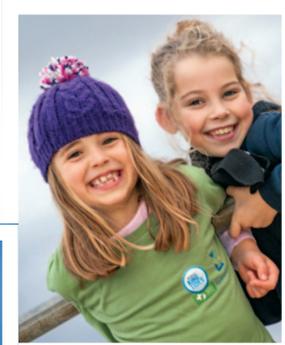
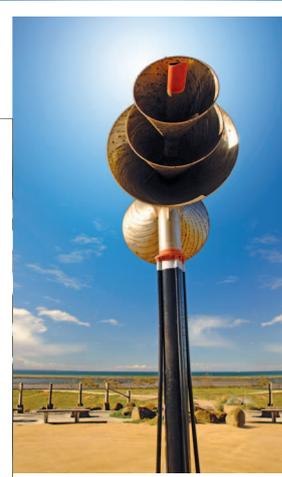




Hobsons Bay
CITY COUNCIL



Hobsons Bay City Council
Environmental Sustainability
Report 2012-2013

Contents

Environmental Sustainability Report 2012-2013

1. Introduction	3
2. Greenhouse gas emissions	4
3. Water use	10
4. Waste and litter	12
5. Projects and activities 2012 - 2013	16
6. Strategy development 2012 - 2013	26
7. Regional initiatives	28

Introduction

Environmental Sustainability Report 2012-2013

1



This document is a report of the Council's key environmental undertakings and the results of three years of measurement of greenhouse gas emissions and water use to the end of June 2013.

The Council reviews its inventory of greenhouse gas emissions and water use annually based on available data. The results of these reviews are provided in this document.

The Council also undertakes day-to-day activities and many projects to protect our biodiversity, manage waste, reduce our greenhouse gas emissions and manage water more wisely. Some activities are ongoing and some are discrete projects to address specific issues. These projects are outlined in this document.

In addition, major strategies and plans are reviewed and developed to determine the allocation of resources. This strategic work is outlined in this document.

Overall greenhouse gas emissions have remained relatively stable over the last three years.

However, there has been a 243 tonne increase in building emissions from 2011-2012 to 2012-2013, with emissions rising steadily since 2010-2011 by approximately 340 tonnes. The increase in emissions over the previous 12 months is partly attributable to the introduction of an Environmental Reporting System, which provides more accurate data reporting, as well as the opening of four new buildings to the Council's building portfolio during the 2012-2013 financial year. These buildings are:

- Williamstown Library;
- Laverton Community Hub;
- Williamstown Cricket Ground Clubrooms; and
- The Range Childcare Centre.

It is anticipated that next year's emissions will be reduced as a result of the Council more accurately defining its actual 'operational control' of buildings and thus its Scope 1 and Scope 2 organisational boundary. That is, those emissions which are our direct responsibility. In addition, emissions reduction works in accordance with the Council's Corporate Greenhouse Strategy are envisaged, which will increase building operating efficiency and reduce emissions.

2.1 Overview

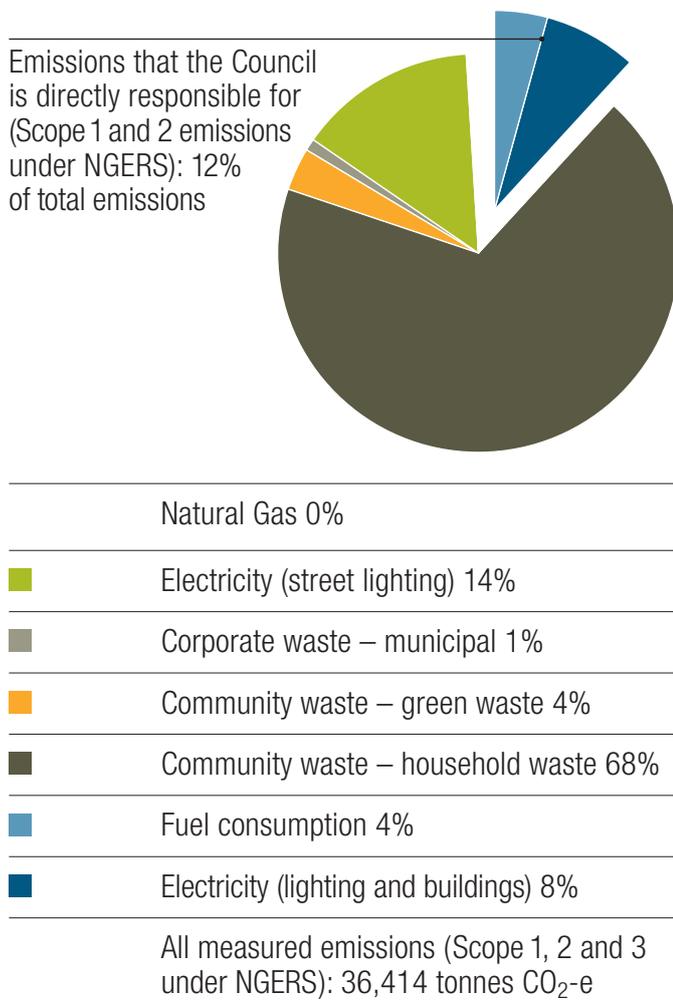
The National Greenhouse and Energy Reporting System (NGERS) legislation provides the central framework for the reporting of emissions and energy consumption within Australia. Hobsons Bay City Council uses this framework.

The NGERS framework prescribes the emissions that are deemed to be within the Council's control. This includes fuel use from Council fleet vehicles (i.e. Council depot vehicles), other corporate fleet vehicles (such as pool vehicles) and volunteer vehicles. It also includes natural gas use, refrigerant gasses, electricity use for buildings and non-street lighting (also referred to as metered lighting). In total, this accounts for approximately 5,000 tonnes of greenhouse gas emissions in 2012-2013.

It excludes items that are outside of the Council's direct control. This includes community household and green waste, electricity used for street lighting, air travel, taxi travel and paper. It also does not include the extraction, production and transportation of energy for electricity, gas or fuel. However, as part of best practice reporting standards, these emissions were measured as part of our 2010-2011 overall inventory. In total, these items account for 36,414 tonnes of greenhouse gas emissions. This overall inventory is captured in Figure 1 and demonstrates the relatively small proportion that the Council is directly responsible for under the NGERS accounting format.

Corporate waste is difficult to quantify with accuracy due to complex collection arrangements. However, it is estimated to be approximately 1 per cent of the Council's total greenhouse gas emissions.

Figure 1 Hobsons Bay City Council greenhouse gas emissions inventory 2010-2011



2.2 2012 - 2013 emissions

Table 1 and Figure 2 demonstrate, that emissions from the various types of fuel consumption, associated with the Council's corporate operations, account for more than 19 per cent of total emissions. It also demonstrates that electricity from lighting and buildings accounts for more than 78 per cent of total emissions.

