



HUME CITY COUNCIL  
**GREENHOUSE  
ACTION PLAN  
2013-2016**  
Council Operations

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# 1. INTRODUCTION

Council has a firm commitment to greenhouse action and reduction within its own operations. This commitment is reflected in the objectives and actions of the Hume City Plan 2030, the Hume Council Plan 2009-2013, *Pathways to Sustainability: An Environmental Framework* and the previous Greenhouse Action Plan (2009 – 2011). This four year Greenhouse Action Plan (2013 – 2016) has been developed to update and detail the objectives, actions and resource requirements to support this commitment, under the following key themes:

1. Public lighting
2. Buildings
3. Waste
4. Transportation
5. Data Management

The goals as relevant for each key theme describe the role and ability of Council to:

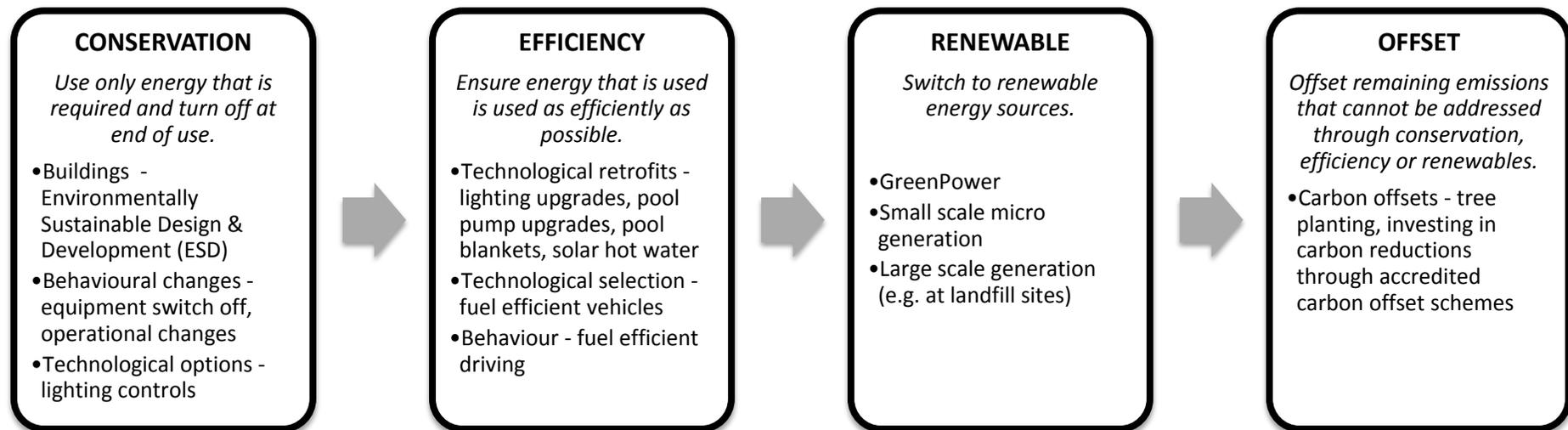
- **Demonstrate greenhouse leadership** by minimising greenhouse gas emissions in Council's own operations.
- **Influence and advocate for wider change** within Council's networks, including other local government areas, electricity distributors, community members and non-government organisations.

There are several Council Strategies, Action Plans and programs that support greenhouse action both internally and externally:

Council document / program	Aim and Target Audience
<i>Live Green</i> Strategy and Action Plan (2011-13)	Engages and educates the Hume community on environmental sustainability.
<i>Live Green Work Green</i> program (launched in 2010)	Engages and educates Hume staff on environmental sustainability.
Business Efficiency Network	Engages Hume businesses with energy efficiency and environmental practices.
Waste Management Strategy (2012-2016)	Reduce waste sent to landfill and implement best practice waste management. The audience includes the Hume community.
Climate Change Adaptation Strategy (available in late 2013)	Will outline Council's approach to managing its climate change risks.
Green Travel Plan (available in 2013)	Will contain initiatives to encourage staff to choose sustainable transport for commuting and business travel.
Hume Integrated Land use and Transport Strategy (HILATS) (2011-2020)	Integrates land-use and transport planning within Hume, and works to reduce reliance on the private car for residents.
Procurement Policy (2011)	Outlines the procurement principles for Council purchasing, including environmental sustainability considerations.

These Strategies, Action Plans and programs are complementary to the Greenhouse Action Plan, which focusses on reducing greenhouse gas emissions from Council's own operations and influencing and advocating for wider change as relevant. Supporting actions contained in any of these Strategies, Plans and programs are generally not replicated in this Action Plan - except where they have significant greenhouse reduction potential, particularly in relation to waste management.

