



NAGA

NORTHERN
ALLIANCE FOR
GREENHOUSE
ACTION

Manningham 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 drawn 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.

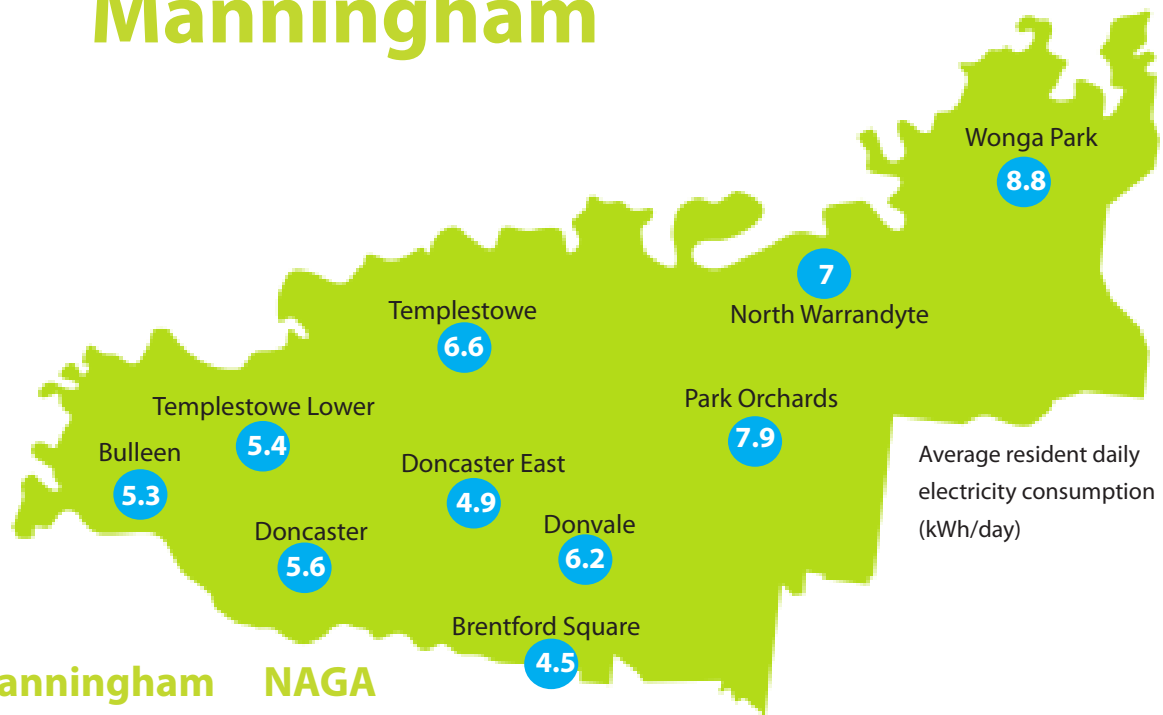
Acknowledgements

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

Manningham



Manningham Average

5.8

NAGA Average

4.8

Changes from 2009 to 2014

Manningham Average

