zero's zero emissions target by 2020.

**Buildings** (electricity and gas) – Buildings currently account for 47.6% of total emissions (excluding GreenPower). In 2010-11, Council reduced its total building emissions by 6.2% from the previous year (8.1% since 1996-97). All of this reduction is due to energy efficiency retrofits. Key activities undertaken to achieve these reductions in 2010-11 included:

- Retrofits on 18 council buildings, focussing on childcare centres as well as upgrades to selected other facilities. Retrofits included lighting upgrades, upgrades to hot water systems, installation of insulation, and upgrades to other energy using appliances and control systems
- Information technology servers were rationalised and updated.

Other activities undertaken in 2010-11 on Council buildings included:

- Environmental audits and retrofit recommendations for 141 Council facilities
- An assessment of renewable energy generation potential for the South Melbourne market roof
- Developed **Sustainable Building Improvement Plan** (SBIP) to ensure building retrofit and maintenance activities are undertaken strategically, and that adequate resources can be made available
- Developed **Sustainable Design for Council Buildings** guidelines (Council component of the Sustainable Design Strategy)
- Finalised and piloted the **Building Efficiency Management Plan** (BEMP) at 2 minor sites to assist building managers and users to operate a facility efficiently.



**Public Lighting** – Public lighting currently accounts for 47.1% of total Council emissions (excluding GreenPower). In 2010-11, Council reduced its total public lighting emissions by 9.1% from the previous year (21.1% since 1996-97). All of this reduction is due to energy efficiency retrofits. Key activities to achieve these reductions in 2010-11 included:

- o The first tranche of changeovers to more energy efficient lighting (from 80w mercury vapour (MV) lamps to T5 fluorescent lamps) mean that these lights will use around 65% less energy over their life, are longer-lived and require less maintenance.

Other activities undertaken in 2010-11 on public lighting included:

- o Allocating the 80w MV street lighting retrofit budget and initiating negotiations for the procurement and retrofitting of the remaining 80w MV streetlights over 2011-2014
- o The development and finalisation of Councils **Sustainable Public Lighting Strategy** and **Sustainable Public Lighting Guidelines**

**Council Fleet** – Council's fleet currently accounts for 5.2% of total Council emissions (excluding GreenPower). In 2010-11, Council reduced its fleet emissions by 9.3% from the previous year (18.5% since 1996-97). Almost all of this reduction is due to increased fuel efficiency with the replacement of a further 9 vehicles with hybrid alternatives (up from 2 hybrid vehicles in 2009-10). Other key activities undertaken in 2010-11 included:

- o the introduction of six new pool bikes to encourage staff to use bicycles for appointments (total of eight pool bikes, up from two in 2009-10)
- o continued involvement in the Victorian Electric Vehicle Trial
- o Introduction of Council's **Staff Travel Program** and an increase in staff engaging in sustainable travel options at each of the town halls.

**GreenPower** – Council continued to maintain its purchase of 25% GreenPower for all Council electricity use in 2010-11. There is currently no intention to increase Council's proportion of GreenPower purchase until Council further reduces electricity consumption levels through increased energy efficiency in buildings and public lights. Council will continue to maintain a watching brief on how GreenPower and other accredited and voluntary offsets will be treated in the post Kyoto Protocol era (international carbon reduction agreements after 2012), as well as under the imminent Australian carbon trading scheme.