This Greenhouse Action Plan seeks to consolidate Council's greenhouse actions to date and prioritise ongoing efforts to the most significant and cost-effective reduction opportunities, with a particular focus on energy conservation and efficiency as a first priority. This is in line with the energy hierarchy:



As shown in the energy hierarchy above, energy conservation and efficiency should be prioritised before renewable energy generation. The purchase of carbon offsets would be pursued only after emissions have been reduced and energy sources switched to renewable sources to the fullest extent practical. This hierarchy is recognised as environmental best practice for energy and greenhouse management. Energy conservation and efficiency opportunities are also more cost-effective and have ongoing, additional benefits: reducing energy bills at Council facilities; reducing Hume's risk exposure to increasing energy costs; increasing user awareness; avoiding energy waste; and in many cases improving thermal comfort and service levels for facility users. Renewable energy can also have ongoing, additional benefits for Council and the community: in some cases reducing energy bills at Council facilities and reducing Hume's risk exposure to increasing energy costs; supporting Australia's renewable energy industry; demonstrating leadership; and increasing awareness of renewable energy sources.

This Greenhouse Action Plan also has a strong emphasis on greenhouse data management, reporting and trend analysis, which will provide Council with a firm platform for future target setting and action. Specific KPIs and targets have been set under each key theme, focussing on what is realistic yet still challenging over the 2013-2016 timeframe. Council will re-assess setting an overall greenhouse gas emissions reduction target in 2016, based on a robust understanding of Hume's greenhouse data and taking into account Hume City Council's inevitable growth in servicing a growing municipality.

The Greenhouse Action Plan capital works budget supports the activities and actions outlined in this Greenhouse Action Plan. The Greenhouse Action Plan capital works budget is \$350,000 for 2013/14, \$400,000 for 2014/15 and \$500,000 for 2015/16. Additional sources of funding also support the actions outlined in this Greenhouse Action Plan – existing and additional sources of funding for each action/ activity are noted as relevant. The Greenhouse Action Plan capital works budget has also been utilised to date for water conservation initiatives for Council facilities. It is anticipated that a separate capital works budget will be established for water conservation initiatives from 2014/15 to support the Integrated Water Management Plan (currently in development).

The Australian Government introduced carbon pricing from July 2012. Carbon pricing covers the majority of greenhouse gas sources within the Australian economy, including electricity, gas and waste/landfill; fuel consumption from transportation is currently excluded. Carbon pricing has impacted on Council indirectly through increased costs (predominately electricity and gas costs) and will impact on Council directly through a requirement to pay the carbon price at Council's operating landfill site. Actions contained in this Greenhouse Action Plan will reduce Council's exposure to the carbon price, either directly or indirectly.

## 2. PUBLIC LIGHTING

### Key Performance Indicator (KPI) and Targets:

- KPI 1:** Significant improvement in the energy efficiency of Hume’s public lighting.
- Target 1:** Zero net increase in greenhouse gas emissions from Hume’s street lighting given significant projected growth (2011-12 baseline).
- Target 2:** 100% of new public lights to have energy efficient fittings (equivalent or better than T5s) for ‘P’ Category streets and relevant Council applications.

### Goal: To Demonstrate Greenhouse Leadership

#### Objective 1: Improve the energy efficiency of street lighting within the Hume municipality

Action / Activity	Budget	Responsibility	Level of Priority and Action Completed	Outputs and Outcomes
Change all (9,120 approx.) standard 80W mercury vapour street lights to efficient T5 lighting. Purchase lights via MAV Procurement or tender; tender and appoint an installation contractor; and work with Jemena to commence the lighting upgrade roll out.	\$2,736,100  (Loan financing has been approved by Council and \$1,443,000 in co-funding to be provided by the Australian Government) <sup>1</sup>	<b>Lead:</b> Sustainable Environment  <b>Support (internal):</b> City Governance and Information, Services, Marketing and Communications  <b>Support (external):</b> Jemena, Maddocks, MAV Procurement, Ironbark Sustainability	<b>High</b>  2016	Upgrade of all standard street lights (9,120 approx.) to efficient T5 lighting (output).  Public Lighting Policy/ies approved by Council (output).  Improved energy efficiency of existing and new street lighting within Hume (outcome).  Significant annual electricity cost savings for Council (outcome).
Ensure review and update of Council’s Public Lighting Policy/ies incorporate energy efficient lighting outcomes.	N/A	<b>Lead:</b> Subdivisions  <b>Support:</b> Sustainable Environment, Capital Works, Parks and Open Spaces	<b>Medium</b>  2014	Improved levels of lighting along Hume streets (outcome).

<sup>1</sup> Council was successful in its \$1.88 million funding grant submission to the Australian Government’s Community Energy Efficiency Program (CEEP) to undertake a street lighting upgrade and other energy efficiency works at Council buildings.