NAGA Average

Annual decrease in daily household electricity use

-4.6%

-4.3%

Annual decrease daily household gas use per year

-2.6%

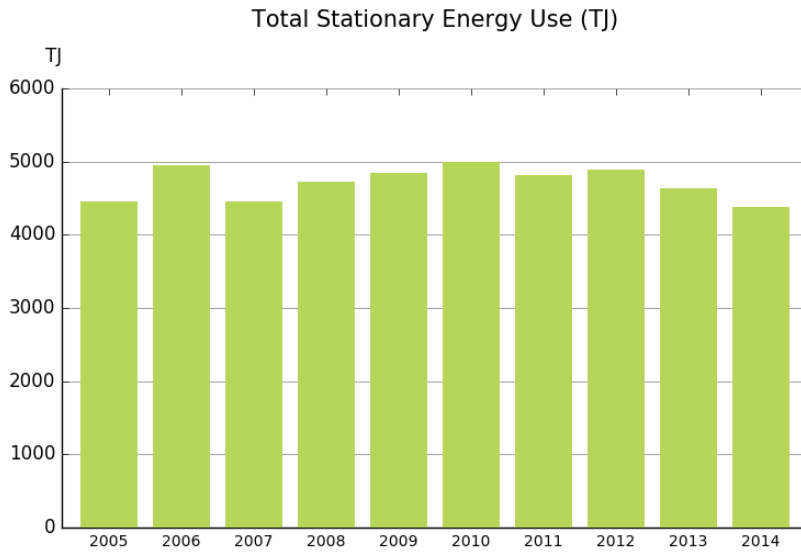
-2%

Annual decrease in daily household GHG emissions

-5.4%

-5.2%

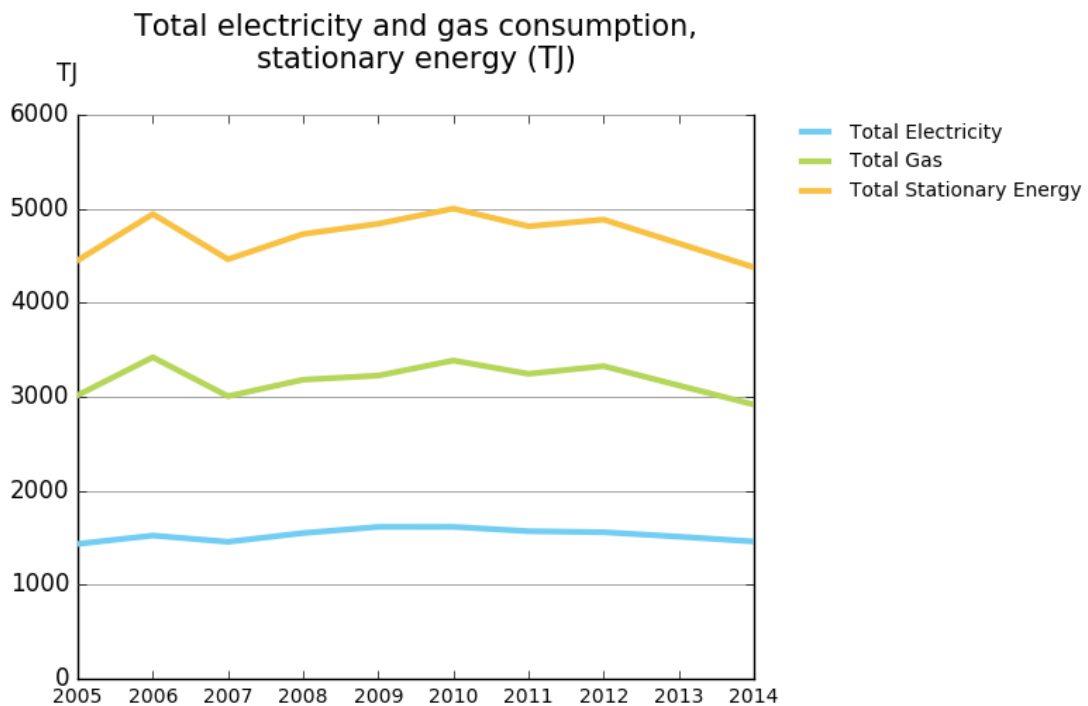
Manningham's energy consumption



The 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).