#### **Strategic greenhouse management actions implemented in 2010-11 –**

Over 2010-11, Council initiated development or revision of several key policies and strategies that impact on how greenhouse emissions are managed in Council operations. These include:

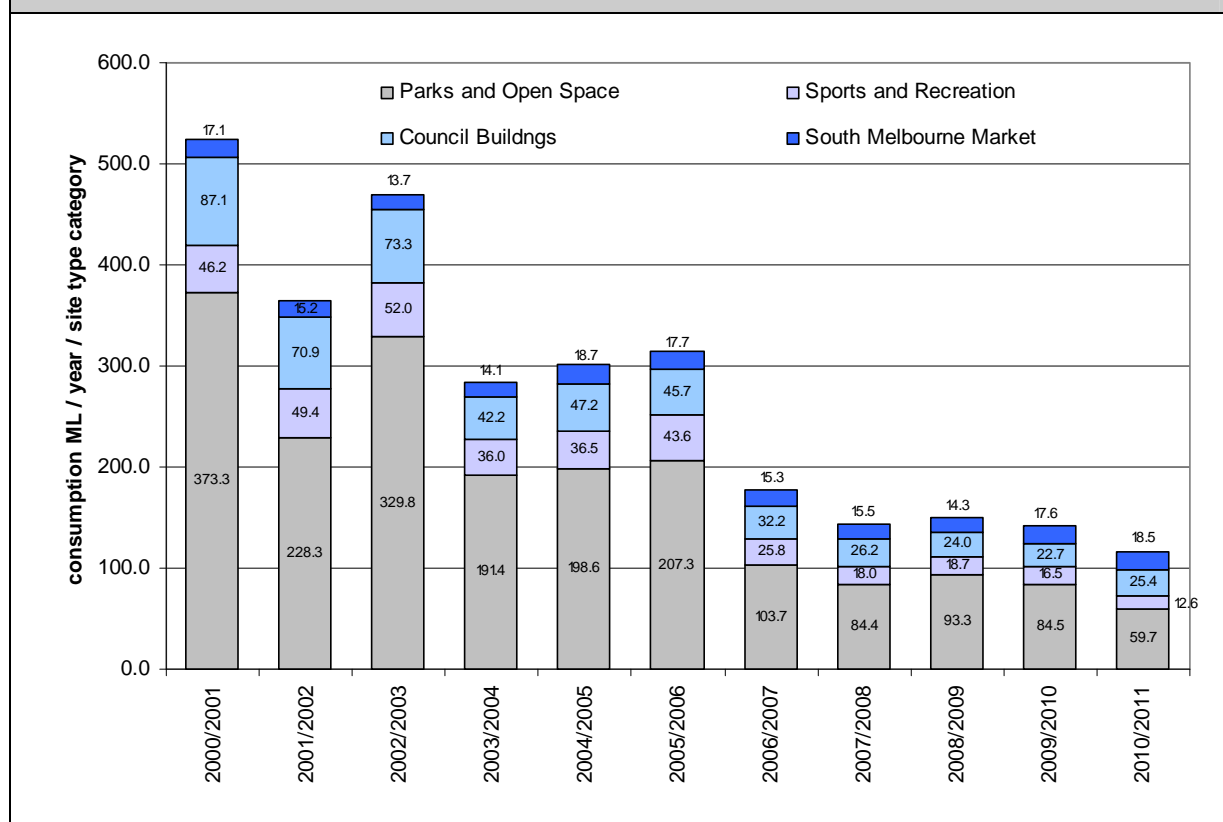
- o The development of the **Greenhouse Plan**
- o The development and adoption of the **Sustainable Transport Strategy, Walk Plan and Bike Plan**
- o The revision of the **Sustainable Design Strategy and Policy**.

Council also conducted the following advocacy to gain state and federal policy and regulatory changes to gain a low carbon economy:

- o Joined with local community groups to advocate with a united voice for meaningful action and national initiatives to challenge the impacts of climate change, including urgent introduction of a price on carbon pollution in Australia (March 2011)
- o Contribution to the Green Lights advocacy campaign to gain a fair and reasonable charge for public lighting retrofits (through the MAV public lighting group)
- o Ongoing advocacy to the State Government to secure the funding and construction of the Park Street tram link in South Melbourne
- o Council pursued the State Government for a start date for the upgraded and extended 606 bus service to run between Fisherman's Bend and Elsternwick Station
- o \$11.9 million funding was secured for the upgrade of Balaclava Station through the 2010 State budget.

