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 2004-2013.

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

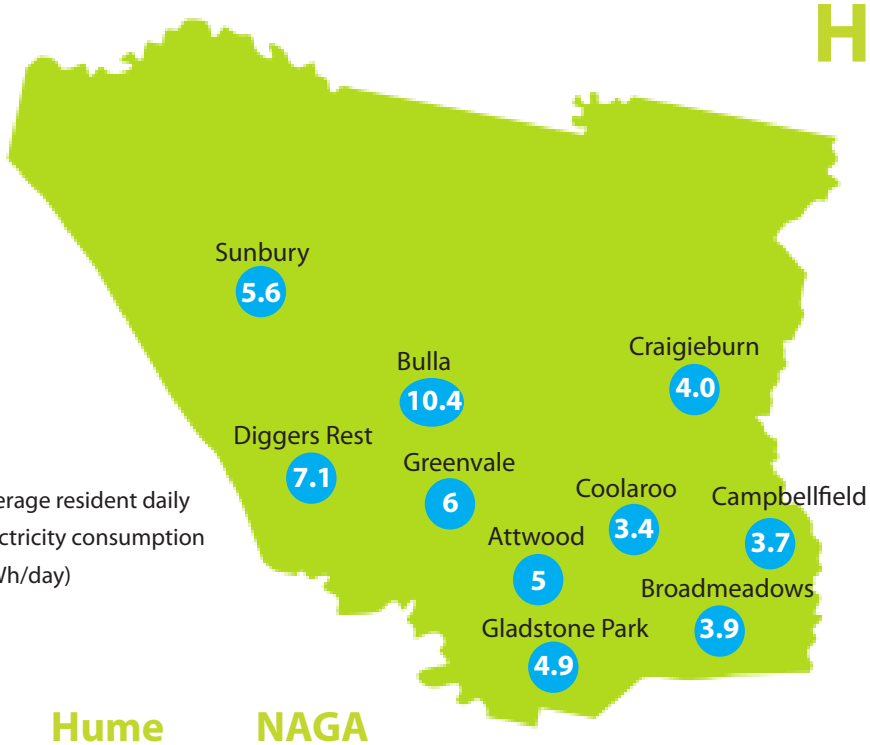
The Municipal Energy Profile was originally developed for NAGA by Moreland Energy Foundation, with funding from the Victorian Government. NAGA acknowledges Victoria's gas and electricity distributors for providing data used to develop this profile.

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 2012 and 2013 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



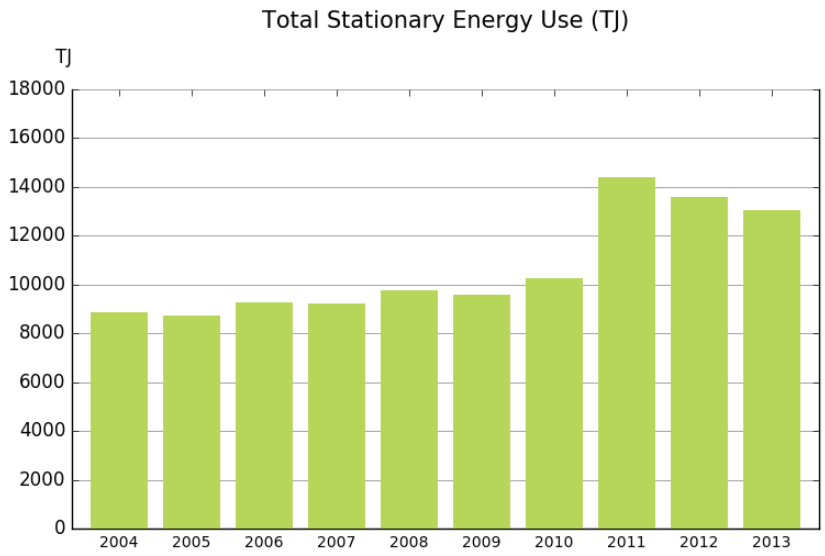
Average resident daily electricity consumption (kWh/day)

