



NAGA

NORTHERN
ALLIANCE FOR
GREENHOUSE
ACTION

Hume City

Energy Profile

Helping Council to improve policies, target programs,
and promote energy smart communities.

Municipal Energy Profile

Introduction

This Municipal Energy Profile provides a comprehensive overview of energy (gas and electricity use) and associated emissions in the municipality. It shows the trends in energy consumption for residential, commercial and industrial sectors with totals for each suburb. The profile draws upon energy data for the period 2004-2014.

Background

The Northern Alliance for Greenhouse Action (NAGA) has been working to obtain local energy data since 2008. NAGA is working to ensure urgent, regional action in our transition to a climate-changed low-carbon future. NAGA supports councils commitments to enhance the wellbeing of their municipalities. Information provided by Victorian electricity and gas distributors to NAGA forms the basis of the profiles.

MEFL has developed a detailed municipal data tool to record raw energy consumption data. This data has been used to construct energy profiles for each of the councils and presents the most comprehensive set of local level energy information produced in Australia.

The profiles demonstrate NAGA's commitment to local leadership in climate change action.

Applications

The availability of local information on energy consumption and trends enables councils to:

- » improve targeting of policies, programs and incentives to reduce energy demand by knowing where consumption and emissions are highest;
- » identify and target effort for maximum impact;
- » communicate to create a better informed community on energy use, carbon pollution and costs; and
- » monitor the effectiveness of energy saving and emission reduction programs and progress towards local, regional or state targets.

Acknowledgements

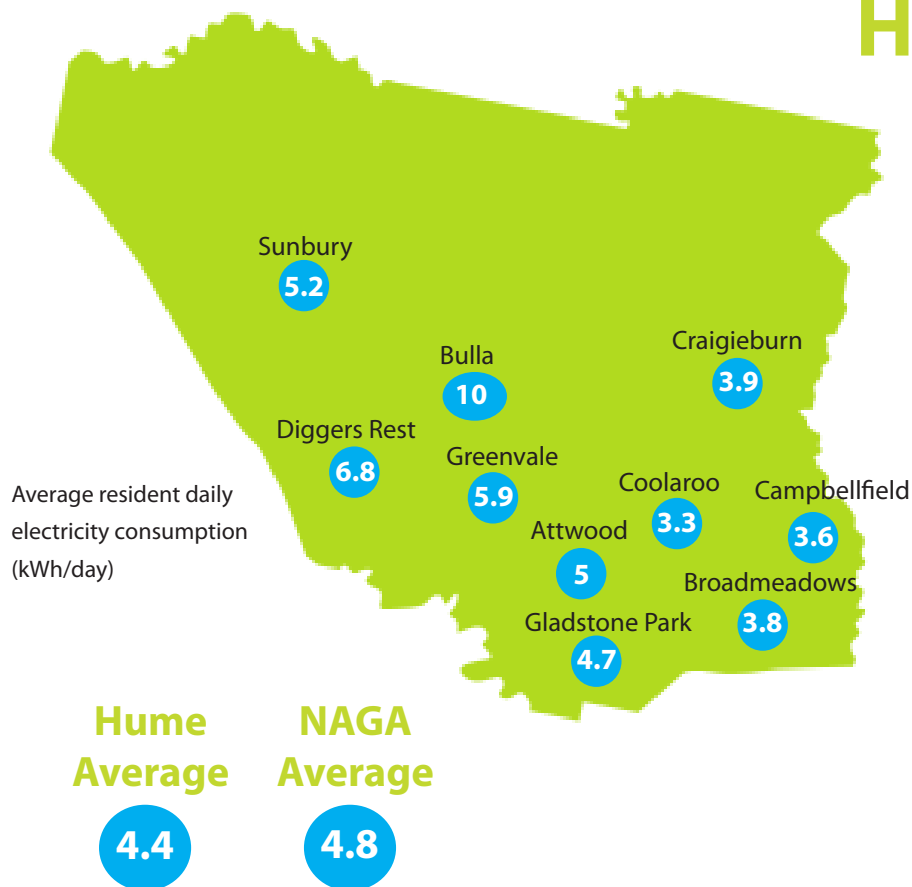
The Municipal Energy Profile was originally developed for NAGA by Moreland Energy Foundation, with funding from the Victorian Government. NAGA acknowledges Victoria's gas and electricity distributors for providing data used to develop this profile.