Together, emissions from electricity use and fuel consumption constitute nearly 98 per cent of the total emissions for Hobsons Bay City Council. The remainder of emissions, approximately 2.5 per cent, are from natural gas consumption and refrigerant gas leakage from fridges and vending machines.

Table 1 Hobsons Bay City Council total emissions 2012 - 2013

Emission sectors	Greenhouse gas emissions (tonnes)
Electricity (buildings and metered lighting)	3,909.42
Fuel	960.41
Natural gas	120.52
Refrigerant gas	1.56
Total Council greenhouse gas emissions (tonnes)	4,991.91

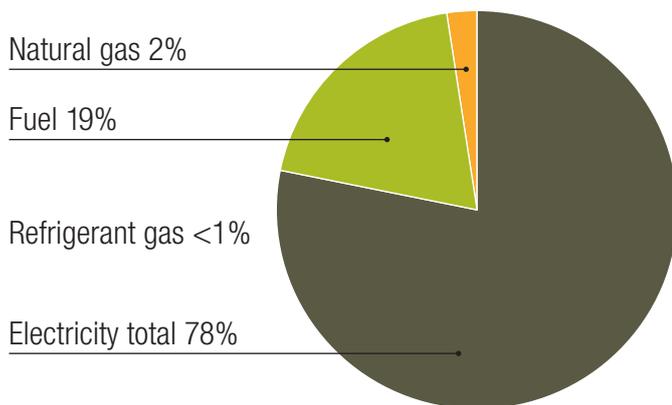
Greenhouse Gas Emissions

2



Figure 2 provides a percentage breakdown of corporate emissions for 2012-2013. It can be noted that fuel and electricity use are the dominant emissions sources.

Figure 2 Hobsons Bay City Council greenhouse gas emissions 2012 - 2013



2.3 Trends

Measurements have been undertaken based on data for the financial years of 2010-2011 to 2012-2013.

Table 2 demonstrates that during these years:

- Total buildings and metered lighting use has increased by 369 tonnes;
- Total fuel consumption has decreased significantly, largely due to more accurate measurement. However, this has offset the buildings and metered lighting emissions increase; and
- Natural gas emissions decreased by approximately 12 tonnes of greenhouse gas emissions.

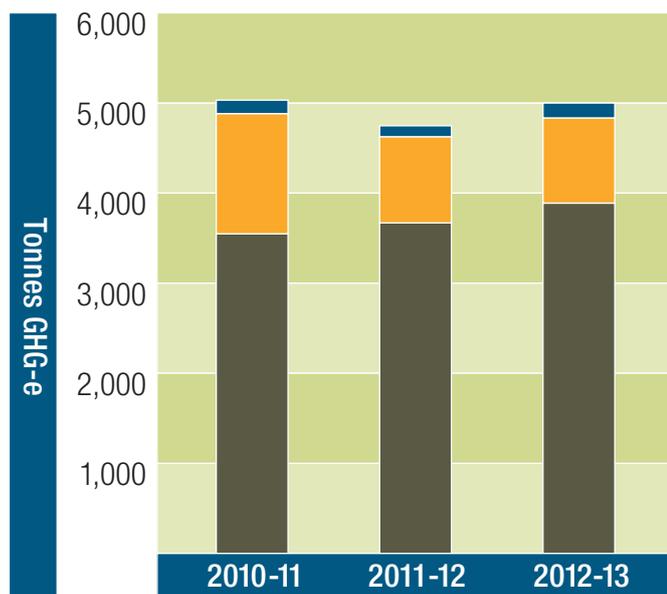
*Refrigerant gas estimated. 2011-2012 and 2012-2013 data carried over from 2010-2011 year.

Table 2 Hobsons Bay City Council total greenhouse gas emissions by year

	2010-11	2011-12	2012-13
Source	Greenhouse gas emissions (tonnes)		
Electricity	3,540.40	3,666.42	3,909.42
Fuel	1,381.49	948.53	960.41
Natural gas	132.61	137.65	120.52
Refrigerant gas*	1.56	1.56	1.56
Total Council greenhouse gas emissions (tonnes)	5,056.06	4,754.16	4,991.91

In total, there has been a decrease in the order of 64.14 tonnes of greenhouse gas emissions over this period. This equates to a percentage decrease of 1.26 per cent in overall corporate greenhouse gas emissions for the three years. This is illustrated in Figure 3.

Figure 3 Total emissions by financial year



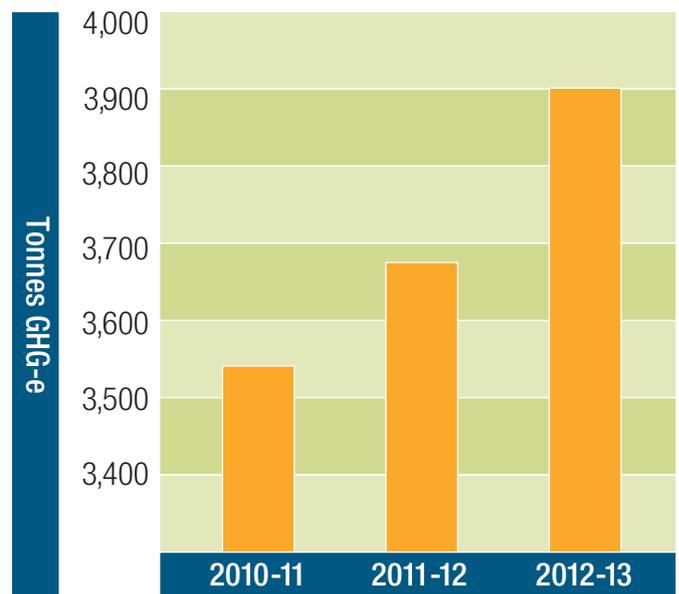
- Natural gas
- Fuel
- Electricity (Buildings and Public Lighting)
- Refrigerant gas >1%

A breakdown in specific sectors of emissions follows.

Buildings and Metered Lighting

As demonstrated in Table 2, electricity related emissions for buildings and metered lighting have increased by 243 tonnes between 2011-2012 and 2012-13 or 6.6 per cent. This is illustrated in Figure 4.