Hume Average 4.6

NAGA Average 5.1

Changes from 2009 to 2013	Hume Average	NAGA Average
Annual decrease in daily household electricity use	-3.4%	-3.9%
Annual decrease daily household gas use per year	-2.2%	-0.3%
Annual decrease in daily household GHG emissions	-3.4%	-3.3%

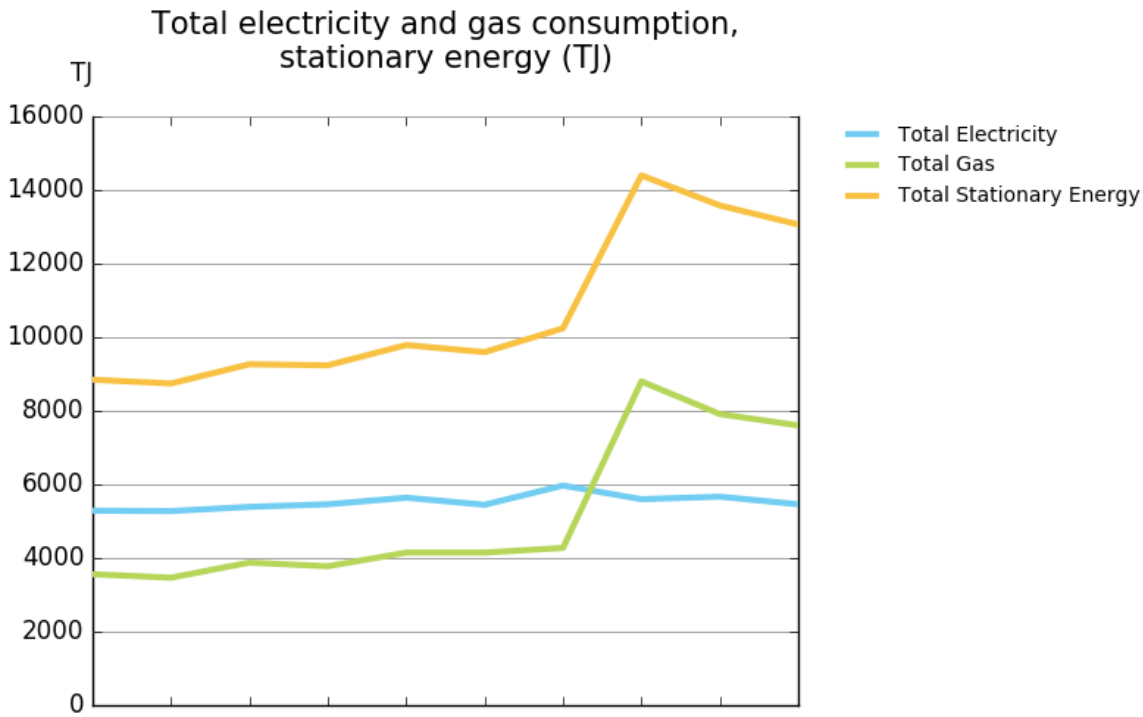
Hume's energy consumption



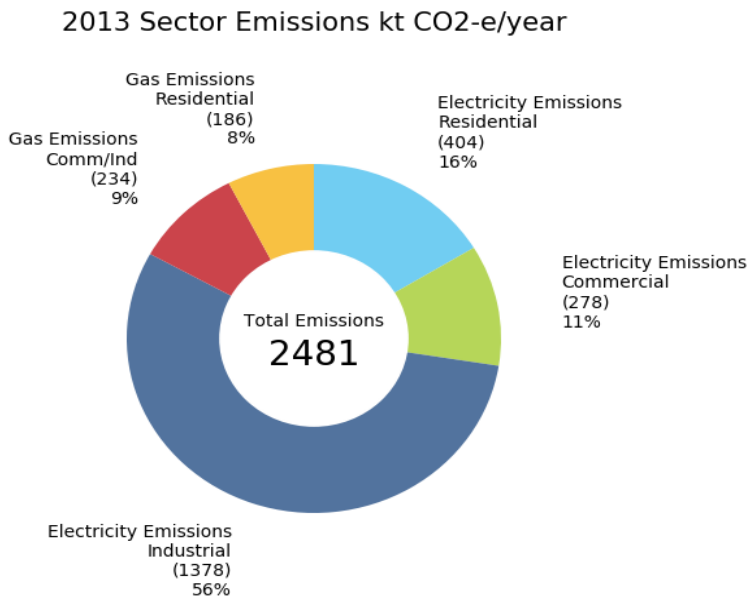
Hume's residential emissions have been decreasing on average 3.4% per year since 2009.