Enquires

Every attempt has been made to verify the data, however it should be noted that this report is intended to be iterative and your feedback is welcome. Also, there may be some unavoidable discrepancies between 2013 and 2014 reports due to changes in the data reporting by the distribution network businesses.

The detailed data on which this profile has been developed is located within the municipal data tool; for more information please contact NAGA.

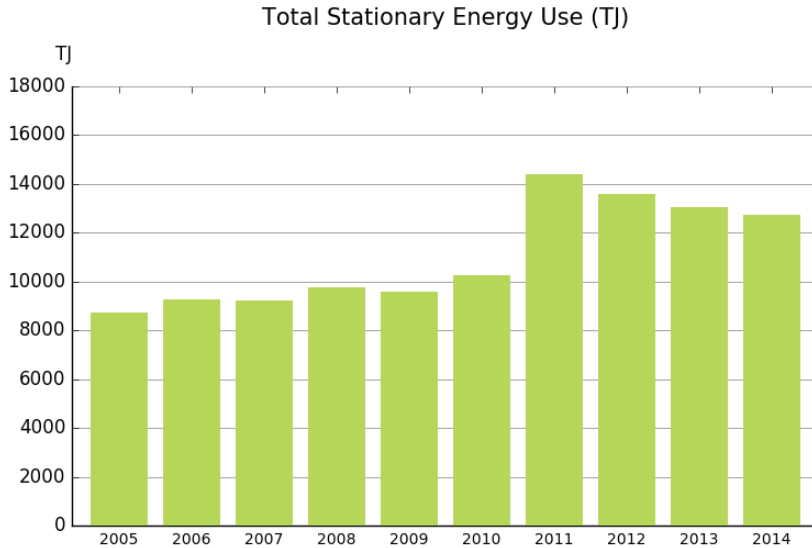
Hume



Changes from 2009 to 2014

	Hume Average	NAGA Average
Annual decrease in daily household electricity use	-3.2%	-4.3%
Annual decrease daily household gas use per year	-2.7%	-2%
Annual decrease in daily household GHG emissions	-4.4%	-5.2%