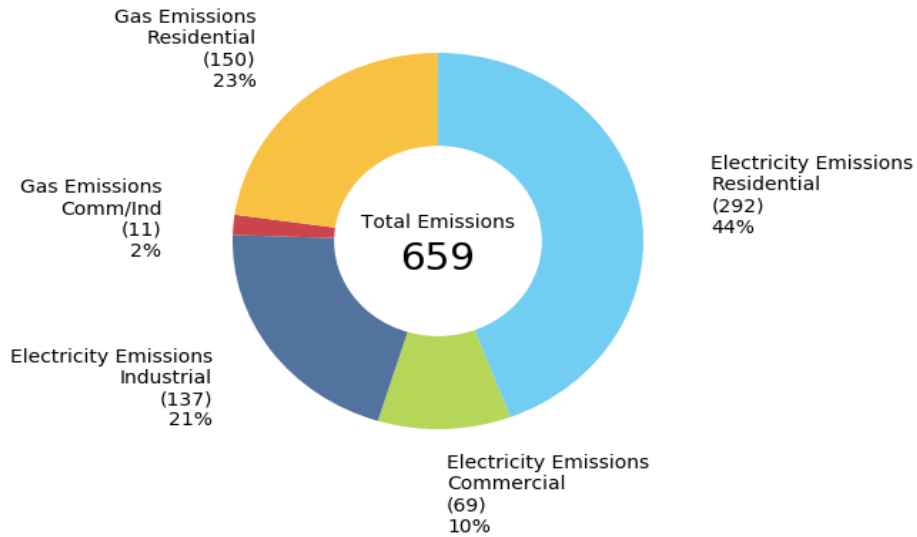
Manningham's average daily household usage of electricity is higher than the NAGA average



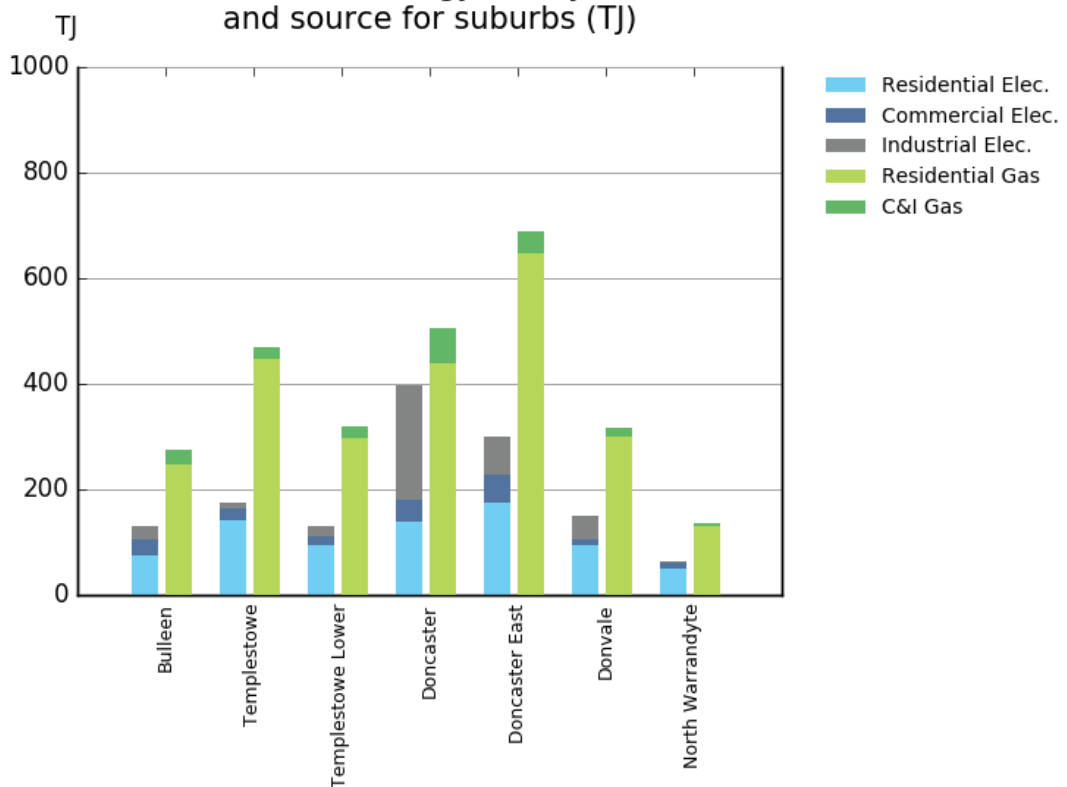
Energy consumption by sector

Total emissions have decreased since 2013 and 2014. However, part of this can be attributed to the increase of renewable energy from grid supplied electricity.