Figure 4 Total buildings and metered lighting electricity emissions by financial year



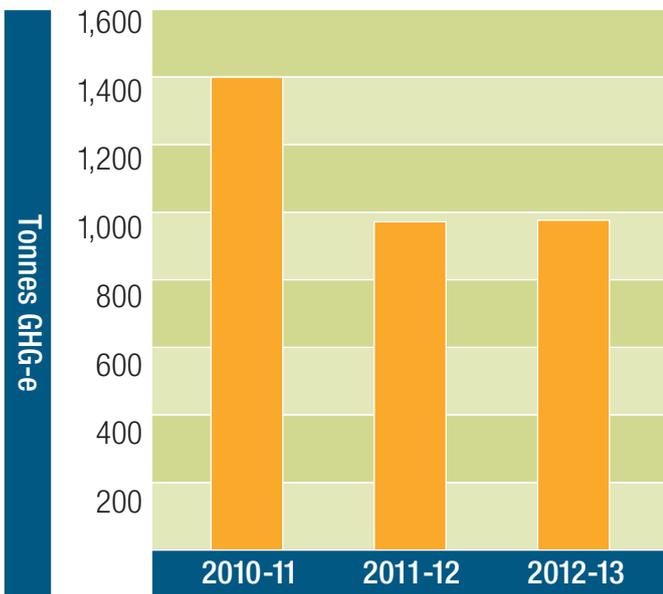
Greenhouse Gas Emissions

2

Transport

As demonstrated in Table 2, there has been an estimated increase in transport related emissions between 2011-2012 and 2012-13 of 12.82 tonnes or 0.94 per cent. However, this follows a significant decrease from 2010-2011 to 2011-2012. This is illustrated in Figure 5.

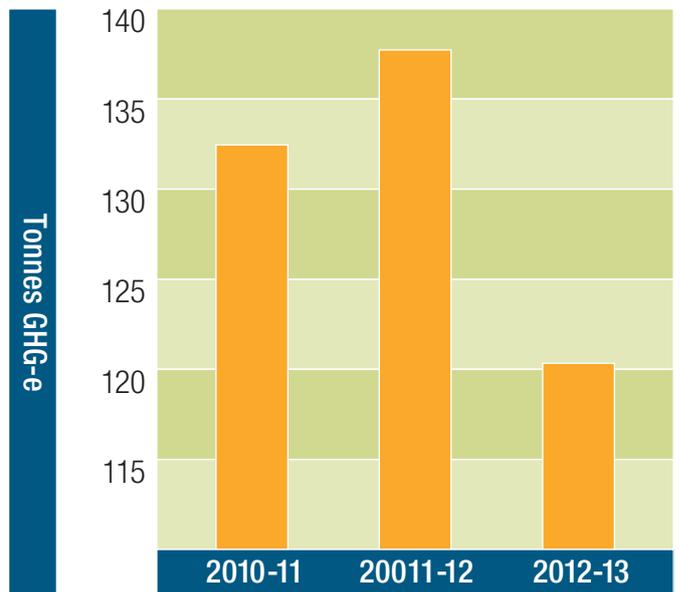
Figure 5 Total fuel emissions by financial year



Natural gas

As demonstrated in Table 2, there has been a decrease in natural gas related emissions between 2011-2012 and 2012-13 of 17.13 tonnes or 12.44 per cent. This is illustrated in Figure 6.

Figure 6 Total natural gas emissions by financial year



Refrigerant gas

As demonstrated in Table 2, refrigerant gas related emissions have been estimated and carried over from 2010-11. It is a small proportion (less than 1 per cent) of the overall emissions. This data will be updated in future reports. This is illustrated in Figure 7.

Figure 7 Total refrigerant gas emissions by financial year



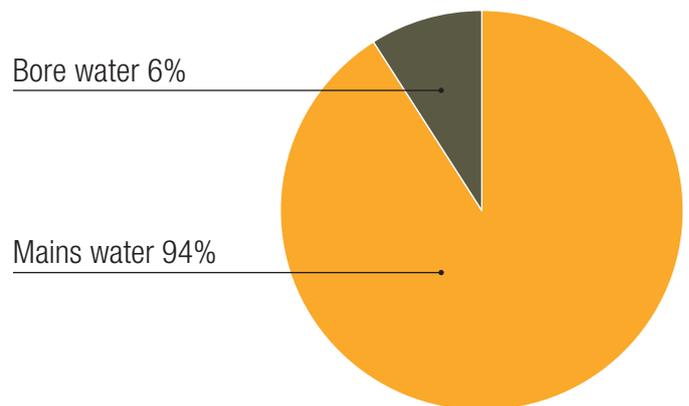
3.1 Overview

The Council's water use consists of both mains (drinking) water and bore water. Mains water is used in buildings and the irrigation of parks and open space, largely being recreation facilities. Bore water is used for the 'top up' of Newport and Cherry lakes.

3.2 2012 - 2013 results

Table 3 demonstrates that the Council used 309 ML of mains water in 2012-2013. This equates to 94 per cent of total water use. It also demonstrates that the Council used an estimated 19.3ML of bore water in 2012-2013. This equates to 6 per cent of total water use. This is further illustrated in Figure 8.

Figure 8 Hobsons Bay City Council water use 2012 – 2013



Council water usage	2008-09	2009-10	2010-11	2011-12	2012-13
Source	ML	ML	ML	ML	ML
Bore water	66.1	16.5	19.3	19.3*	19.3*
Mains (drinking) water	184.8	154.1	199.6	230.2	309.2
Total	250.9	170.6	218.9	249.5	328.5

*Estimated.

Water – general comment

The data for the previous two years included all sites, except Bayfit Leisure Centre which is outside the Council's operational control and therefore not within its reportable boundary. This is consistent with reporting for greenhouse gas emissions.

Bore water

Bore water is used to 'top up' Cherry Lake in Altona and Newport Lakes. However, due to poor data availability regarding the use of bore water, the bore water use for the previous two years has been estimated to be the same as the use for 2010-2011.

Mains (drinking) water

Water irrigation on parks, gardens and playing reserves has increased substantially over the last two years, largely due to the lifting of water restrictions following the drought. It is now possible to water all playing reserves (rather than one in every four as per the drought restrictions), parks and gardens to a level consistent with community demand. However, to ensure that playing reserves are not over watered, the soil moisture content is measured monthly for each of the playing fields that receives irrigation.

It should be noted that adverse weather conditions, including a dry spring and autumn over 2012-2013, extended the watering season on playing reserves by about eight weeks. This has caused a spike in use.