**Objective 2: Seek to improve the energy efficiency of Council's (non-street light) public lighting, including sports grounds, reserves and car parks**

Action / Activity	Budget	Responsibility	Level of Priority and Action Completed	Outputs and Outcomes
Integrate energy efficient lighting options into the upcoming sports grounds lighting audit and upgrade program.	\$500,000 over four years. (Existing Leisure Capital Works budget - 2013/14, 2014/15, 2015/16, 2016/17).	<b>Lead:</b> Leisure and Youth Services <b>Support:</b> Sustainable Environment, City Infrastructure, Parks and Open Spaces	<b>Medium</b> 2016+	Sports ground lights upgraded to energy efficient lighting where feasible (output). Public Lighting Policy/ies approved by Council (output). Optimal energy efficiency achieved for Hume's sports reserve lighting (outcome).
Ensure review and update of Council's Public Lighting Policy/ies incorporate energy efficient lighting outcomes.	N/A	<b>Lead:</b> Subdivisions <b>Support:</b> Sustainable Environment, Capital Works, Parks and Open Spaces	<b>Medium</b> 2014	Annual electricity cost savings for Council (outcome). Improved levels of lighting at Hume sports grounds (outcome).

## Goal: To Influence and Advocate for Wider Change

### Objective 3: Support and learn from other local government areas to improve street lighting energy efficiency

Action / Activity	Budget	Responsibility	Level of Priority and Action Completed	Outputs and Outcomes
Share Hume's own key learnings and learn from others through continuing Council's active participation in the Northern Alliance for Greenhouse Action (NAGA).	~\$20,000/annum for NAGA Membership (Recurrent in GAP operational budget)	<b>Lead:</b> Sustainable Environment <b>Support (external):</b> Other Councils, NAGA	<b>Medium</b> Ongoing	Informal conversations and formal presentations at NAGA / MAV meetings (output). Conference presentations (output). Potential cost savings through shared resources (outcome).
Share Hume's own key learnings and learn from others through collaboration with other Councils and continuing Council's participation in bodies including Municipal Association of Victoria (MAV).	N/A	<b>Lead:</b> Sustainable Environment <b>Support (external):</b> Other Councils, MAV	<b>Medium</b> Ongoing	Improved capacity within Hume and other local Councils to pursue energy efficient street lighting (outcome).

### Objective 4: Continue to advocate to other levels of Government and organisations to address legal and bureaucratic barriers to street light upgrades

Action / Activity	Budget	Responsibility	Level of Priority and Action Completed	Outputs and Outcomes
Provide feedback via submissions, meetings and in collaboration with other Councils to the Victorian and Australian Governments, Distribution Businesses and MAV regarding issues impacting on street light efficiency.	N/A	<b>Lead:</b> Sustainable Environment	<b>Medium</b> Ongoing	Increased understanding of ongoing barriers for Councils to upgrade to energy efficient street lights (output). Potential review of legislation, policies and guidelines to improve processes and clarify responsibilities (outcome).

### 3. BUILDINGS

#### Key Performance Indicators (KPIs) and Targets:

**KPI 2:** ESD integrated into new Council buildings.

**Target:** Greenhouse gas emissions of Council's new large facilities (at the Design stage) at least 25% below the modelled greenhouse gas emissions equivalent to compliance with Section J of the National Construction Code.

**KPI 3:** Minimise energy consumption at Council facilities.

**Target:** 10% reduction in greenhouse gas emissions from six targeted facilities<sup>2</sup> (2011-12 baseline).

#### Goal: To Demonstrate Greenhouse Leadership

##### Objective 1: Continue to purchase GreenPower electricity

Action / Activity	Budget	Responsibility	Level of Priority and Action Completed	Outputs and Outcomes
Maintain current GreenPower purchase of 10% of Council's electricity use in Council buildings, and investigate the costs and benefits of purchasing an increased percentage of GreenPower.	To be determined post-investigation.	<p><b>Lead:</b> Sustainable Environment</p> <p><b>Support (internal):</b> Contracts, Finance</p> <p><b>Support (external):</b> Procurement Australia, AGL, GreenPower retailers</p>	<p><b>Medium</b></p> <p>2014 / Ongoing</p>	<p>10% GreenPower purchase for Council buildings maintained (output).</p> <p>Purchasing an increased percentage of GreenPower investigated, and percentage increase considered by Council (output).</p> <p>Continue to support renewable energy leadership (outcome).</p> <p>Council's annual greenhouse gas inventory is reduced (outcome).</p>

<sup>2</sup> The six targeted facilities are the Broadmeadows Leisure Centre, Sunbury Aquatic and Leisure Centre, Broadmeadows Basketball Stadium, Broadmeadows Netball Stadium, Boardman Stadium and Craigieburn Leisure Centre Stadiums. Audits were completed at these facilities in 2013 and they were found to have good energy reduction opportunities; Council will implement energy efficiency works at these facilities under its successful Australian Government Community Energy Efficiency Program funding grant.