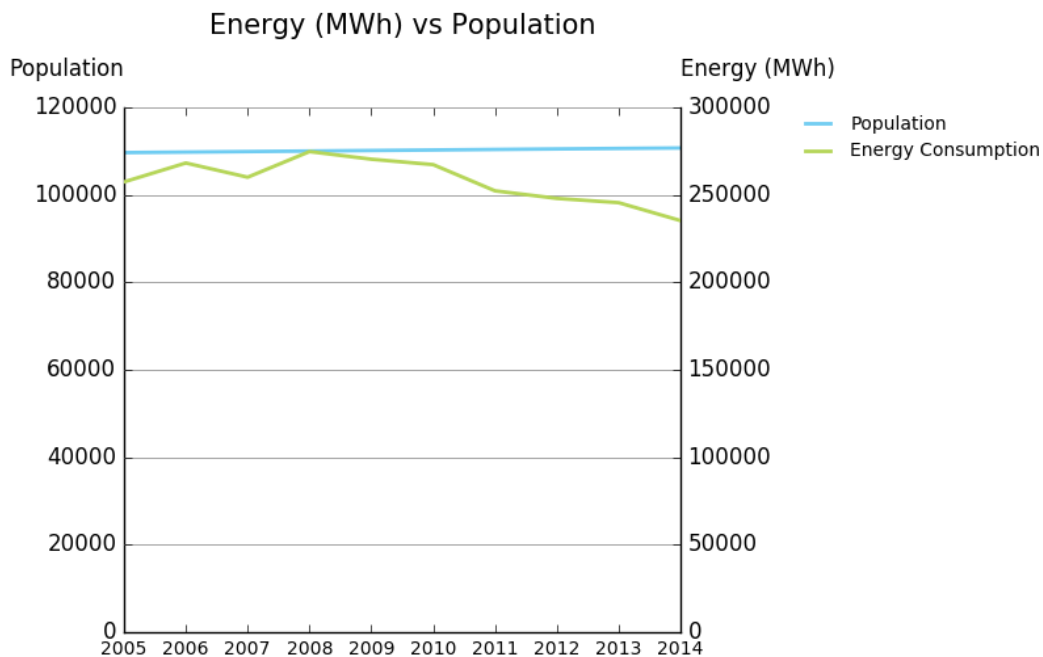
2014 Sector Emissions kt CO₂-e/year



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



Residential Energy

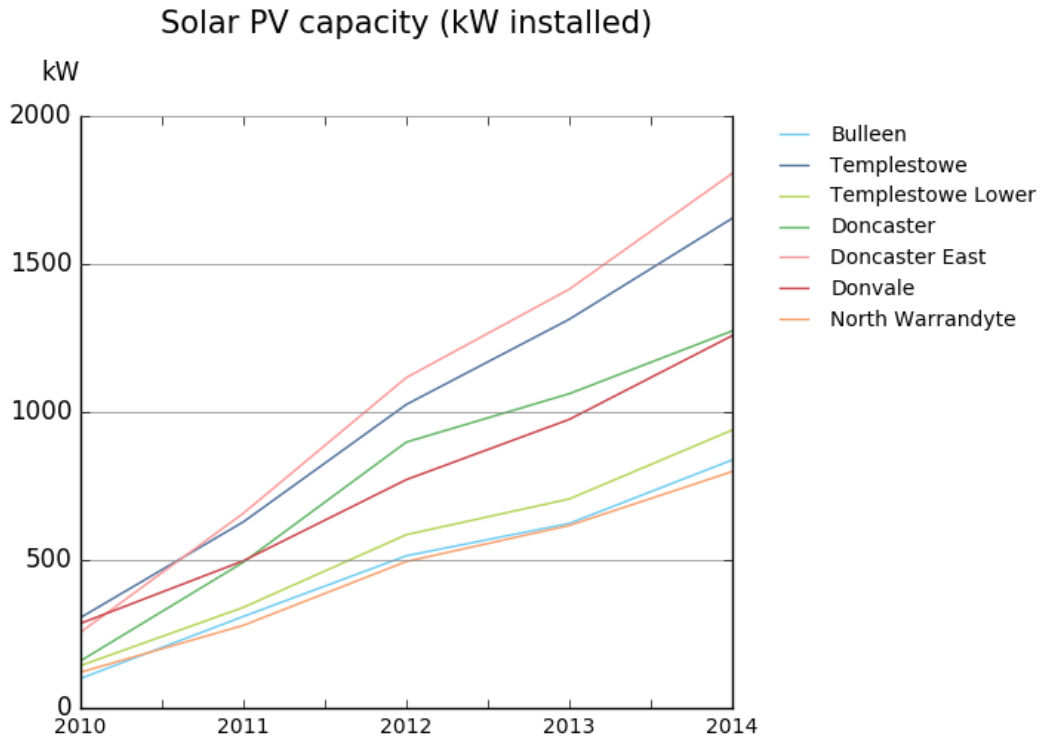


The population of Manningham has grown slightly, however since 2009 this growth has not seen a