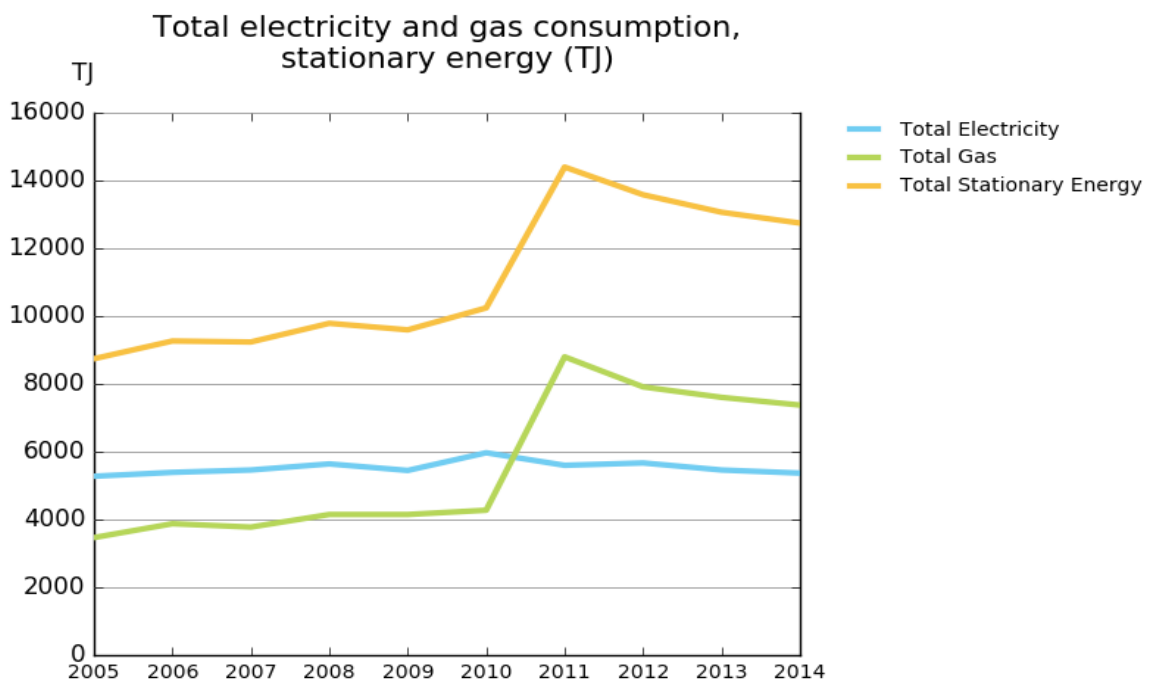
Hume's energy consumption



Hume's residential emissions have been decreasing on average 4.4% per year since 2009.

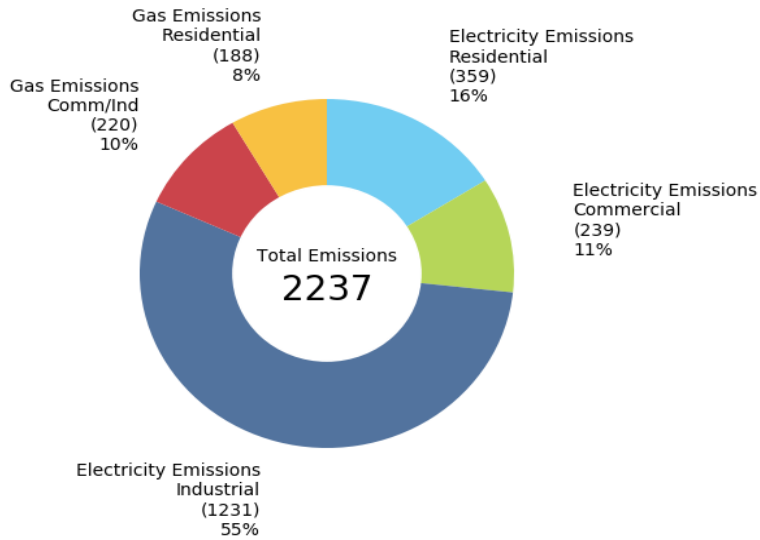
Total stationary energy consumption for the municipality combines gas and electricity used in the residential, commercial and industrial sectors.

For electricity, megawatt hours (MWh) have been converted to terajoules (TJ). Note that in 2011 there is a significant increase in gas use recorded in the commercial and industrial sector due to a gas distributor providing previously-undisclosed information about industrial gas use.