## Objective 2: Integrate Environmentally Sustainable Design and Development (ESD) (which includes energy efficiency) features into all new Council building projects

Action / Activity	Budget	Responsibility	Level of Priority and Action Completed	Outputs and Outcomes
Finalise the Capital Works Approval Form and process to ensure ESD (and other considerations such as Maintenance and Social Justice) are integrated into Capital Works planning.	N/A	<b>Collaboration:</b> Capital Works, Infrastructure Planning, Engineering and Assets, Sustainable Environment	<b>Medium</b> 2016	Capital Works Approval Form finalised and process for cross Council application / planning process implemented (output).  Integrated planning and assessment of organisational priorities (including ESD) in capital works planning (output).
Finalise the ESD Assessment process (for new large facilities) and ESD Checklist / Tender Schedule (for new small facilities).	\$25,000 (Existing 2013/14 Sustainable Environment operational budget)	<b>Lead:</b> Sustainable Environment  <b>Support:</b> Capital Works, Leisure and Youth Services	<b>High</b> 2014	ESD Assessment and ESD Checklist / Tender Schedule approved and integrated into Capital Works Approval Form and process (output).
ESD training undertaken by relevant staff (e.g. Capital Works, Services, Leisure and Youth Services, Environmental Sustainability).	\$12,000 (Existing 2013/14 Corporate Training budget)	<b>Lead:</b> Sustainable Environment  <b>Support:</b> Capital Works, Leisure and Youth Services, Services, Human Resources	<b>High</b> 2014	All new large building projects and a selection of priority small building projects assessed regarding ESD (output).  ESD training completed by Capital Works staff (output).
Identify priority new large building projects for particular attention, including the new Craigieburn Leisure Centre and proposed Sunbury Global Learning Centre, as well as priority small building projects.	Incorporated in Capital Works budget for the facility – with consideration given to operating savings / paybacks of environmental features.	<b>Lead:</b> Capital Works and Sustainable Environment  <b>Support:</b> Leisure and Youth Services, Social Development, Learning Community	<b>High</b> Ongoing	New Appliances purchased with high energy ratings (output).  High energy and water efficiency and minimised greenhouse gas emissions at new Council facilities (outcome).
Continue to select and purchase new appliances with high energy ratings, where possible.	Incorporated in Building Maintenance recurrent budget and Capital Works budget – with consideration given to operating savings for energy efficient appliances.	<b>Leads:</b> Services (for existing buildings), Capital Works (for new buildings)  <b>Support:</b> Sustainable Environment	<b>Medium</b> Ongoing	Minimised utility costs for Council from new facilities (outcome).  Appropriate comfort levels in summer and winter for users at new Council facilities (outcome).

### Objective 3: Improve the energy efficiency of Council's existing facilities

Action / Activity	Budget	Responsibility	Level of Priority and Action Completed	Outputs and Outcomes
Implement energy efficiency works contained in Council's successful Community Energy Efficiency Program (CEEP) submission. This includes various lighting upgrades, ceiling insulation, pool pump upgrades and pool blanket installations at Council leisure centres, sports stadiums and a community centre.	\$385,000  (\$280,000 in co-funding to be provided by the Australian Government through CEEP, and remainder to be sourced from existing GAP capital works budget).	<b>Lead:</b> Sustainable Environment  <b>Support:</b> Capital Works, Leisure and Youth Services, Services, Marketing and Communications	<b>High</b>  2016	Energy efficiency works program implemented (output).  Energy and water considerations integrated into Council's Building Service Review (output).  Improved energy efficiency and reduced greenhouse gas emissions at Council's existing facilities (outcome).  Reduced electricity and gas costs for Council at existing facilities (outcome).
Retrofit solar hot water systems at the Broadmeadows and Sunbury Leisure Centres.	\$91,323  (\$73,059 funded under the Australian Government's Local Government Energy Efficiency Program, and remainder to be sourced from existing GAP capital works budget).	<b>Lead:</b> Sustainable Environment  <b>Support:</b> Leisure and Youth Services, Services, Marketing and Communications	<b>High</b>  2014	Appropriate comfort levels in summer and winter for staff and community users of Council facilities (outcome).
Prioritise and implement high energy saving retrofit opportunities at Council's large and small facilities as identified in recent audits.	~\$200,000-\$400,000 annually  (Existing GAP capital works budget).	<b>Lead:</b> Sustainable Environment  <b>Support:</b> Leisure and Youth Services, Services, Learning Community, Family and Children's Services	<b>Medium</b>  Ongoing	
Integrate energy and water considerations into Council's five-yearly Building Service Audit (due 2016).	\$20,000 (Indicative)  (Additional GAP operational budget – applicable to 2015/16 financial year)	<b>Lead:</b> Services  <b>Support:</b> Sustainable Environment	<b>Medium</b>  2016+	