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

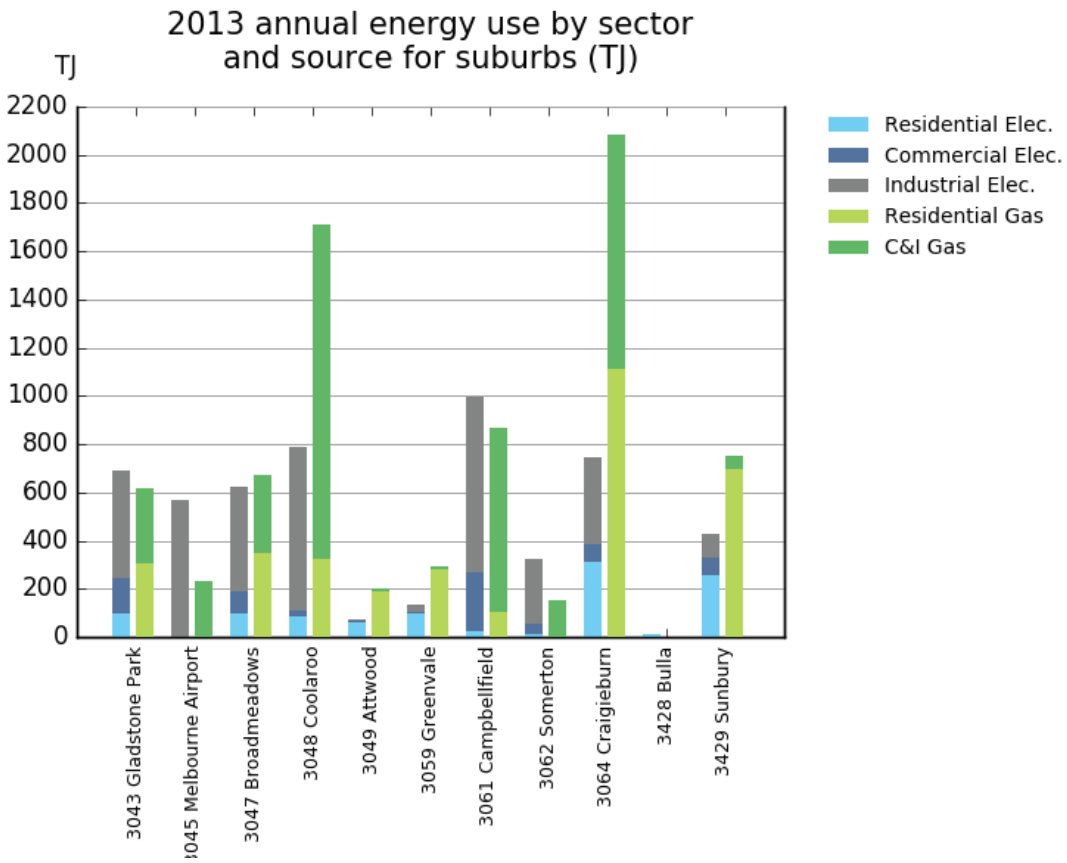
For electricity, megawatt hours (MWh) have been converted to terajoules (TJ). Note that in 2011 there is a significant increase in gas use recorded in the commercial and industrial sector due to a gas distributor providing previously-undisclosed information about industrial gas use.