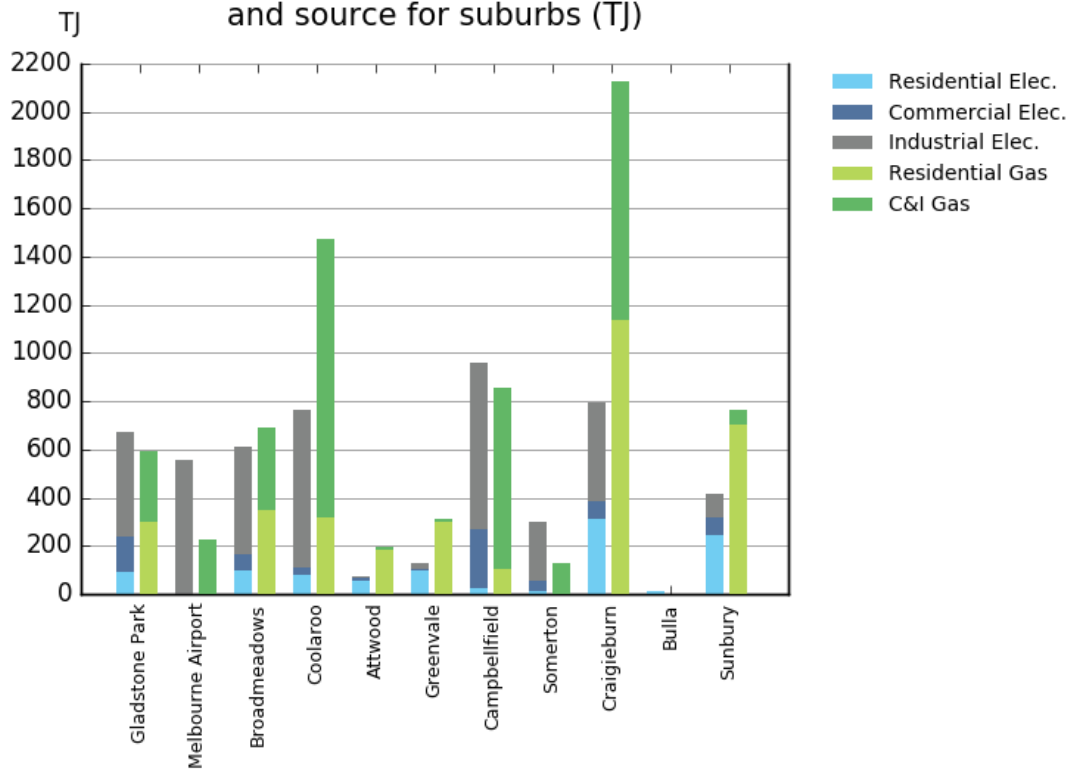
Energy consumption by sector

2014 Sector Emissions kt CO₂-e/year



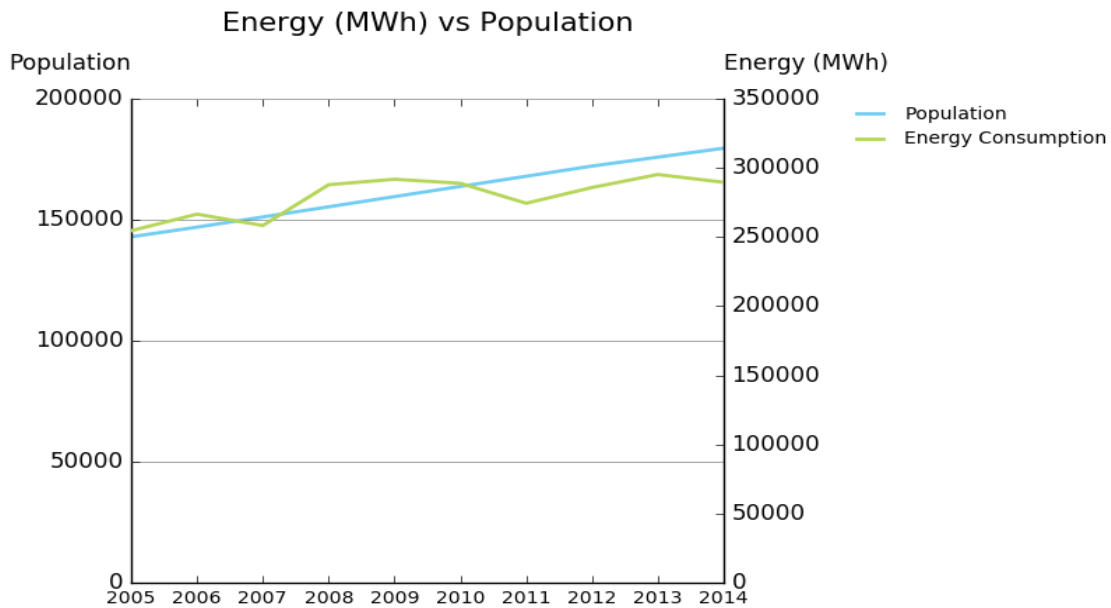
Emissions for both gas and electricity consumption are down from the previous year for all sectors.