## Objective 4: Investigate Council's further renewable electricity generation opportunities

Action / Activity	Budget	Responsibility	Level of Priority and Action Completed	Outputs and Outcomes
Participate in NAGA's Solar Scale Up initiative, which aims to catalyse a significant increase in the number of Council and residential solar photovoltaic (PV) systems across the NAGA region.	To be determined.	<p><b>Lead:</b> Sustainable Environment</p> <p><b>Support (internal):</b> City Communities, Services, Marketing and Communications</p> <p><b>Support (external):</b> AGL, Jemena, solar PV installers, NAGA</p>	<p><b>Medium</b></p> <p>2015</p>	<p>Participate in NAGA's Solar Scale Up initiative (output).</p> <p>Recommendations identified for energy generation opportunities at appropriate Council facilities (output).</p> <p>Renewable energy generation business case/s prepared for suitable community facilities (output).</p> <p>Investigate the development of suitable programs to support an increase in the amount of solar PV systems installed by Hume's residents (output).</p>
Keep a watching brief on the development (technological, financial) of various renewable energy micro generation opportunities, particularly solar PV and wind. Complete investigation and prepare business cases for appropriate Council facilities if appropriate.	N/A	<p><b>Lead:</b> Sustainable Environment</p> <p><b>Support (internal):</b> City Communities, Services, Marketing and Communications</p> <p><b>Support (external):</b> AGL, Jemena, solar PV installers, NAGA</p>	<p><b>Medium</b></p> <p>Ongoing</p>	<p>Installation of solar PV systems at suitable Council facilities considered by Council (outcome).</p> <p>Increased Council understanding of costs and benefits of renewable energy electricity generation for Hume (outcome).</p>

## Goal: To Influence and Advocate for Wider Change

Objective 5: Increase staff and community understanding of the environmental features of Council buildings				
Action / Activity	Budget	Responsibility	Level of Priority and Action Completed	Outputs and Outcomes
Develop signage at one or more of Council's largest facilities and priority small (community) facilities outlining environmental features.	\$10,000 (Indicative)  (Additional GAP operational budget – applicable to 2014/15 financial year)	<b>Lead:</b> Sustainable Environment  <b>Support:</b> Services, Leisure and Youth Services, Learning Community, Marketing and Communications	<b>Medium</b>  2015	Signage developed and displayed (output).  Increased understanding by staff and community members regarding the environmental features of Council buildings (outcome).
Objective 6: Support and learn from other local government areas to improve the energy efficiency of Council buildings				
Action / Activity	Budget	Responsibility	Level of Priority and Action Completed	Outputs and Outcomes
Share Hume's own key learnings and learn from others through continuing Council's active participation in the Northern Alliance for Greenhouse Action (NAGA).	Annual NAGA Membership Fee  (Recurrent in GAP operational budget)	<b>Lead:</b> Sustainable Environment  <b>Support (external):</b> Other Councils, NAGA	<b>Medium</b>  Ongoing	Informal conversations and formal presentations at NAGA/MAV meetings (output).  Conference presentations (output).  Potential cost savings through shared resources (outcome).
Share Hume's own key learnings and learn from others through collaborating with other Councils and continuing Council's participation in bodies including MAV.	N/A	<b>Lead:</b> Sustainable Environment  <b>Support (external):</b> Other Councils, MAV	<b>Medium</b>  Ongoing	Improved capacity at Hume and within other local Council's regarding energy efficient buildings (outcome).

## 4. WASTE

### Key Performance Indicator (KPI) and Targets:

- KPI 4:** Reduce waste sent to Hume’s operating landfill site.  
**Target 1:** Increase (landfill) waste diversion rate to 45% (currently ~37%).  
**Target 2:** 38% of Hume households have an organic waste bin (currently ~32%).

### Goal: To Demonstrate Greenhouse Leadership

#### Objective 1: Continue to manage Hume’s landfill sites to reduce greenhouse gas emissions

Action / Activity	Budget	Responsibility	Level of Priority and Action Completed	Outputs and Outcomes
Undertake a Feasibility Study regarding greenhouse gas management (i.e. methane flaring) at Hume’s operating landfill (Sunbury), and present to Council for consideration.	N/A  (Additional Capital Works budget for any commissioned works to be determined post-Feasibility Study).	<b>Lead:</b> Infrastructure Planning  <b>Support:</b> Contracts, Services, Sustainable Environment	<b>High</b>  2014	Feasibility Study undertaken for greenhouse gas management/methane flaring at Sunbury landfill, and presented to Council (output).  Electricity generated at Hume’s closed landfill sites (output).  Council’s greenhouse gas emissions from Hume’s landfills reduced (outcome).
Continue to outsource the generation of electricity and reduction of greenhouse gas emissions at Hume’s closed landfill sites (Camp Road and Bolinda Road, Campbellfield)	N/A  (Council receives an income stream of ~\$45,000-\$70,000/annum).	<b>Lead (external):</b> EDL (Electricity generation operators, Campbellfield)  <b>Support:</b> Infrastructure Planning	<b>Medium</b>  Ongoing	Continue to demonstrate leadership in greenhouse gas reduction at Hume landfills (outcome).