Recycled water

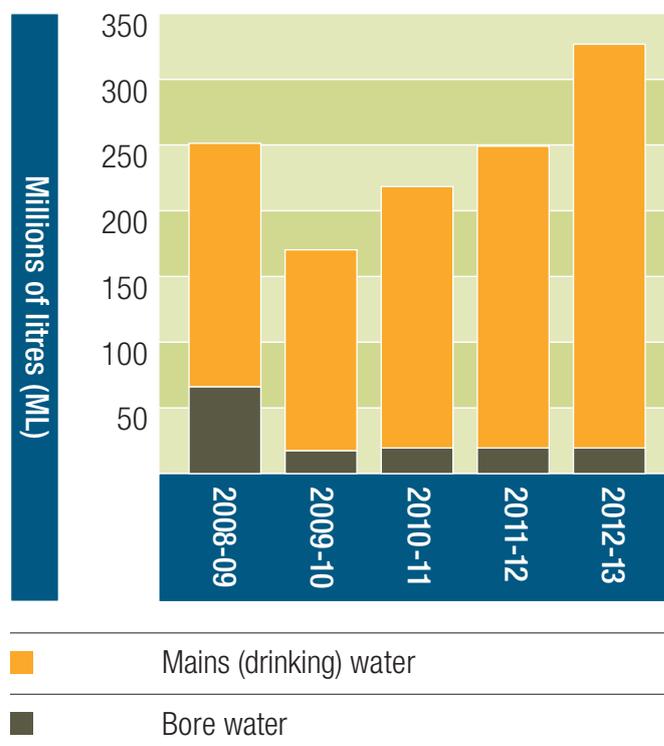
The Council also procures class A recycled water from the Altona Sewage Treatment Plant through City West Water. Over the last two years approximately eight million litres (ML) of recycled water has been used. This relatively low figure is partly due to issues with the reliability of the supply being delivered.

Council water usage	2011-12	2012-13
Source	ML	ML
Recycled water	4	4.1

3.3 Trends

It can be noted in Figure 9 that there has been a 34.3 per cent increase in mains water use between 2011-2012 and 2012-2013. This has continued the trend of upward growth in water use since 2009-2010. For mains water use, this has largely been a result of the lifting of water restrictions, allowing resumption of irrigation regimes consistent with seasonal demands. For bore water use, additional ‘top up’ water has been used for Newport and Cherry Lakes.

Figure 9 Hobsons Bay City Council total water use by financial year



Waste and Litter

4

4.1 Overview

The Council provides waste and litter services to its community via collection services to households, community organisations and businesses, community education and engagement, enforcement of local laws, litter collections, street sweeping, stormwater management, beach cleaning and seaweed removal.

The Council measures the amount of waste and litter collected, disposed of and recycled through these services.

4.2 2012 - 2013 results

Table 5 demonstrates that in 2012-2013 there was 17,970 tonnes of garbage, 9,923 tonnes of recyclables and 7,550 tonnes of garden waste collected. Other large waste streams were seaweed and dumped rubbish with 1,903 and 1,160 tonnes collected respectively.

Table 5 Waste and Litter collection services by tonnes 2012 - 2013

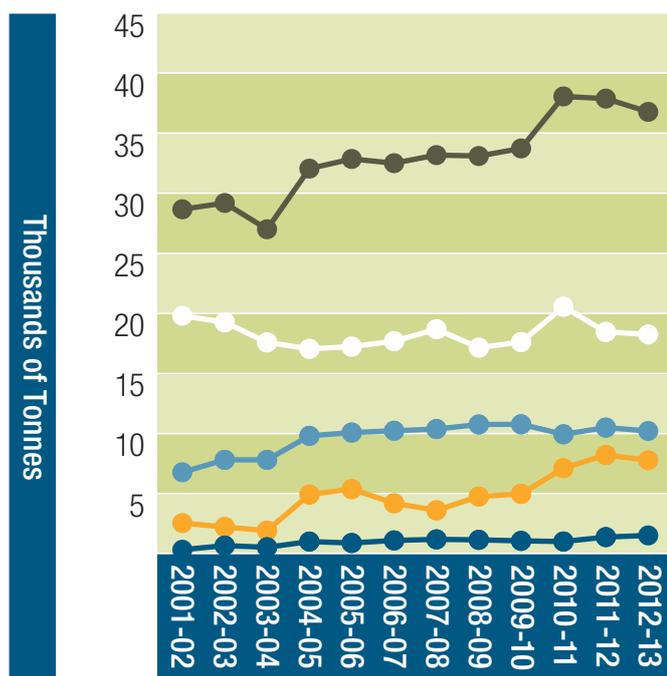
Waste or litter service	Tonnes	Recycling or disposal location
Garbage	17,970	Land filled
Recycling	9,923	Recycled
Garden waste	7,550	Recycled
Hard waste	1,197	70% Recycled*
Litter bins	508	Land filled
Housing commission	145	Land filled
Street sweeping	1,121	Land filled
Sand siftings	4	Land filled
Dumped rubbish and loose litter	1,160	Land filled
Seaweed	1,903	Land filled
Stormwater traps	150	Land filled

*Approximately 70 per cent by volume is recycled

4.3 Trends – collection services

Figure 10 shows the amount of waste in tonnes collected in kerbside waste collection services. The graph highlights that the waste generation in Hobsons Bay is increasing.

Figure 10 Total waste (tonnes) collected each year 2001 - 2002 to 2012 - 2013 from all municipal waste collection services and from each waste stream



In 2012-2013 the Council experienced a decrease in garbage, recycling and garden waste tonnes collected from the previous year. Feedback from other metropolitan councils suggests this is a common trend. Comparable data is only available until 2010-2011 from the *Victorian Local Government Survey 2010-2011* published by Sustainability Victoria.

During 2010-2011 there was a decrease in garbage collected Victoria wide by 2.6 per cent. Although inconclusive, this decrease could be a result of a better educated community, improved packaging or reduced consumption.

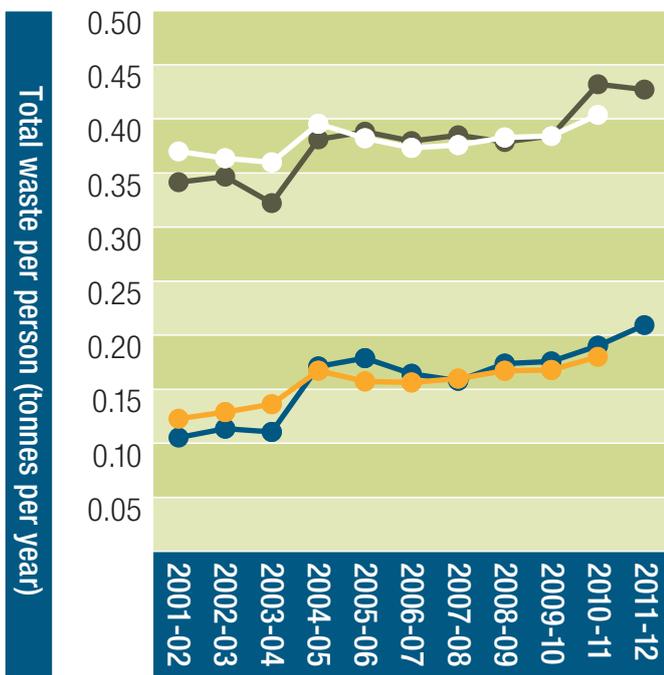
The slight reduction in the amount of garden waste collected may be due to the return to relatively stable weather conditions throughout the year.