Energy consumption by sector

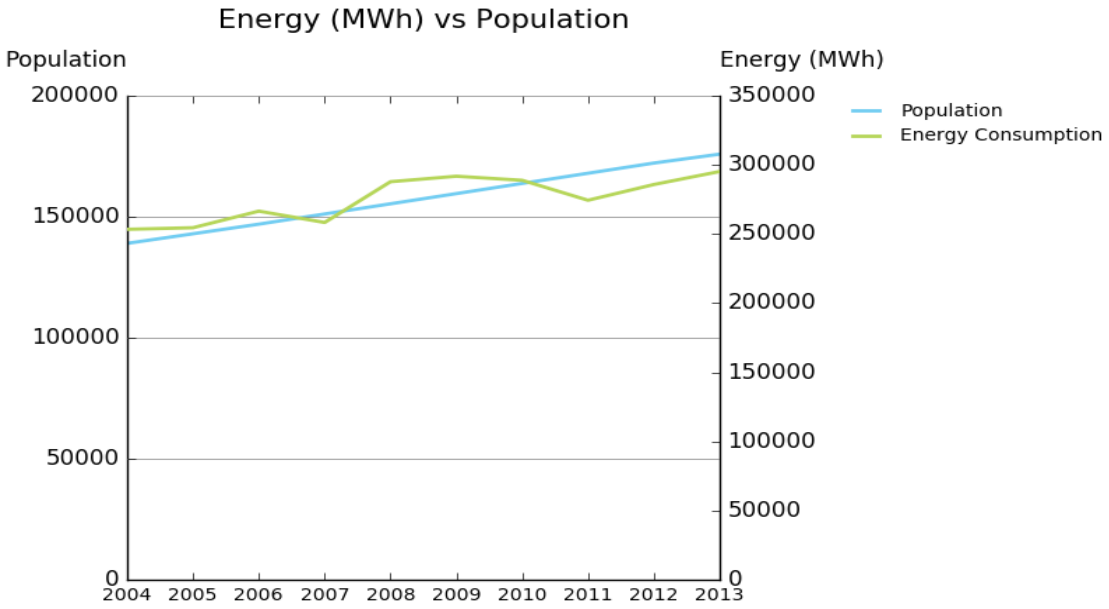


Emissions for gas consumption are slightly down from the previous year for all sectors. Electricity emissions have remained relatively stable for all sectors.



*Shared with other municipalities

Residential Energy



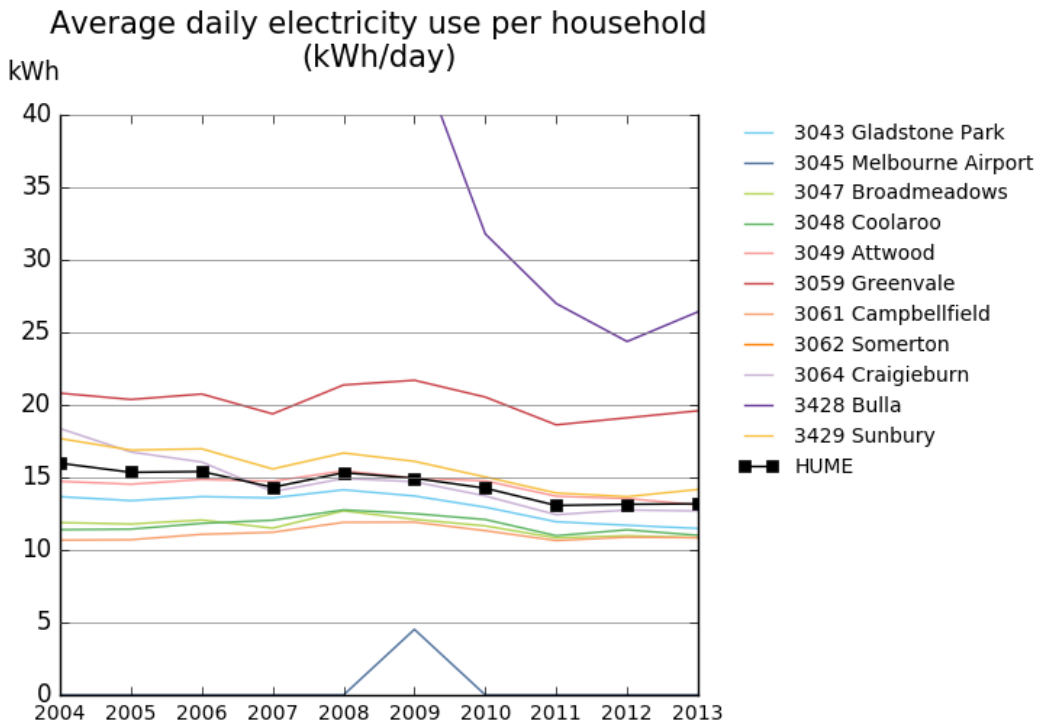
The population of Hume continues to grow, and since 2011 this growth has seen a corresponding increase in electricity consumption.