## Goal: To Influence and Advocate for Wider Change

Objective 2: Reduce the amount of waste sent to Hume's operating landfill site (Sunbury)				
Action / Activity	Budget	Responsibility	Level of Priority and Action Completed	Outputs and Outcomes
Present a Feasibility Study to Council to consider the costs and benefits of an organic waste bin for Hume households.	N/A  (Program cost to be determined post-Feasibility Study).	<b>Leads:</b> Infrastructure Planning, Services	<b>High</b>  2014	Feasibility Study on the costs and benefits of an organic waste bin considered by Council (output).  Worm farm and composting bins for residents program continued (output).  Increased levels of (landfill) waste diversion rates (outcome).  Decreased carbon pricing liability for Council at the Sunbury landfill (outcome).
Continue to run the worm farm and composting bins for Hume residents program (provided for 500-1,000 residents/annum) to encourage diversion of organic materials from landfill.	\$30,000/annum  (Existing Waste and Litter Education operational budget).	<b>Lead:</b> Services  <b>Support:</b> Marketing and Communications	<b>High</b>  Ongoing	Beneficial utilisation of Council's waste resources (outcome).  Greenhouse gas emission reductions at Sunbury landfill (outcome).  Demonstrate leadership in greenhouse gas reduction (outcome).  Improved community awareness of the link between waste and greenhouse gas emissions (outcome).

## 5. TRANSPORTATION

### Key Performance Indicator (KPI) and Target:

**KPI 5:** Minimise the greenhouse gas emissions of Council's fleet.<sup>3</sup>

**Target:** 10% reduction in greenhouse gas emissions from Council's light fleet fuel consumption (2011-12 baseline).

### Goal: To Demonstrate Greenhouse Leadership

#### Objective 1: Reduce the greenhouse gas emissions of Council's fleet

Action / Activity	Budget	Responsibility	Level of Priority and Action Completed	Outputs and Outcomes
Continue to monitor new low greenhouse emission (i.e. no more than 175g CO <sub>2</sub> -e /km passenger vehicles and no more than 185g CO <sub>2</sub> -e /km operational vehicles) light fleet vehicle options, and update the Fleet Policy if required.	N/A	<b>Lead:</b> Fleet <b>Support:</b> Sustainable Environment	<b>Medium</b> Ongoing	Fleet Policy updated as required (output). Fuel efficient fleet vehicles purchased (output). 'Fleet Respect' program completed (output). Biodiesel blend (B20) used (output).
Continue to select and purchase fuel efficient fleet passenger and operational vehicles, where operational requirements allow.	Incorporated into the recurrent Capital Works budget.	<b>Lead:</b> Fleet <b>Support:</b> Sustainable Environment	<b>Medium</b> Ongoing	Council fuel expenses reduced (outcome). Council's greenhouse gas emissions from fleet vehicles reduced (outcome).
Run 'Fleet Respect' – a program which will support fuel efficient driving practices and safety outcomes.	\$50,000 (Indicative) (Additional budget – applicable to 2014/15 and 2015/16 financial years).	<b>Lead:</b> Fleet <b>Support:</b> Sustainable Environment, Human Resources	<b>Medium</b> 2016	
Continue to purchase and use a biodiesel blend (B20) for Council's heavy fleet.	Incorporated into the recurrent Fleet operational budget.	<b>Lead:</b> Fleet <b>Support:</b> Sustainable Environment	<b>Medium</b> Ongoing	

<sup>3</sup> Council's Fleet data excludes novated lease staff vehicles. Novated lease vehicles continue to increase; Council does not currently encourage fuel efficient novated vehicle selection.

## 6. DATA MANAGEMENT

### Key Performance Indicator (KPI) and Target:

**KPI 6:** Strengthen greenhouse data management and reporting processes.

**Target 1:** Energy, water and greenhouse reporting regularly sent to facility managers of key large facilities.

**Target 2:** Scope 3 greenhouse gas emissions integrated into Council's inventory for electricity, gas and fuel.

### Goal: To Demonstrate Greenhouse Leadership

#### Objective 1: Improve the data completeness and accuracy of the greenhouse gas data tracking / management system

Action / Activity	Budget	Responsibility	Level of Priority and Action Completed	Outputs and Outcomes
Investigate updating Council's fuel consumption tracking system to incorporate estimated fuel consumption data from staff novated vehicle leases.	N/A	<b>Lead:</b> Sustainable Environment <b>Support:</b> Finance, Fleet	<b>High</b> 2014	Novated lease fuel consumption data investigated; <i>Insight</i> data updated and access obtained to Jemena's smart meter online portal (output).  Recommendations of the UBMS project considered and system commissioned, completed and used by Council if appropriate for Hume's needs (output).
Work with AGL to load additional electricity and gas site data into AGL's <i>Insight</i> online portal.	N/A	<b>Lead:</b> Sustainable Environment <b>Support (external):</b> AGL	<b>High</b> 2013	Increased accuracy and completeness of fuel, electricity and gas data in Council's greenhouse gas tracking / management system (outcome).
Gain access to Council's accurate and real-time electricity consumption and generation (solar PV) data via Jemena's smart meter online portal.	N/A	<b>Lead:</b> Sustainable Environment <b>Support (external):</b> Jemena	<b>High</b> 2013	
Continue Council's involvement in the multi-Council Utility Billing Management System (UBMS) project, to pursue the development of a Council-specific utility data management tool covering greenhouse sources including electricity, gas and fuel.	\$10,000/annum. (Recurrent in GAP operational budget).	<b>Lead:</b> Sustainable Environment <b>Support (internal):</b> Fleet, Information Services, Finance <b>Support (external):</b> UBMS Working Group, MAV	<b>Medium</b> 2016	