The increase in recycling and garden waste tonnes collected shown in 2004-2005 data can be attributed to the introduction of the fortnightly recycling and garden waste services in February 2004 and the subsequent increased use.

Figure 10 also shows the variation in the amount collected in each type of service. From 2011-2012 to 2012-2013 overall waste collected decreased by 2.83 per cent. Garbage decreased by 1.29 per cent, recycling by 3.65 per cent and garden waste by 6.44 per cent. The amount of hard waste collected rose by 5.59 per cent. The increase in hard waste collected can be attributed to an increase in the number of hard waste collections delivered in 2012-2013.

Figure 11 illustrates the trend in solid waste generation and recovery relative to Hobsons Bay population changes and compares this trend to metropolitan Melbourne councils. Data includes municipal solid waste only.

Figure 11 Trend in solid waste generation and recovery relative to Hobsons Bay and metropolitan Melbourne councils



- Hobsons Bay waste generated
- Hobsons Bay waste recovered
- Metropolitan Melbourne waste generated
- Metropolitan Melbourne waste recovered

The amount of recyclables and garden waste that is recycled or recovered (diversion rate) for 2012-2013 for the Council was 46.64 per cent, a decrease of 1.79 per cent than the previous year. Comparable data is only available until 2010-2011 from the Victorian Local Government Survey 2010-2011 published by Sustainability Victoria. In 2010-2011 the Council was ranked 26 out of 70 councils for diversion with 44 per cent diversion (recycling and garden waste). The average for metropolitan Melbourne was 46 per cent.

Waste generated per person in Hobsons Bay is higher than that of metropolitan Melbourne by approximately 30 kilograms in 2010-2011. However the amount of waste recovered for recycling by each person in Hobsons Bay was approximately 10 kilograms higher than metropolitan Melbourne for the same time frame.

Diversion rates are very difficult to compare across councils. They can be influenced by the types of services offered, whether garden waste services are compulsory, the cost of voluntary garden waste services, the size of garbage bins, if food waste is permitted in garden waste bins and community demographics.

Note to Figure 11: The Australian Bureau of Statistics reviewed methodologies during the 2011 census and as a result population of Local Government Areas were adjusted. Waste generation and recovery rates are available up until 2010-2011. Hobsons Bay population data is only available until 30th June 2012. Waste data includes waste collected from commercial properties for Hobsons Bay and possibly in most metropolitan councils.



Figure 12 Total litter (tonnes) collected 2009-2010 to 2012-2013 from litter collection services



■	Seaweed
■	Street sweepings
□	Dumped rubbish and loose litter
■	Litter bins
■	Stormwater
■	Sand siftings
■	Housing commission

4.4 Trends – litter collection services

Figure 12 indicates the trends in tonnes collected through litter collection services for the last four years.

The amount of litter collected through the different means has largely remained stable since the previous year, with the exception of seaweed. The amount of seaweed collected decreased by 43 per cent in 2012-2013 compared with the previous year. The amount of seaweed that is produced is affected by tidal movements, nutrient sources, health of the seaweed and weather conditions. In 2012-2013 seaweed was land filled. The Council has been working with a service provider to trial seaweed recycling using a rotating drum trommel to separate sand from the seaweed. The trommel requires modifications before being fully operational.

4.5 Tracking against targets

Previous state government waste policy set targets for municipal waste diversion. The recently adopted Victorian Waste and Resource Recovery Policy 'Getting Full Value' does not have targets. The Council did not adopt specific targets for waste and litter management because at the time the state government was reviewing its policy. If targets are set in the future by the state government, the Council will consider these in light of its Waste and Litter Management Plan 2012-2017.

The Council undertakes day-to-day activities and many additional activities to protect the municipality's biodiversity, manage waste and reduce our greenhouse gas emissions and water use. Some are ongoing and some are discrete projects to address specific issues. Some of these activities assist the Council to meet its policy obligations for sustainability targets. Other activities assist the community to take action on sustainability or biodiversity. These projects and activities are guided by higher level strategies (see section 6) to ensure that the Council has a targeted approach to achieving its aims and objectives.

5.1 Buildings

The Council has included significant sustainable design elements in recent building projects, such as the Newport Gardens Early Years Centre, the Laverton Community Hub, the Williamstown Town Hall refurbishment and the Williamstown Esplanade Public Amenities.

Laverton Community Hub

In the Laverton Community Hub development, energy modelling of annual electricity consumption indicates expected consumption of 77 Kilowatt hour/m²/yr. This is a 28 per cent improvement on Building Code of Australia 2009 Section J energy requirements, or 28 per cent less carbon emissions compared to a building of a similar type and size designed to current regulatory standards. Some of the sustainable design elements include:

- thermal insulation to walls and ceiling space;
- design features include large glazed facades and three light wells to maximise natural lighting;
- openable windows throughout to help ventilation;
- an underground thermal storage tank for heating/cooling;



- water collection tanks that are designed to service garden areas and toilet systems throughout; and
- the inclusion of an energy efficient lighting system and lighting control.

During the construction period, the Council achieved an expected waste recovery rate of 92 per cent - based on the recycling of the materials, including aluminium, brick/concrete mix, clean concrete and asphalt.

Newport Gardens Early Years Centre

In the Newport Gardens Early Years Centre development, the Council aimed to achieve at least 30 per cent less carbon emissions than required by the National Construction Code. Some of the sustainable design elements include:

- an electric boosted solar hot water system. The solar contribution is expected to be greater than 80 per cent;
- three rainwater tanks will be installed onsite and they will jointly collect 30,000 litres of rainwater from the building roof. The water collected to be used for irrigation to landscaped areas;



- rainwater from the car park will be collected and treated in a filtration stormwater pit prior to discharge into the main stormwater system;
- double glazed windows and doors;
- extra insulation in the internal and external walls, roof and ceilings;
- natural ventilation including a night purge system which includes low-level intake trickle vents and high-level openable clerestory windows for maximum comfort to users;
- a condenser boiler unit with 95 per cent efficiency; and
- installation of hydronic heating panels.

Williamstown Town Hall refurbishment

The Williamstown Town Hall refurbishment has been the recipient of sustainable design elements, including:

- reconstruction of the thermal chimney to improve air circulation;
- construction of a thermal corridor within the roof space;
- installation of sub-floor insulation to contribute to satisfying energy compliance;
- installation of more energy efficient boiler units, to provide heating to the grand hall and supper room;

- motion sensors and timer controls fitted to lighting and ventilation within heritage toilets, supper room toilets, backstage and change room areas; and
- during the re-construction of the new timber floor, the Council recycled 85 per cent of all timber material removed from the site.