2014 annual energy use by sector and source for suburbs (TJ)



*Shared with other municipalities

Residential Energy



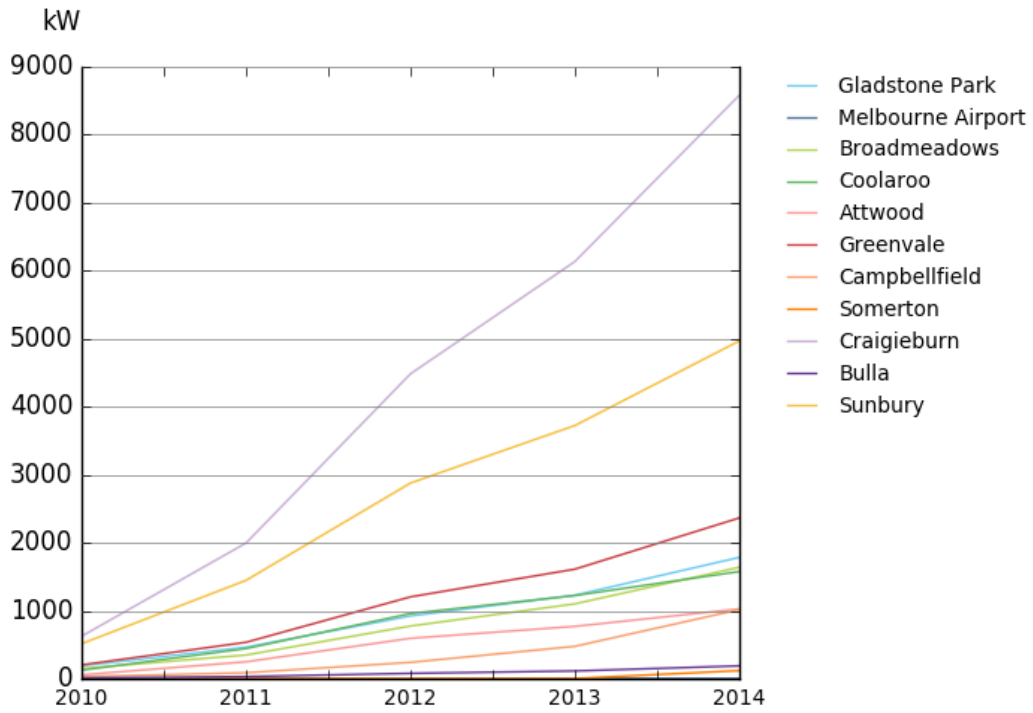
The population of Hume continues to grow, and since 2011 this growth has seen a corresponding increase in electricity consumption. However, electricity consumption has declined between 2013 and 2014.

Solar Energy

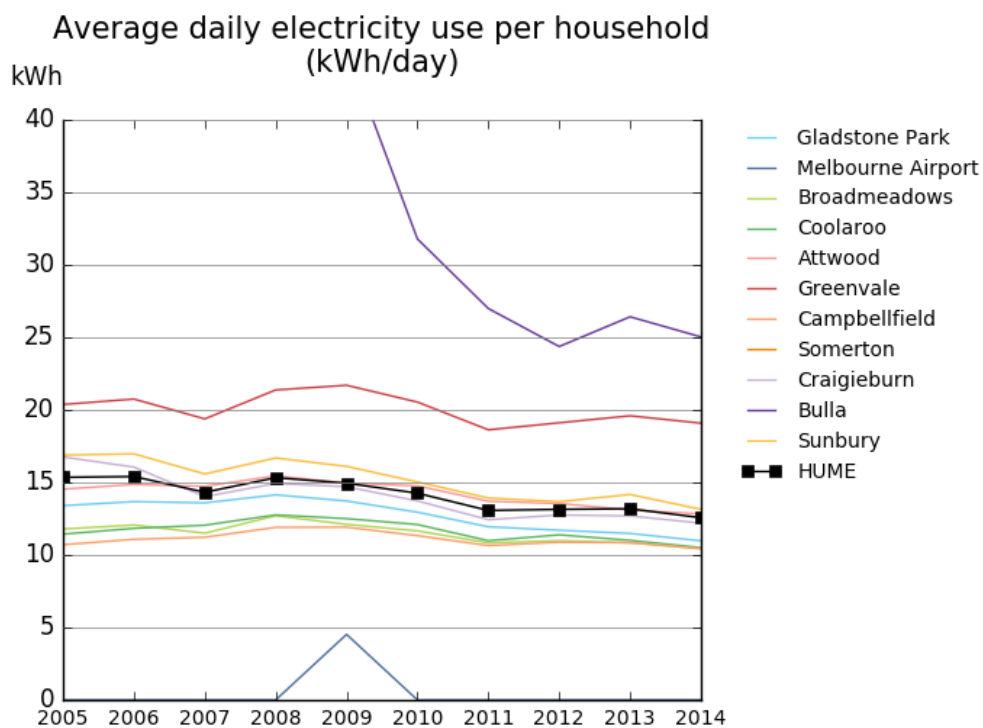
There continues to be a rapid uptake of solar PV systems in the municipality, with the majority of systems being installed on homes. Cumulative installed systems by the end of 2014 are outlined below.