## Council's Potable Water Use

Figure 2 – Corporate Water Consumption History 2000- 2011



**Overview** - Council's total potable water use in 2010-11 was just over 116 megalitres (ML). This represents a 22.7% reduction from the previous year and a 77.6% reduction since the 2000-01 base year. Much of this continued reduction and maintenance of reduced potable water use is due to a series of irrigation efficiencies and reduction in irrigation demand implemented by Parks and Open Space. However, potable water use in Council buildings has increased by 18% (2.8 megalitres) since the previous year. This signals a return to increased water use by staff since the easing of water restrictions.

**Parks and Open Space** – Parks and Open Spaces currently account for 51% of Council's total potable water use (59.7 megalitres). This sector continues to lead in the progressive reduction of potable water use. A 29% reduction (25 megalitres) since the previous year demonstrates that the systems and maintenance efficiency changes implemented in the past three years are working well and can drive further reductions in wet years.

Parks and Open Space also led in initiating a suite of planned water harvesting works (over the next 4-5 years under the 10 year Capital Works Plan) to significantly increase Council's use of alternative water sources. If implemented as planned, Parks and Open Space will meet up to 40% of its water needs through alternative water sources while also embedding much of the water sensitive urban design works intended for the City's parks and reserves. This will be a further significant achievement for Council.

Other key activities undertaken in 2010-11 include:

- Irrigation upgrades at Elwood Park, St Vincent Gardens and Peanut Farm reserve
- Stage 1 of the implementation of the Elsternwick Park Project including pumps and tanks in Elwood Park

- o JL Murphy Reserve and St Kilda Botanic Gardens Stormwater Harvesting Projects are progressing through the planning phase
- o Ongoing monitoring of water use across all open space sites and participation in the South East Water's 'waterMAP' for large water using sites continues to drive efficiencies across the board.

**Sports and Recreation** – Recreational and sporting facilities and their grounds currently account for 11% of Council's total potable water use (12.6 megalitres). This sector also continues to lead in the progressive reduction of potable water use, with a 24% reduction (3.9 megalitres) since the previous year. Again, this is likely to be attributed to both irrigation efficiencies and a reduction in irrigation demand at these facilities.

**Council Buildings** – Council buildings are the second largest sectoral user of Council's potable water consumption, and currently account for 16% of Council's total potable water use (18.1 megalitres). There has been an 18% increase in water use since the previous year (additional 2.8 megalitres in 2010-11). It is difficult to identify a definitive cause for this increase however, higher rainfall during 2010-11 and an easing of water restrictions (including the axing of the State Government's Target 155 program) may have had an impact on water saving behaviours in staff and other building users.

Key activities undertaken to improve efficiencies included the retrofitting of 18 buildings with water efficient fixtures however, this has not been enough to drive continued improvement. Sub-metering of select Council facilities is planned in the coming financial year, to more accurately determine usage trends and to ensure resulting strategies, staff awareness or infrastructure solutions are implemented to a better degree of success.

**South Melbourne Market and public amenities** – South Melbourne Market currently accounts for 16% of total potable water use (18.5 megalitres). There has been an increase of 6% (almost 1 megalitre) since the previous year, due to an increase in restaurants at the site, and a return to pre-drought cleaning regimes to ensure odour and hygiene are managed appropriately. The 'Roof over the Roof' Project will deliver significant water savings to the site with an estimated reduction of 6.3 megalitres per year through rainwater harvesting. This project is likely to be commissioned in 2012/13.

**Other** - Public amenities currently account for 5% of Council's total potable water use (6.1 megalitres) and have reduced potable water consumption by 3% since the previous year.

## Water Quality

The **Water Plan** was introduced in 2010, setting long term targets for water quality and water use. The Water Plan confirmed council's existing water use reduction target set through the Toward Zero Strategy, and set water quality targets (reduction in stormwater pollution) which were adopted during this reporting period (2010-11). As such, Council will not begin to quantitatively track against its water quality targets until there are sufficient implemented water sensitive urban design projects. This is likely to be from 2013-14 onward.