Solar Energy

Solar PV systems have seen a rapid uptake in the municipality, with the majoirty of systems being installed on homes. Cumulative installed systems by the end of 2013 are outlined below.

Suburb in 2013	Postcode	No. System	Installed PV kW
Gladstone Park	3043	476	1228
Melbourne Airport	3045	2	4.7
Broadmeadows	3047	416	1101
Coolaroo	3048	507	1224
Attwood	3049	283	770
Greenvale	3059	516	1612
Campbellfield	3061	121	477
Somerton	3062	2	4.2
Oaklands Junction	3063	21	88.5
Craigieburn	3064	2411	6136
Diggers Rest	3427	21	57
Bulla	3428	31	114.5
Sunbury	3429	1437	3724
Hume Total		**6252**	**16564**

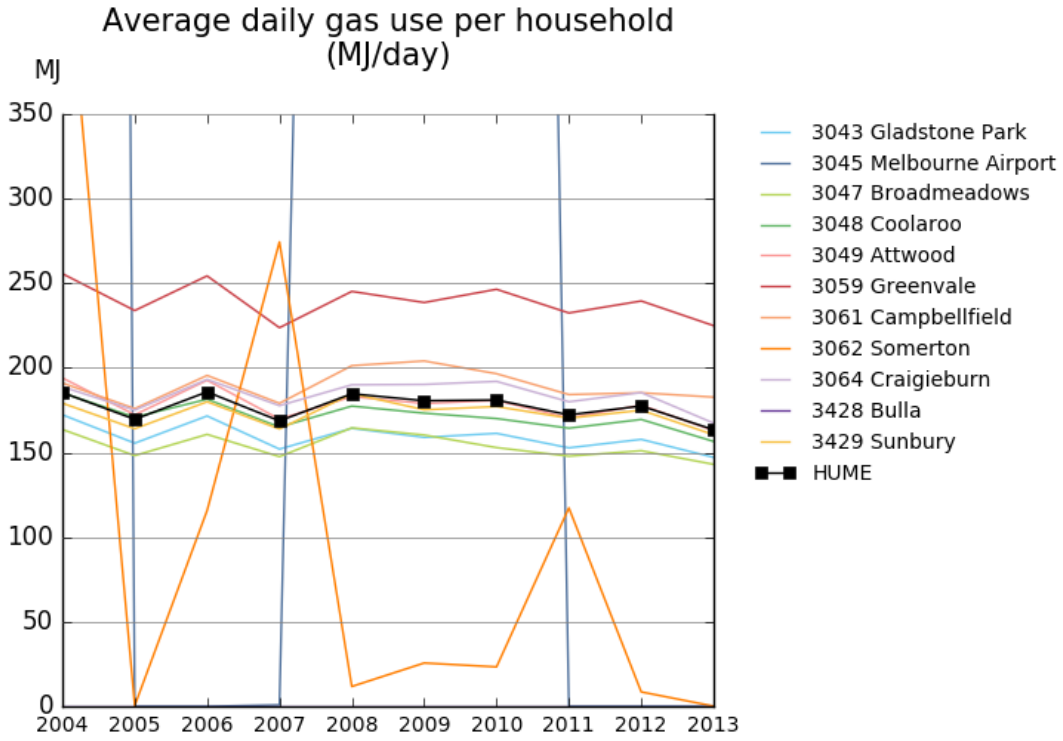
Residential Electricity



Overall electricity consumption is trending 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.