corresponding increase in electricity consumption.

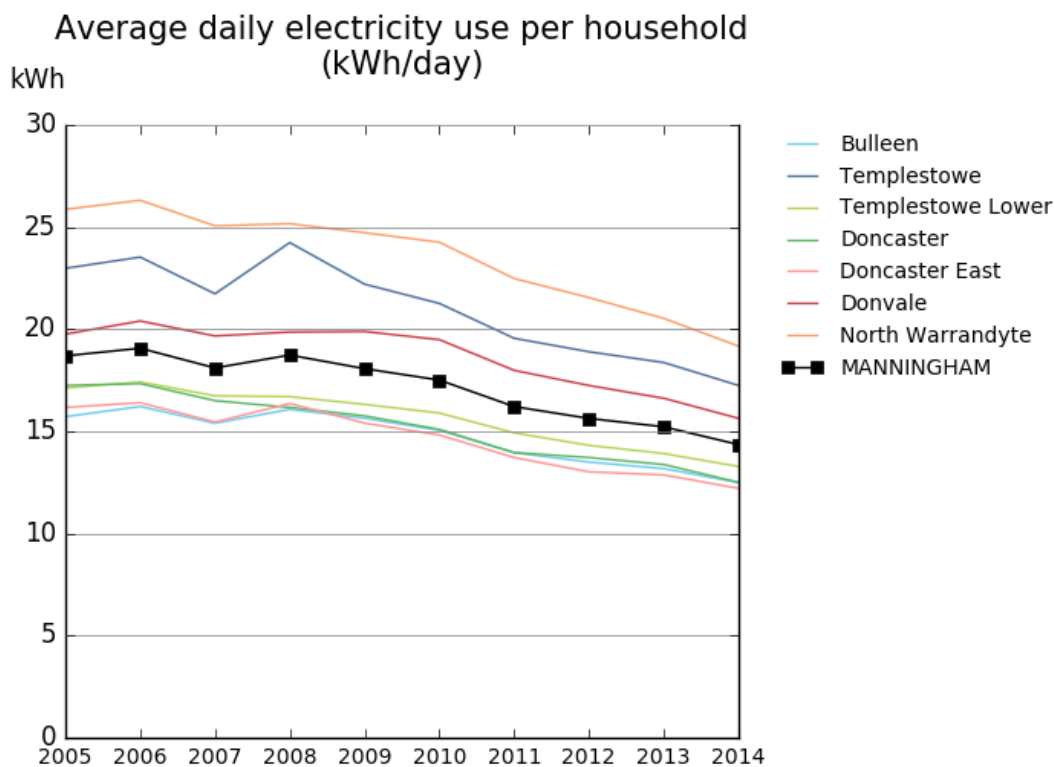
Solar Energy

Solar PV systems have seen a rapid uptake in the municipality, with the majority of systems being installed on homes. Totals for installed systems by the end of 2012 are outlined below.