A number of water sensitive urban design projects were implemented during 2010-11, including:

- o raingardens at Dow St, Beaconsfield Parade and Betty Day Community Centre
- o Elsternwick/Elwood stormwater harvesting project (SWEEP) which will deliver up to 30 megalitres p/a of recycled stormwater to Elwood Park

Significant efforts have also been made to build capacity within Council to deliver on our targets, through council's **WSUD Guidelines** and other supporting documents.

## Council's Waste

Over 2010-11, it was established that Council needed to independently audit its total waste, including the percentages to each waste stream (landfill, recycling, composting). Two independent audits are being conducted over 2011-12. This audit will establish a baseline for both waste, and waste emissions to landfill by the end of 2011-12. Once these baselines are established, Council will be able to initiate actions to reduce and minimise its total waste, as well as waste to landfill.

## Council's Climate Adaptation Program

The **Climate Adaptation Plan** was introduced at the end of 2010. The Plan focuses on five key action areas – climate resilient buildings, flood management, beach protection, city climate and access and safety. Over the next three years, the focus of the Adaptation Plan is:

- Mapping and modelling in the key areas of catchment and coastal flooding and local urban heat island effects – this will provide the necessary information on how future flooding will behave in the municipality and what future drainage, coastal management, planning and development, and infrastructure needs the city will have
- Initiating partnerships to gain regional, state and federal support and policy changes to support Council's climate adaptation agenda
- Initial community information and education on how to prepare for and be safe during extreme weather.

## Community Progress in Key *Toward Zero* Targets in 2010-11

Table 4 (also Table 2) – Summary Community Progress Toward Aspirational Targets in 2010-11				
Aspirational Reduction Targets	Baseline	2009/10	2010/11	% Total Reduction or Increase since Baseline
Net Carbon Emissions (tonnes CO <sub>2</sub> -e) (estimated) 50% by 2020	1,412,639 (2007-08)	----	1,600,000	13% ↑
Potable Water Use (mega litres) 50% reduction by 2020	10,307 (2000-01)	8,345	8,108.5	21.5% ↓
Municipal Waste to landfill (tonnes) 75% by 2020 (State target – <i>Towards Zero Waste Strategy</i> )	19,531 (2005-06)	20,104	21,518	10.2% ↑ ( 6.7 % increase from 2009-10)

NOTE 1: Community greenhouse emissions are extrapolated from 2006/07 data and estimated on population.

NOTE 2: Community waste does not include private waste collection services.

NOTE 3: Waste Baseline data corrected to 19,531tonnes - previously reported in error as 30,831 tonnes

### Community Carbon Emissions in 2010-11

Total community emissions are estimated at about 1,561,104 tonnes CO<sub>2</sub>-e in 2010-11. It is also estimated that total community emissions have risen by about 8% between 2007-2011. The residential sector is estimated to be responsible for 35.5% of total community emissions, the commercial sector for 52.3%, and the industrial sector for the remaining 12.2%.