Suburb in 2013	Postcode	Electricity kWh/hh/day	Electricity kWh/person/day
Gladstone Park	3043	11.5	4.9
Melbourne Airport	3045		
Broadmeadows	3047	10.8	3.9
Coolaroo	3048	11	3.4
Attwood	3049	13.1	5
Greenvale	3059	19.6	6
Campbellfield	3061	10.8	3.7
Somerton	3062		
Oaklands Junction	3063	20.8	7.3
Craigieburn	3064	12.7	4.0
Diggers Rest	3427	16	7.1
Bulla	3428	26.4	10.4
Sunbury	3429	14.2	5.6
Hume Average		**13.2**	**4.6**
NAGA Average		**12.5**	**5.1**

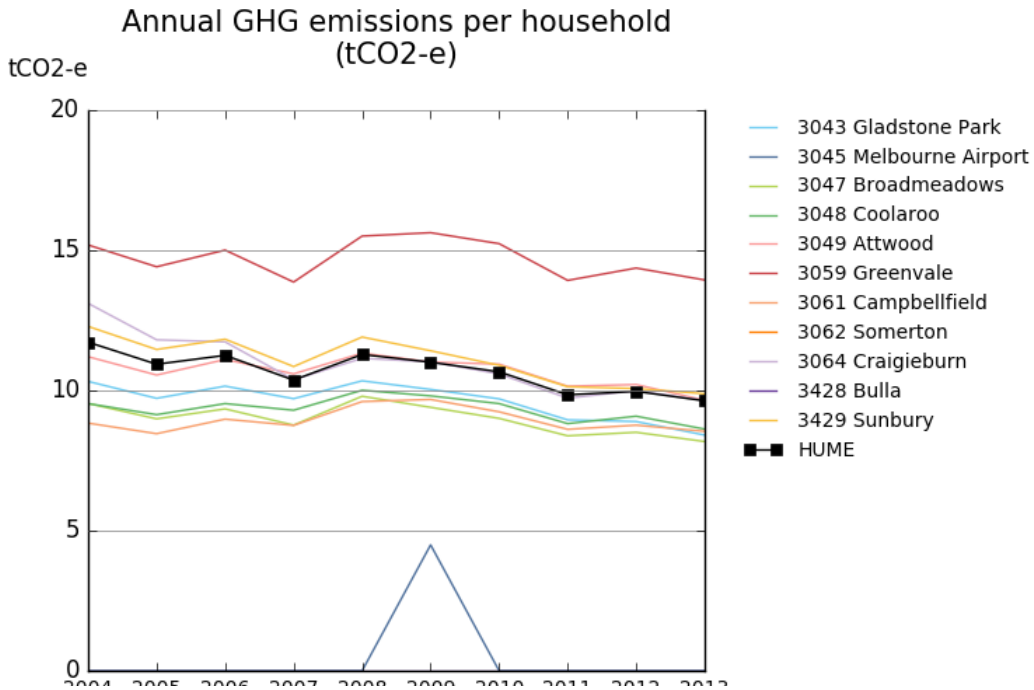
Residential Gas



Suburb in 2013	Postcode	Gas Usage MJ/hh/day
Gladstone Park	3043	147
Melbourne Airport	3045	
Broadmeadows	3047	143
Coolaroo	3048	156.5
Attwood	3049	163
Greenvale	3059	225
Campbellfield	3061	182.7
Somerton	3062	
Oaklands Junction	3063	
Craigieburn	3064	167.4
Diggers Rest	3427	126.1
Bulla	3428	
Sunbury	3429	160.5
Hume Average		**163.5**
NAGA Average		**156**

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

Residential greenhouse gas emissions



Greenhouse gas emissions per household are relatively stable for Hume, trending downwards slightly after 2008.

Suburb in 2012	Postcode	CO2 Emissions tCO2e/hh/year
Gladstone Park	3043	8.4
Melbourne Airport	3045	
Broadmeadows	3047	8.2
Coolaroo	3048	8.6
Attwood	3049	9.7
Greenvale	3059	13.9
Campbellfield	3061	8.3
Somerton	3062	
Oaklands Junction	3063	
Craigieburn	3064	9.6
Diggers Rest	3427	9.8
Bulla	3428	
Sunbury	3429	9.9
Hume Average		**9.6**
NAGA Average		**8.8**