Suburb in 2014	Postcode	No. System	Installed PV kW
Gladstone Park	3043	476	1785
Broadmeadows	3047	416	1639
Coolaroo	3048	507	1577
Attwood	3049	283	1027
Greenvale	3059	516	2365
Campbellfield	3061	121	1017
Somerton	3062	2	119
Oaklands Junction	3063	21	120
Craigieburn	3064	2411	8580
Diggers Rest	3427	21	72.2
Bulla	3428	31	189.3
Sunbury	3429	1437	4969
Hume Total		6252	23495

Solar PV capacity (kW installed)



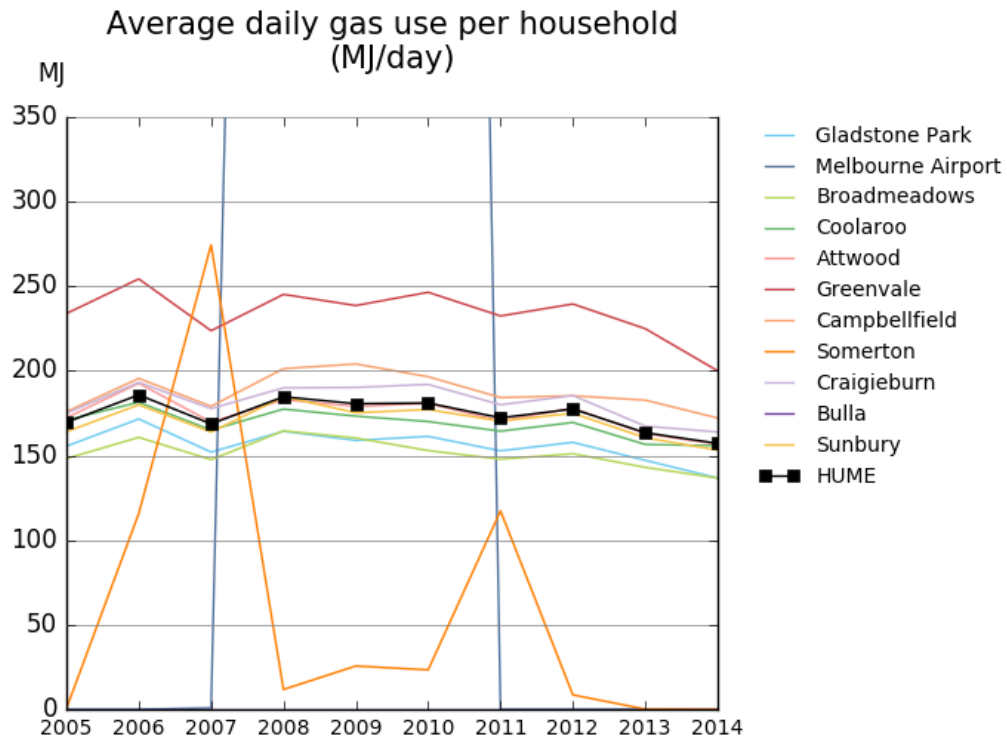
Residential Electricity



Overall electricity consumption continues to trend downwards for Hume. Some suburbs have quite high occupancy (such as Greenvale) which leads to higher overall household consumption, while other suburbs (such as Bulla) generally do not have reticulated gas and a lower population.