## Objective 2: Establish energy efficiency project data tracking and potential re-investment processes

Action / Activity	Budget	Responsibility	Level of Priority and Action Completed	Outputs and Outcomes
Set up an Excel spreadsheet to progressively track the annual utility cost savings to Council which have resulted from individual energy efficiency projects (including street lighting).	N/A	<b>Lead:</b> Sustainable Environment <b>Support:</b> Finance	<b>High</b> 2013	Energy efficiency projects and utility cost saving spreadsheet set up and regularly updated as utility data is available (output).  Increased understanding and appreciation by Council of direct and ongoing utility cost savings delivered by energy efficiency projects (outcome).
Investigate the development of a process for establishing an 'ESD Fund' – to re-invest utility cost savings from energy efficiency projects in funding further sustainability initiatives in Council facilities.	N/A	<b>Lead:</b> Sustainable Environment <b>Support:</b> Finance, Capital Works	<b>High</b> 2014	Process to establish an 'ESD Fund' investigated (output).  Additional budget available for sustainability initiatives in Council facilities (outcome).

## Objective 3: Assist facility managers to understand and reduce energy, water and greenhouse from their operations

Action / Activity	Budget	Responsibility	Level of Priority and Action Completed	Outputs and Outcomes
Set up an internal dashboard reporting process, whereby facility managers of key facilities will receive regular energy, water and greenhouse performance data for their facility.  See Appendix 1 for further details on the key facilities.	N/A	<b>Lead:</b> Sustainable Environment  <b>Support (internal):</b> Leisure and Youth Services, Services, Learning Community, Family and Children's Services  <b>Support (external):</b> AGL, EnergyAustralia, City West Water, Yarra Valley Water, Western Water	<b>High</b> 2014	Energy, water and greenhouse reporting system for facility managers established (output).  Increased understanding by facility managers of up-to-date energy, water and greenhouse trends due to their operations (outcome).  Positive influence on facility managers to drive energy, water and greenhouse reductions (outcome).

## Objective 4: Improve the integrity and transparency of Council's greenhouse gas reporting system

Action / Activity	Budget	Responsibility	Level of Priority and Action Completed	Outputs and Outcomes
Commence a reconciliation process between Council facilities / assets, utility meters and utility invoicing, to identify cost and data anomalies and to improve the accuracy of Council's greenhouse and water reporting.	\$10,000 (Existing 2013/14 GAP Operational budget).	<b>Lead:</b> Sustainable Environment  <b>Support (internal):</b> Finance, Services, Leisure and Youth Services, Learning Community, Family and Children's Services  <b>Support (external):</b> AGL, EnergyAustralia, City West Water, Yarra Valley Water, Western Water	<b>Medium</b>  2014	Council asset and utility billing reconciliation commenced (output).  Scope 3 emission sources integrated into Council's greenhouse inventory (output).  Greenhouse Gas Inventory Protocols Manual developed (output).  Utility billing inaccuracies identified (output).  Utility cost savings for Council identified (outcome).
Integrate scope 3 greenhouse gas emissions for electricity, gas and fuel into Council's annual greenhouse inventory, and investigate the inclusion of other scope 3 emissions such as paper use, travel to work and corporate waste. <sup>4</sup>	N/A	<b>Lead:</b> Sustainable Environment	<b>Medium</b>  2014	A more complete and accurate Council greenhouse gas inventory (outcome).  Clear, step-by-step documentation of Council's greenhouse gas reporting process to enable yearly consistency (outcome).
Develop a Greenhouse Gas Inventory Protocols Manual, to clearly document Council's greenhouse gas inventory compilation process.	N/A	<b>Lead:</b> Sustainable Environment	<b>Medium</b>  2014	

<sup>4</sup> Scope 3 greenhouse gas emissions refer to emissions that occur *indirectly* as a result of an organisation's operations. For example for electricity consumption, Scope 3 emissions would relate to fuel extraction, transmission and distribution losses. Scope 3 greenhouse gas emissions have not been included in Council's greenhouse inventory to date but this is now standard reporting practice in line with the National Greenhouse and Energy Reporting Scheme.