Suburb in 2014	Postcode	No. Systems	Installed PV kW
Bulleen	3105	307	838
Templestowe	3106	595	1654
Templestowe Lower	3107	355	939
Doncaster	3108	509	1274
Doncaster East	3109	698	1806
Donvale	3111	472	1258
North Warrandyte	3113	263	799
Park Orchards	3114	133	430.5
Wonga Park	3115	125	398
Brentford Square	3131	10	25.9
South Warrandyte*	3134	32	87.2
Manningham Total		3499	9510



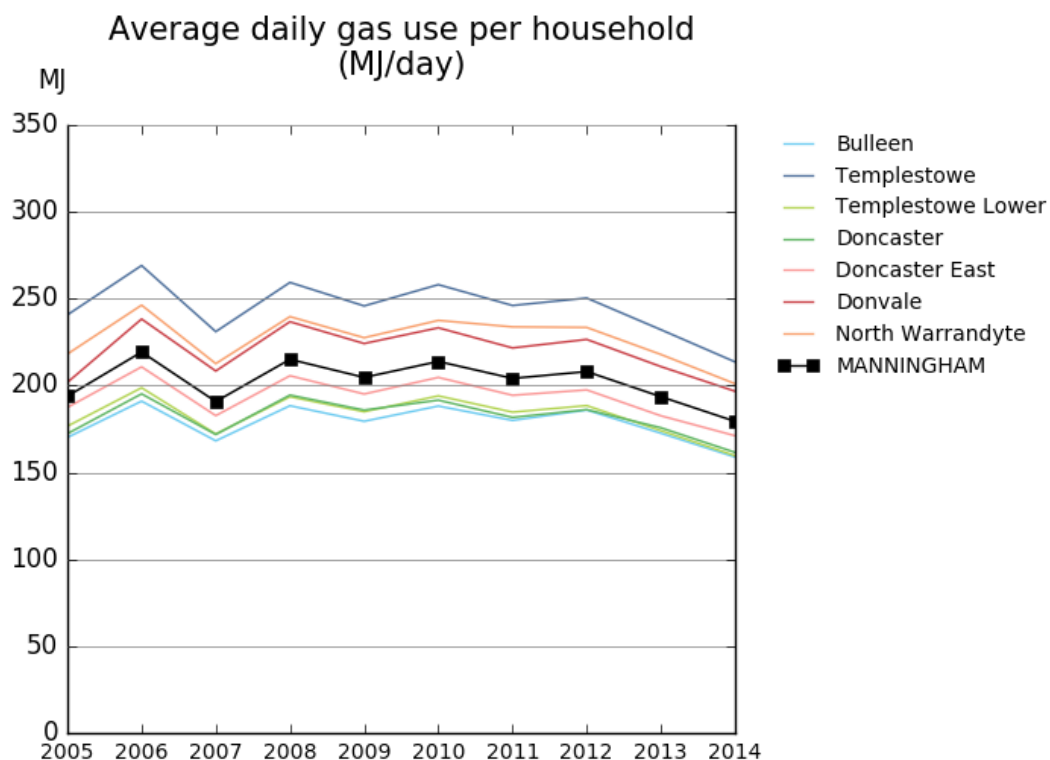
Residential Electricity



Overall, average daily household electricity consumption is trending strongly downwards for all suburbs across Manningham.

Suburb in 2014	Postcode	Electricity kWh/hh/day	Electricity kWh/person/day
Bulleen	3105	12.5	5.3
Templestowe	3106	17.2	6.6
Templestowe Lower	3107	13.3	5.4
Doncaster	3108	12.5	5.6
Doncaster East	3109	12.2	4.9
Donvale	3111	15.6	6.2
North Warrandyte	3113	19.2	7
Park Orchards	3114	22.8	7.9
Wonga Park	3115	24.7	8.8
Brentford Square	3131	10.5	4.5
South Warrandyte*	3134	13	5.4
Manningham Average		14.3	5.8
NAGA Average		11.6	4.8