Suburb in 2014	Postcode	Electricity kWh/hh/day	Electricity kWh/person/day
Gladstone Park	3043	11.5	4.7
Melbourne Airport	3045		
Broadmeadows	3047	10.8	3.8
Coolaroo	3048	11	3.3
Attwood	3049	13.1	5
Greenvale	3059	19.6	5.9
Campbellfield	3061	10.8	3.6
Somerton	3062		
Oaklands Junction	3063	20.8	6.2
Craigieburn	3064	12.7	3.9
Diggers Rest	3427	16	6.8
Bulla	3428	26.4	10
Sunbury	3429	14.2	5.2
Hume Average		13.2	4.4
NAGA Average		11.6	4.8

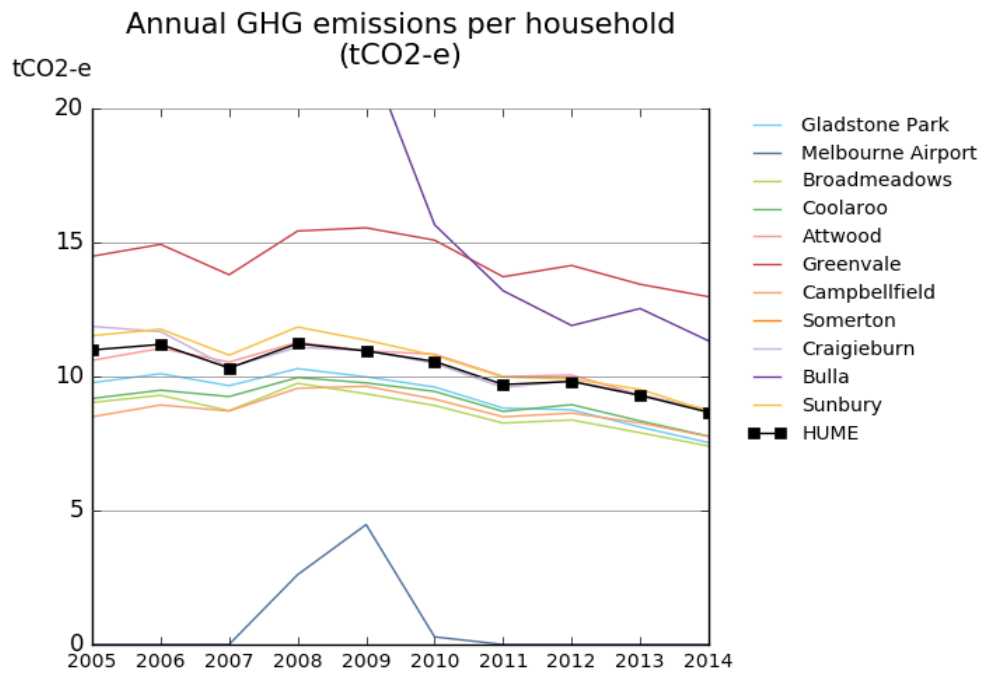
Residential Gas



Suburb in 2014	Postcode	Gas Usage MJ/hh/day
Gladstone Park	3043	137
Melbourne Airport	3045	
Broadmeadows	3047	137
Coolaroo	3048	156
Attwood	3049	157
Greenvale	3059	200
Campbellfield	3061	172
Somerton	3062	
Oaklands Junction	3063	
Craigieburn	3064	164
Diggers Rest	3427	130
Bulla	3428	
Sunbury	3429	153
Hume Average		157.2
NAGA Average		137.6

Gas consumption per household in Hume has remained relatively stable over the last 5 years.

Residential greenhouse gas emissions



Greenhouse gas emissions per household have been trending downwards since 2008.

Suburb in 2014	Postcode	CO ₂ Emissions tCO ₂ e/hh/year
Gladstone Park	3043	7.5
Melbourne Airport	3045	
Broadmeadows	3047	7.4
Coolaroo	3048	7.8
Attwood	3049	8.8
Greenvale	3059	13
Campbellfield	3061	7.8
Somerton	3062	
Oaklands Junction	3063	
Craigieburn	3064	8.7
Diggers Rest	3427	8.5
Bulla	3428	11.3
Sunbury	3429	8.7
Hume Average		8.7
NAGA Average		7.5