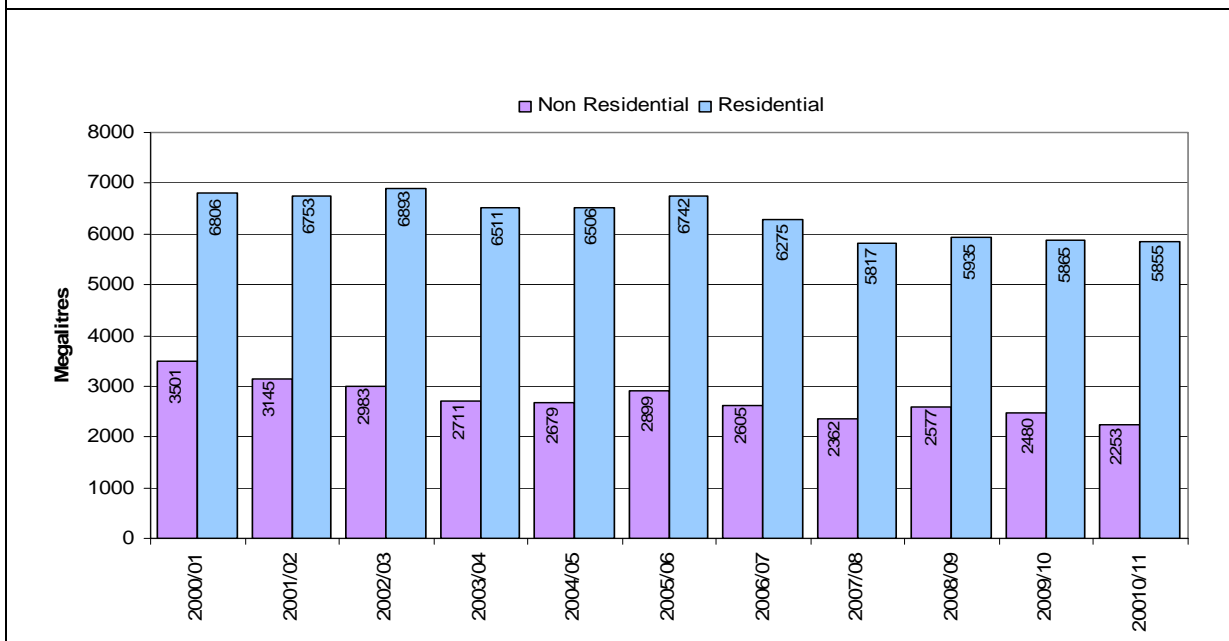
No further analysis is being provided on this estimate as it is extrapolated from 2006-07 energy consumption data from energy retailers, ABS-based transport data and municipal waste to landfill emissions (excluding private waste collection services). Council will not be able to extrapolate from this data again as it is aging data. It is hoped that Council might be able to obtain a more timely, comprehensive and locally relevant community emissions inventory in the coming year through advocacy for centralised state government collection of data.

### Community Potable Water Use in 2010-11

Total municipal-wide community mains water consumption totalled 8,108 ML in 2010/11. This represents a continued mild downward trend with a 21% reduction since the 2000/01 base year. Water use has decreased or remained steady across all suburbs except for Southbank where an increase of 6.5% (7.5 ML) was recorded.

Household water consumption reduced by 10 ML maintaining a 13% reduction since the base year. Business water consumption achieved a greater reduction of 227 ML resulting in a 6.5% reduction since 2009/10 and a total business sector reduction of 35% since the base year. The commercial sector is therefore continuing to demonstrate strong year by year reductions in contrast to household water use which has essentially started to plateau over the past four years. As with water consumption generally, the major factor driving further reductions is likely to be the wetter than average climatic conditions which persisted throughout the year, reducing the need for garden watering; however, there are also likely to be other efficiency gains being achieved in the commercial sector.

Figure 4 Community Water Consumption History 2000 - 2011





### Community Waste in 2010-11

In 2010-11, total community waste (excluding private waste collection services) disposed to landfill was 21,518 tonnes. This represents approximately a 10.2% increase since the 2005-06 baseline year, and a 6.7% increase from the previous year.

In 2010-11, Port Phillip recycled 13,788 tonnes via kerbside recycling and the Resource Recovery Centre. Community waste diversion levels have remained constant at around 40% compared to 2009-10.