Williamstown Esplanade public amenities

New public amenities have been provided on the Williamstown Esplanade next to Williamstown Beach. The sustainable design elements include:

- a solar hot water system for the indoor showers;
- one 2,000 litre rainwater storage tank for flushing the toilets and garden irrigation;
- recycled ironbark deck timber;
- recycled ironbark external wall cladding;
- recycled messmate feature timber slats;
- recycled ironbark structural posts;
- natural ventilation;
- light sensors;
- two raingardens designed to capture and treat runoff from adjacent roof spaces and hard surfaces; and
- self closing tap ware.

5.3 Biodiversity

Conservation actions

The Council has undertaken revegetation of 15,920 indigenous plants across environmentally sensitive sites throughout Hobsons Bay to increase biodiversity, reduce pest plant infestation, assist in the restoration of ecological function and enhance habitat connectivity/ de-fragmentation between existing sites. The revegetation was completed by Council staff and as partnership plantings with a range of local volunteer/ friends groups, school groups and various local industry and resident groups.

As indicated in table six, over the last five years the total number of plants provided in conservation sites is 77,165.

Table 6 Plants provided to conservation sites

Year	Plantings
2008-2009	15,165
2009-2010	14,735
2010-2011	16,700
2011-2012	14,645
2012-2013	15,920
Total	77,165



The Council secured grants for on-ground conservation works (which have commenced), including:

- \$10,000 with Friends of Williamstown Wetlands through Communities for Nature for construction of nature trail, bird hide improvements, revegetation, weed control and an interpretive sign;
- \$7,000 with Friends of Laverton Creek through Melbourne Water's Corridors of Green Community Grants program for revegetation, weed control and community planting days along Laverton Creek;
- \$25,000 from Hyde Tank PTY LTD through Environment Protection Authority Victoria Inspiring Environmental Solutions Program for a nature trail, re-vegetation and rehabilitation work at Altona Coastal Park;
- \$4,500 with Friends of Skeleton Creek through Melbourne Water's Corridors of Green Community Grants program for revegetation, weed control and community planting days along Skeleton Creek;
- \$2,900 for engagement activities promoting wetlands and birds through the Ramsar Project Group; and
- \$2,000 for engagement activities in schools through the Ramsar Project Group.

The Council has also continued with its annual ongoing target to plant more than 1,400 street trees and 400 park trees.

Vegetation management planning

The Council is developing vegetation management plans for the Rifle Range Reserve, Truganina Explosives Reserve and Altona Coastal Park.

5.4 Water

Stormwater harvesting projects

Further to the Council's 2009 Water Plan, the Council has partnered with City West Water to undertake three stormwater harvesting schemes at Cyril Curtain Reserve Williamstown, Paisley Park Altona North and Laverton Recreation Reserve.

The stormwater harvesting and reuse project at Paisley Park, Altona North is now completed and operational, providing non-mains water to assist irrigation of the Altona Lakes golf course. In full operation it will provide irrigation water to both the Altona East and Altona Magic soccer clubs and the Altona lacrosse fields.

The Cyril Curtain Reserve and Laverton Recreation Reserve schemes are almost complete. In total, these three schemes will capture and treat 175ML of stormwater per year for reuse on a range of sporting fields and ovals reducing the reliance on mains (drinking) water. This is equal to the average annual use of over 1,000 households and will reduce pollution to the bay.

Smarter water management

There are now 20 reserve sites with smart water meters, improving monitoring ability. An additional six major sites will have software to enable the water use to be monitored and controlled remotely. This software is designed to detect leaks and will shut down if a leak is detected.

Other recreation reserve projects

Over the past 12 months, the Council continued to integrate sustainable design elements into a number of projects, including road upgrades, playgrounds and new public toilets.

Works have been completed on stages 1, 2 and 3 of Sugar Gum Drive and Blue Gum Drive roadway and car park in Altona to provide grassed swales, rather than kerb and channel, to help treat road runoff.

The Edwards Reserve, South Kingsville playspace design incorporated raingardens designed to capture and treat runoff from adjacent roof spaces and hard surfaces.



At McCormack Park, Laverton an ephemeral swale was developed adjacent to the Laverton Creek during 2012. Stage 1 of the swale was undertaken to improve the flow of surface run off in the central section of the park and treat runoff prior to it entering the creek. Plant species used in the project were locally indigenous, native and drought tolerant.

All landscape designs, such as J. J. Ginnifer Reserve Play Space, Altona North, used responsible selection of plant species with a focus on locally indigenous, native and drought tolerant species which do not require irrigation after establishment.

The A.W. Langshaws Reserve Oval redevelopment, Altona North included the planting and establishment of new warm season grass.

Car parks are now designed with the aim to maximise large canopy shade tree planting to reduce heat emission from hard surfaces.

5.5 Waste and litter projects and activities

The Council adopted its Waste and Litter Management Plan 2012-2017 in August 2012. There were eight projects or activities undertaken in 2012-2013 to implement this plan.

Electronic waste recycling

Electronic waste (ewaste) is electronic appliances that are obsolete and of no use to their owners. This includes appliances that are powered by batteries or those that plug into electric outlets. Most of these items can be refurbished for reuse or recycled.

The Council conducted two ewaste recycling trials in September and November 2012. The trials were a success, with over 1,500 residents enthusiastically recycling approximately 80 tonnes of ewaste.

In early 2013, the Council began preparing a business case for an ewaste recycling program. Along with information from the two trials, the business case would assess opportunities within the National Television and Computer Recycling Scheme and the Council's current hard waste service and have consideration for illegal dumping data and benchmarking with other councils' ewaste recycling programs.

Kerbside waste, recycling and garden waste collection services

In February 2013, the Council commenced its new contract with Transpacific Cleanaway for weekly collection of waste, an alternate fortnightly collection of garden waste and recyclables, the distribution and maintenance of bins and the weekly collection of commercial bundled cardboard. Improvements include geographic positioning systems and the requirement for the contractor to report on resources consumed. New collection vehicles were also a requirement of the contract and have fewer emissions than previous models and the fleet that have been in operation for nine years.



Hard waste collection services

In March 2013, the Council reviewed its hard waste collection service and began a tender process which sought to improve recycling in general but in particular take advantage of a national scheme for television and computer recycling. The Council will award this tender in October 2013.

Waste Service and Charge Policy

In April 2013, the Council adopted a Waste Service and Charge Policy. This policy details the levels of municipal waste services provided by the Council, where fees and charges do or do not apply and how they are calculated. The policy was developed from a study of the number and type of municipal waste services provided to non-residential properties.