## Objective 5: Establish an electricity generation reporting system

Action / Activity	Budget	Responsibility	Level of Priority and Action Completed	Outputs and Outcomes
<p>Gain access to Council's electricity generation (solar PV) data via Jemena's online portal, and collate annual generation data.</p> <p>Collate data on the electricity generated at Council's closed landfill sites (Campbellfield).</p> <p>Collate data on electricity generated by Broadmeadows Leisure Centre cogeneration unit (from end 2013).</p>	N/A	<p><b>Lead:</b> Sustainable Environment</p> <p><b>Support (internal):</b> Infrastructure Planning, Leisure and Youth Services, Capital Works</p> <p><b>Support (external):</b> Jemena, EDL (Electricity generation operators, Campbellfield)</p>	<p><b>Low</b></p> <p>2014</p>	<p>Electricity generation reporting system established (output).</p> <p>Electricity generation reported to staff and the Hume community via Council's annual Sustainability Report (output).</p> <p>Increased understanding by staff and the Hume community regarding Council's own annual clean energy generation (outcome).</p>

## Goal: To Influence and Advocate for Wider Change

### Objective 6: Continue to advocate to other organisations to better understand municipal-wide energy consumption and generation

Action / Activity	Budget	Responsibility	Level of Priority and Action Completed	Outputs and Outcomes
Continue to collaborate with other Councils on NAGA projects, such as Communicating Energy Use, to obtain improved access to municipal energy data via the electricity distribution businesses.	Annual NAGA Membership Fee.  (Recurrent in GAP operational budget).	<b>Lead:</b> Sustainable Environment  <b>Support (external):</b> NAGA, other Councils, Jemena	<b>Medium</b>  Ongoing	Access to Hume and other local government municipal energy consumption and generation data profiles (output).  Increased understanding of the Hume municipality's energy consumption and generation patterns (outcome).

## APPENDIX 1 - Key Facilities for Regular Environmental Reporting

Details of the key facilities for regular energy, water and greenhouse performance reporting are summarised in the table below. The nine key facilities are six facilities that will have energy efficiency works implemented under Council's successful Australian Government Community Energy Efficiency Program (CEEP) funding grant, and three additional large facilities.

Key Facility	Rational for inclusion	Greenhouse Reduction Opportunities (if relevant) <sup>5</sup>	Facility Manager / Interested Parties
<b>Broadmeadows Leisure Centre</b>	Largest energy using Council facility. Facility audit completed in 2013 and found to have good energy reduction opportunities; energy efficiency works to be implemented under CEEP.	Pool blankets Pool pump upgrades	Allan Primrose, Manager Broadmeadows Leisure Centre
<b>Sunbury Aquatic and Leisure Centre</b>	Second largest energy using Council facility. Facility audit completed in 2013 and found to have good energy reduction opportunities; energy efficiency works to be implemented under CEEP.	Pool pump upgrades Efficient lighting upgrades	Cameron Owen, Manager Sunbury Aquatic and Leisure Centre
<b>Craigieburn Leisure Centre Stadiums</b>	The Craigieburn Leisure Centre, including the sports stadiums, is currently the third largest energy using Council facility. Facility audit completed in 2013 and found to have good energy reduction opportunities at the stadiums; energy efficiency works to be implemented under CEEP. Despite the new planned Craigieburn Leisure Centre, the sports stadium courts will remain in on-going use at this site.	Stadium lighting upgrades	Michael Bzdel, Manager Craigieburn Leisure Centre  External : Jason Moore, President, Craigieburn Eagles Basketball Association
<b>Broadmeadows Administration Building</b>	Fourth largest energy using Council facility.		Henry Budz, Coordinator Property and Resources
<b>Broadmeadows Global Learning Centre</b>	Fifth largest energy using Council facility.		Dana Burnett, Coordinator Learning Centre
<b>Craigieburn Global Learning Centre</b>	Likely to be the sixth largest energy using Council facility (based on available electricity consumption data to date – facility opened May 2012).		Dana Burnett, Coordinator Learning Centre
<b>Broadmeadows Basketball</b>	Facility audit completed in 2013 and found to have good	Stadium lighting upgrades	Allan Primrose, Manager

<sup>5</sup> As per recent energy efficiency audit results (completed in 2013).

Key Facility	Rational for inclusion	Greenhouse Reduction Opportunities (if relevant) <sup>5</sup>	Facility Manager / Interested Parties
<b>Stadium</b>	energy reduction opportunities; energy efficiency works to be implemented under CEEP.		Broadmeadows Leisure Centre External: Terri Sutton, General Manager, Broadmeadows Basketball Association
<b>Broadmeadows Netball Stadium</b>	Facility audit completed in 2013 and found to have good energy reduction opportunities; energy efficiency works to be implemented under CEEP.	Stadium lighting upgrades	Allan Primrose, Manager Broadmeadows Leisure Centre
<b>Boardman Stadium</b>	Facility audit completed in 2013 and found to have good energy reduction opportunities; energy efficiency works to be implemented under CEEP.	Stadium lighting upgrades	Georgina Green, Coordinator Minor Facilities External: Rick Giannino, Operations Administrator, Sunbury Basketball Association Inc.