## Community Sustainability Actions and Progress in 2010-11

Table 8 – Community Participation in Council-Initiated Sustainability Programs, 2010-11			
Community Sustainability Programs	Participation Rates 2006/07	Participation Rates 2009/10	Participation Rates 2010/11
<b>Total Participation Rates in Council Programs</b>	106	726	2,918 
Climate Challenge 1000	----	346	49
Challenge to Change	----	(program not offered)	102
SOCs & Blocks	----	282	1943
CitySwitch Green Office	----	----	3
EnviroEvents	----	267	668
Community Leadership Training	----	20	18
Tomorrow's Leaders (for schools)	----	78	78
Local Action Planning	----	----	50
Low Carbon Early Childhood Services	----	(program not offered)	7
Sustainable Living @ Home	106	(program not offered)	(program not offered)
<b>Participation in other sustainability actions (not included in program participation figures above)</b>			
<b>Increase in Eligible Planning Applications Applying Sustainability</b>	115 (26% of eligible planning applications)	148 (46.5% of eligible planning applications)	182  (58% of eligible planning applications)
Showerhead XChange (with South East Water)	334	1202	336
Active Transport (with Dept of Transport)	270 (Walking School Bus)	--- (No program)	--- (No program)
1000 Raingardens (with Melbourne Water)	----	----	1

Council's community environment programs are designed to engage the community to take action on climate change. The programs provide a mix of both direct reduction in environmental impacts and building community resilience.

Table 8 demonstrates that community participation in Council-run programs have again, considerably increased to a total of 2,918 participants across all programs over 2010-11. This represents over a 2,650% increase in community participation since the 2006-07 base year, and over triple (300% increase) the participation rate from the previous year. This excludes the Showerhead Exchange, facilitated by Council for South East Water, 1000 Raingardens facilitated with Melbourne Water, Active Transport programs, planning applications with sustainability; as well as volunteer waste, planting and **Community Pulse** initiatives.

The total number of sustainability programs delivered by Council also increased again in 2010-11, with the delivery of **Local Action Planning** which assists community members to initiate local projects, and the introduction of the **CitySwitch Green Office Program** (with local offices), **Low Carbon Early Childhood Services**, and **Tomorrow's Leaders for Schools**.



<b>Table 9 – Summary Total Community Emissions and Water Use Savings From Key Council-Initiated Programs</b>		
	<b>Greenhouse Savings (tonnes Co2-e)</b>	<b>Water Savings (litres)</b>
<b>Climate Challenge 1000</b>	92.70	257.00
<b>Challenge 2 Change</b>	1.53	
<b>Showerhead XChange</b>	33.40	2,820
<b>Total Savings</b>	<b>127.53</b>	<b>3,077</b>

Table 9 demonstrates that participants in the three key community programs with measurable reductions saved a total of 127.5 tonnes Co2-e and 3,077 litres of water respectively with their actions over 2010-11.

## Analysis by Program

**Climate Challenge 1000** – This home retrofit program encourages commitment to GreenPower in return for the installation of energy and water saving products. Participation was low in 2010-11 (49) as a result of a break in the program, due to the completion of one contract and the delay in the establishment of another by tender. It is anticipated that in the coming year, participation numbers will again increase significantly. Retrofits of energy and water saving items in the Climate Challenge 1000 program resulted in a reduction of 92 tonnes CO<sub>2</sub>e and 257 kilolitres

**Challenge 2 Change** – This electricity reduction behaviour change program engaged 10 businesses (involving 102 people) from the Albert Park Traders Association in August 2010. Behaviour change actions in the Challenge 2 Change resulted in a small reduction of 1.5 tonnes CO<sub>2</sub>e through changes in weekly electricity use.

**SOCs and Blocks** – The second year of this program resulted in 20 owner’s corporations committing to recommendations from sustainability assessments of their apartment blocks. In effect, this engaged 1,943 apartments in our program, and at least as many individual participants. In the two program rounds, i.e. in both 2009-10 and 2010-11, a total of 106 initiatives with a potential carbon reduction of 1,460 tCO<sub>2</sub>e were identified. This is equal to an energy reduction of 11% and greenhouse gas reductions of 17%. However, as implementation of these initiatives is at the discretion of the Owner’s Corporation, the likely greenhouse gas reduction is expected to be a maximum of 5.4%, over the next 18 months.