North West Organics Recycling Project

In 2012 the Council signed the contracts and memorandum of understanding with the Metropolitan Waste Management Group (MWMG), Veolia Environmental Services Australia Pty Ltd for organics processing plants to be established in Bulla and Wyndham. This project involves 11 councils and began in 2009. It was accepted by the Council in 2010. The Council has been involved in implementation through a user group established under the contract terms.

Advocacy

During 2012-2013 the Council was actively involved in activities of the Metropolitan Waste Management Group and the Local Governments' Waste Forum, with a senior officer being the chair of the Technical Advisory Reference Group for two years and contributing to the development of a draft organics strategy for metropolitan Melbourne.

The Council contributed to the development of the Victorian Waste and Resource Recovery Policy 'Getting Full Value', advocating to the state government and MWMG to invest in and research alternatives to landfill and options for resource recovery providing funding from the landfill levy.

Clean Up Australia Day

The Council hosted its annual Clean Up Australia Day event at the Warmies, Newport on Sunday, 3rd March 2013. Approximately 30 people helped collect almost half a tonne of rubbish. The Council also provided skips and collection services for community groups running their own events at 17 other sites across the municipality.

Fluorescent tube and bulb lighting recycling

The Council recycled approximately 46 kilograms of lighting through its lighting recycling partnership program with Bunnings Warehouse, Altona and Chemsal. In 2012-2013, the Council commenced a review of the program.

5.6 Community

My Smart Garden

My Smart Garden is a free joint program for residents of Hobsons Bay and Moonee Valley that promotes the use of gardens as spaces to be utilised for climate change adaptation, including:

- trees for shade, reducing the need for air conditioning;
- food gardens, minimising household 'food miles';
- habitat gardens, encouraging native species and enhancing local biodiversity;
- organics composting, reducing waste to landfill;
- water sensitive garden design, minimising potable water usage; and
- development of a web-based toolkit to assist continued development and improvement of 'My Smart Garden'.

This program helps instill a culture of gardening as a valuable resource for dealing with climate change. The practical, fun and social approach taken by this program encourages a self-sustaining community which comes together to transfer and extend skills and knowledge obtained through participation.

A robust evaluation was undertaken of the My Smart Garden program in December 2012 as part of the final reporting process to the joint funder, Sustainability Victoria. The evaluation covered the first two years of the program. Some of the key results are provided below.



My Smart Garden boasts 1,042 participating residents, with 619 of those members attending at least one gardening workshop throughout the year.

The original aim was to deliver at least 12 workshops throughout the program. The program actually delivered 35 My Smart Garden events (gardening workshops, open days, garden tours and an edible gardening working bee or 'permablitz'), plus five smart gardening activities at festivals. An average of 39 people attended each workshop. Overall, participants found the events highly valuable, providing an average rating of nine out of 10.

The majority of survey respondents (87 per cent) reported that they are gardening more sustainably since being involved in the My Smart Garden program. A similar number of people (84 per cent) reported that they now better understand the environmental benefits of gardening.

Based on a detailed survey of action taken by 182 respondents, it is estimated that My Smart Garden achieved the following resource savings annually:

- at least 50 tonnes of organic waste (equivalent to 860 small wheelie bins);
- at least 80 tonnes of greenhouse gas emissions (equivalent to the annual emissions of five average Australian households); and
- at least 1,245 kilolitres of potable water (equivalent to volume of 622 slimline rainwater tanks).

Additional resource savings are expected to have been achieved by participants who did not undertake the survey.

Since completion of this evaluation, a further six workshops have been undertaken with about 120 people attending these events.

My Smart Garden has also helped many participants connect with other people through gardening and other community groups, thus creating new connections and strengthening existing networks within the local community. A high portion (70 per cent) became aware of other groups involved in sustainable gardening and 69 per cent shared what they learnt with others. It is hoped that through stronger connections in the community, residents will feel motivated and supported by being part of a larger group of 'smarter gardeners'.

In 2013, the City of Maribyrnong partnered with Moonee Valley City Council and Hobsons Bay City Council in the My Smart Garden program.

Energy, water and climate change community events

Five events were held whose objectives were to offer businesses and residents within Hobsons Bay an opportunity to become informed about practical, affordable and realistic action they can take to reduce their environmental footprint and, in many cases, reduce their costs or learn about climate change. They also offered avenues of assistance that participants could utilise after the events.

Small business events

With the introduction of the carbon price legislation on 1st July 2012, local businesses were invited to a workshop held in August 2012 to learn how to reduce their costs and become more environmentally friendly. Ralph Plarre, owner of Ferguson Plarre Bakehouses, presented the business case for environmental action. In addition, Professor Neville Norman presented on how to achieve significant cost savings and how the 'Clean Energy Future' package works and ways businesses can prosper in a carbon-constrained economy.

In February 2013, Toyota Motor Corporation (Ltd), together with the Council and the Victorian Chamber of Commerce and Industry, provided local businesses with an understanding of the business case for energy efficiency and carbon reduction. Toyota Australia also presented their environmental programs and led a tour of the manufacturing plant, showcasing its environmental and sustainability attributes.

Representatives of 63 local businesses attended these two events.

World Environment Day

Three community events were held by the Council to celebrate World Environment Day, all of which were well attended.

The Mayoral Forum at Newport Substation, held on 5th June 2013, attracted 120 community members and community expo providers, including special guest speakers: Professor Barbara Norman from the Australian National University's Climate Change Institute; Gardening Australia's Millie Ross; Nutritionist, Naturopath, Author and gold medallist Lauren Burns; Rod May from Captains Creek Organics; and Master of Ceremonies Vasili of Vasili's Garden.

The 'Cooking for Sustainability' and 'Gardening for Sustainability' workshops were held at the Laverton Community Hub on Thursday, 6th and Saturday, 8th June 2013 and were both over-subscribed with a second 'Cooking for Sustainability' workshop held to cater for the great interest.

National Tree Day

The Council's official Planet Ark National Tree Day event was held at Truganina Park, Altona Meadows on 29th July 2012. Over 70 people from the local community attended the event and helped plant 3,200 plants on the day. The Council also provided assistance to the Friends of Lower Kororoit Creek who held their own National Tree Day celebrations along the creek. It was great to see so many volunteers out and about in Hobsons Bay on the day.

Witness King Tide

The Witness King Tides program enables our coastal community to create a photographic record of our coastline over time. On Sunday, 26th May, 51 community members met at Altona Beach with their cameras to help capture the changes that climate change will bring to the coast. Whilst the tide was high, the waves were low. These conditions were ideal for allowing participants to capture good base line images for the future.



Friends group activities.

Friends group activities were run on weekends and included activities like planting, weeding, walk and talks, rubbish pick-ups and general maintenance at conservation sites throughout the municipality. Table seven indicates that 60 events were held in 2012-2013, more than one every weekend.