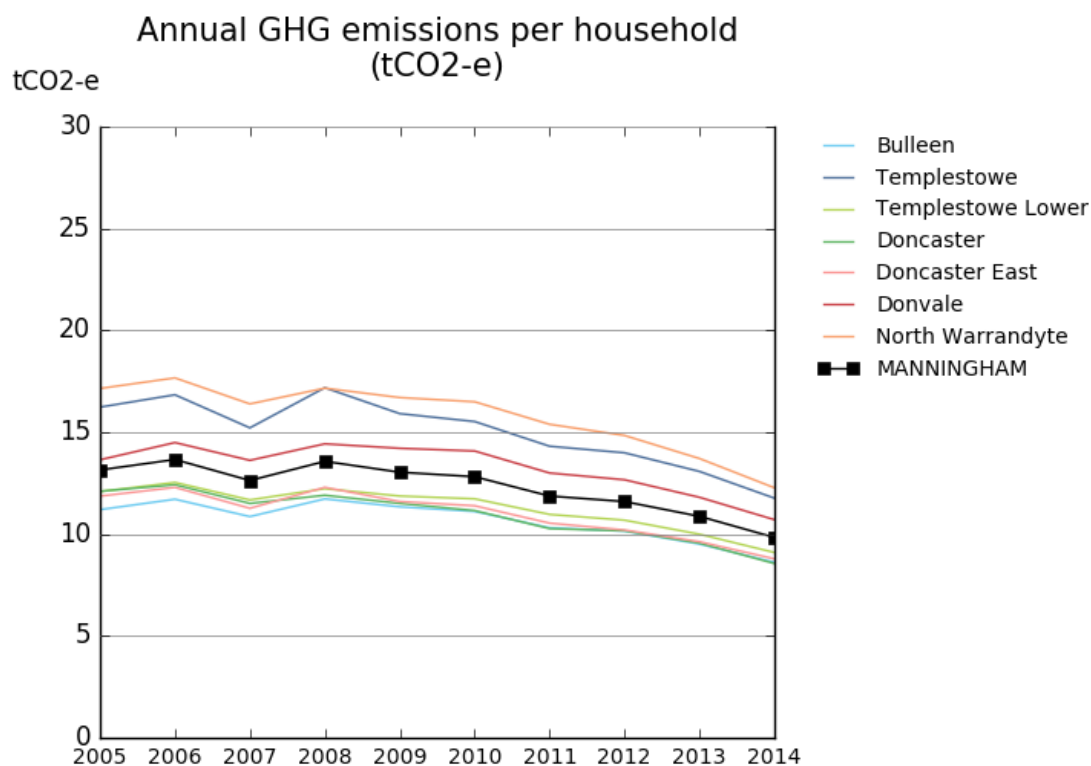
Residential Gas



Gas consumption per household in Manningham has declined over the past three years, yet remains higher than the NAGA average.

Suburb in 2014	Postcode	Gas Usage MJ/hh/day
Bulleen	3105	158.8
Templestowe	3106	213.6
Templestowe Lower	3107	159.6
Doncaster	3108	161.5
Doncaster East	3109	171.1
Donvale	3111	196.7
North Warrandyte	3113	201.1
Park Orchards	3114	245.8
Wonga Park	3115	217.2
Brentford Square	3131	142.1
South Warrandyte*	3134	166.4
Manningham Average		179.4
NAGA Average		137.6

Residential greenhouse gas emissions



Greenhouse gas emissions per household are trending downwards for Manningham, largely as a result of the decreasing household electricity consumption.

Suburb in 2014	Postcode	CO ₂ Emissions tCO ₂ e/hh/year
Bulleen	3105	8.6
Templestowe	3106	11.8
Templestowe Lower	3107	9.1
Doncaster	3108	8.6
Doncaster East	3109	8.8
Donvale	3111	10.7
North Warrandyte	3113	12.3
Park Orchards	3114	15
Wonga Park	3115	15.1
Brentford Square	3131	7.5
South Warrandyte*	3134	9.1
Manningham Average		9.8
NAGA Average		7.5