**CitySwitch Green Office program** – CitySwitch Green Office is a national tenant energy efficiency program being delivered to address the large proportion of energy demand attributed to office tenancies. Despite intensive promotion, only 3 tenancies fully participated in this “green office” program in its first year.

**Showerhead Exchange** – In partnership with South East Water, Council continued to promote this program, with only 157 showerheads in 2010-11, down from 278 showerheads the previous year. Several locations were used as exchange points, including all ASSIST counters, libraries and the EcoCentre. It is likely that this program has reached ‘saturation’ with residents, and new audiences such as business customers will be targeted in future. The Showerhead Exchange resulted in 2,820 kilolitres of water saved through more efficient fixtures, and greenhouse savings for a reduction in hot water use of 33 tonnes CO<sub>2</sub>e.

**Community Leadership Training** – This 4 day course in how to lead a community group or project attracted 18 participants in November 2010. This group is now practising leadership through involvement in or generation of local community projects.

**EnviroEvents and World Environment Day** – Council ran 8 events including World Environment Day in 2010-11, with a total number of 668 participants. Events included themes on sustainable gardening, energy efficiency, and bicycle maintenance. This year’s World Environment Day focussed on sustainable fashion and consumption. [Future Fashion Now](#)

attracted 500 people to St. Kilda Town Hall to showcase practical skills in reusing and recycling clothing, as well as a sustainable fashion parade.

**Tomorrow's Leaders for Schools** - Council's work has been invaluable supported by programs such as Tomorrow's Leaders, delivered by **Port Phillip EcoCentre**. The Education Team engaged 78 students from 4 Port Phillip schools in this practical leadership program, generating sustainability projects that benefit school communities. The EcoCentre also facilitated the **Port Phillip & Bayside Teachers Environment Network** and the **Sustainable Schools Awards**.

**Low Carbon Early Childhood Services** - This project has engaged a range of early childhood centres and services to measure current energy use. Council has developed tools to track environmental impact and communicate how to use the building more efficiently, saving resources for both the centre and the community. This project has led to a Victorian Government Sustainability Accord partnership project with 4 other Councils in 2011-12 to develop a framework for sustainability in the early childhood service sector.

**10,000 Raingardens** - Having adopted water pollutant reduction targets with the introduction of Council's Water Plan in 2010-11, Council and Melbourne Water installed a demonstration raingarden at the Betty Day Centre in St. Kilda. This EnviroEvent attracted 30 participants and the garden was the first of what is sure to be more raingardens implemented and registered by both Council and residents in future.

### **Engaging community in sustainability action beyond Council programs**

The **Local Action Planning** project was delivered on the back of community consultation on Council's draft Water Plan and draft Climate Adaptation Plan, under the banner of **Climate Conversations**. The Local Action Planning project has seen Council expand the way it engages local community in sustainability action, from program delivery targeting households and businesses, to community engagement and facilitation to initiate and deliver local community-based projects. This project saw over 50 participants initiate 23 projects and successfully complete 7.

The **Community Environment E-Hub**, Council's community environment portal (introduced in late 2009), has also been very successful in providing new avenues for community DIY action, social media and e-formats for engaging local community in sustainability action. Over the coming year, the E-Hub will increase its functionality through social media campaigns, introducing online dialogue and a programs registration service.

The result of these two successful projects is that Council will develop a **community sustainability engagement and communications strategy** over 2011-12.

2010-11 also saw Council forging more engagement, collegiate networking and partnerships with the **EcoCentre**, **Locals into Victoria's Environment (LIVE)**, and **Transition Town Port Phillip**. The continued development of the **South Melbourne Commons** project by Friends of the Earth and Fr. Bob Maguire Foundation is expected to create a new community sustainability hub when it opens in late 2011.