Table 7 Friends group activities			
2009-10	2010-11	2011-12	2012-13
55 events	56 events	59 events	60 events

Other community conservation events

These included 'Summer by the Sea' program events with community members and corporate and business days. The corporate days included planting, maintenance, weeding and rubbish collection. Table eight indicates that 25 of these events were held in 2012-2013.

Table 8 Community conservation events			
2009-10	2010-11	2011-12	2012-13
16 events	20 events	30 events	25 events

School events

These included incursions and excursions to conservation sites, both hands-on environmental work and educational sessions. Topics included Flora and Fauna in Hobsons Bay, Biodiversity, Conservation Sites, What it's like to be a Conservation Ranger, I used to be a Landfill Site, Wetlands and Waterway Health and Water Conservation. Table nine indicates that 42 of these events were held in 2012-2013.

Table 9 School events			
2009-10	2010-11	2011-12	2012-13
21 events	20 events	25 events	42 events



In 2012-2013, the Council adopted the Waste and Litter Management Plan 2012-2017, reviewed the Sustainable Design in Council Facilities Policy and procured a data management system to help manage and monitor the Council's environmental data. Looking forward, the Council will soon adopt the Climate change policy 2013, Climate change adaptation plan 2013-2018, Corporate greenhouse strategy 2013-2020, Environmental engagement strategy 2013-2018 and the Community greenhouse strategy 2013-2030.

6.1 Waste and Litter Management Plan 2012-2017

The Council adopted its Waste and Litter Management Plan 2012-2017 in August 2012. This plan sets the direction of waste and litter management for the municipality. The plan has drawn from an Issues Paper, community feedback on this paper, government policy, and the Council's operational changes. The plan centres on the Council's areas of responsibility and aims to address the waste and litter management needs of Hobsons Bay over five years. The plan addresses waste and litter that the Council has direct control over, or influence on, and includes kerbside waste and litter collection.

6.2 Climate Change Policy 2013

The Climate change policy 2013 responds to the projected implications of climate change on Hobsons Bay's social, environmental and economic sustainability.

The policy stipulates the Council will:

- apply the precautionary principle to decision making when considering the potential implications associated with climate change;
- achieve corporate zero net greenhouse gas emissions by 2020;
- undertake actions to reduce the community's greenhouse gas emissions and lead the community towards achieving zero net greenhouse gas emissions by 2030; and
- respond to the risks of climate change to council assets and services and assist the community to be more resilient to the effects of climate change.

6.3 Climate Change Adaptation Plan 2013-2018

Adaptation planning is a critical component of effective risk management. The output of this project is a practical, implementable plan to guide the Council's coordinated response to the identified risks posed by climate change. The plan is a 'living' document that will be continually updated. It will assist those accountable for adaptation at the Council to drive effective action and planning.

6.4 Corporate Greenhouse Strategy 2013-2020

The strategy primarily addresses those emissions that the Council is operationally responsible for under the framework of Commonwealth legislation. This adopted strategy provides the Council with a pathway for achieving its zero net emissions by 2020 target.

6.5 Environmental Engagement Strategy 2013-2018

Development of this strategy was undertaken to identify key environmental issues of concern to the local community and provide various community engagement opportunities which respond to these issues in a meaningful, positive and constructive way. The strategy defines the various sectors of the community that the Council needs to engage with and the goals and objectives to guide this engagement.

6.6 Community Greenhouse Strategy 2013-2030

The strategy will provide the Council with a pathway for achieving its community target of zero net emissions by 2030. The development of the strategy is informed by research that was undertaken in 2011 into the attitudes and perception of Hobsons Bay residents on climate change and greenhouse gas mitigation and an audit of all Council strategies and policies.

The strategy ties in with the Environmental Engagement Strategy and addresses greenhouse gas emissions from the residential, commercial, industrial, transport and waste sectors. A number of 'solutions', which are relevant to local government control, are proposed in the strategy. The strategy also includes solutions for dealing with residual emissions to achieve the zero net target.

6.7 Sustainable Design in Council Facilities Policy

The Council has developed a Sustainable Design in Council Facilities Policy. The objectives of this policy are to:

- reduce the environmental impacts and operating costs of all Council-owned buildings while achieving

previously adopted corporate energy and water reduction and zero net emissions targets by 2020;

- reduce the environmental impact of the construction and use of Council buildings by embedding sustainable design principles into existing policies and allocating resources to address gaps in existing policies; and
- lead the community towards achieving zero net emissions by 2030 by providing opportunities for public engagement with and access to inspiring sustainable buildings.

This policy is supported by a Strategy and Implementation Plan which has largely been reviewed during 2012-2013. The review identified that the policy is well supported but staff training is required to embed good practice throughout the organisation.

6.8 Data management

The Council has committed to achieving challenging targets for water use and greenhouse gas emissions reduction. Consequently, the Council has procured a data management system and service in order to manage and monitor the Council's environmental data.

The system generates high quality information about water, energy and greenhouse gas emissions available in a way that minimises the staff time required to manage the data, and maximises time to act on the data. The data is used for monitoring, project planning and evaluation, project reporting, and annual reporting. The new Environmental Reporting System has been operational since July 2012 and has improved data management and availability.

7.1 Greening the West

Hobsons Bay City Council is a partner with City West Water, local western councils and Victorian Government organisations to create more liveable suburbs, a cleaner environment and contribute to improved community health. Greening the West aims to positively impact the health status, climate and environment of Melbourne's west by increasing the tree canopy cover and vegetation through its suburbs.

7.2 Western Alliance for Greenhouse Action

Hobsons Bay City Council is an active member of the Western Alliance for Greenhouse Action. This alliance includes western suburb municipalities that work jointly on regional climate change mitigation and adaptation initiatives to reduce the potential impact and outcomes of climate change.



7.3 Association of Bayside Municipalities

Hobsons Bay City Council is a member of the Association of Bayside Municipalities. Hobsons Bay's Mayor Cr Angela Altair chaired the Association of Bayside Municipalities (ABM) during 2012-2013. The ten Councils of the ABM work together to actively manage and maintain the Port Phillip Bay coast to achieve the highest levels of community benefit by protecting and enhancing the social, economic and environmental values of the bay.



Hobsons Bay
CITY COUNCIL

Hobsons Bay City Council
115 Civic Parade, Altona
PO Box 21, Altona 3018
Telephone: (03) 9932 1000
NRS: 133 677 / quote (03) 9932 1000
Hobsons Bay Language Line 9932 1212
Email: customerservice@hobsonsbay.vic.gov.au
Website: www.hobsonsbay.vic.gov.au

The Hobsons Bay City Council is committed to protecting and enhancing our environment. This publication is printed with vegetable inks on recycled, non-chemically bleached stock.

Published 2013