



NORTHERN
ALLIANCE FOR
GREENHOUSE
ACTION

City of Moreland

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.

Enquiries

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. Some of the gas and electricity companies have changed the way they report on energy data, so there may be some slight discrepancies in previous years from previous Municipal Energy Profiles.

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

Moreland



Average resident daily electricity consumption (kWh/day)

Moreland Average

4.6

NAGA Average

4.8

Changes from 2009 to 2014

Moreland Average

NAGA Average

Annual decrease in daily household electricity use

-3.6%

-4.3%

Annual decrease daily household gas use per year

-2.4%

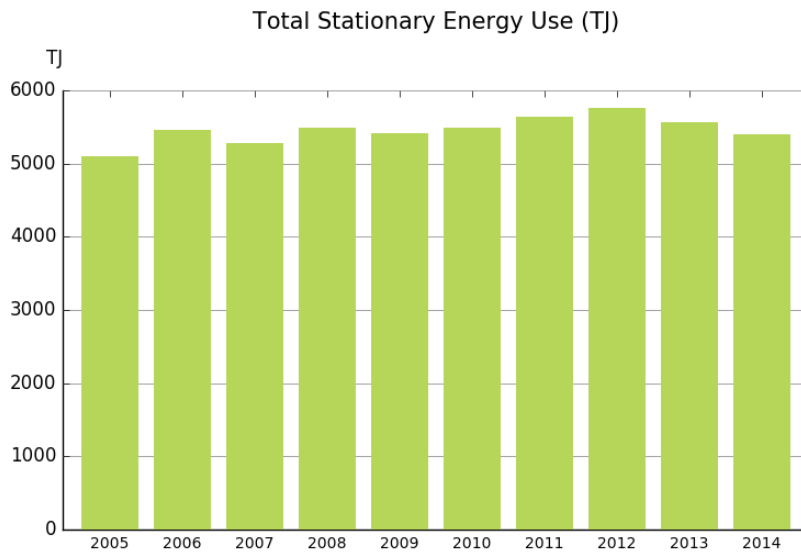
-2%

Annual decrease in daily household GHG emissions

-4.9%

-5.2%

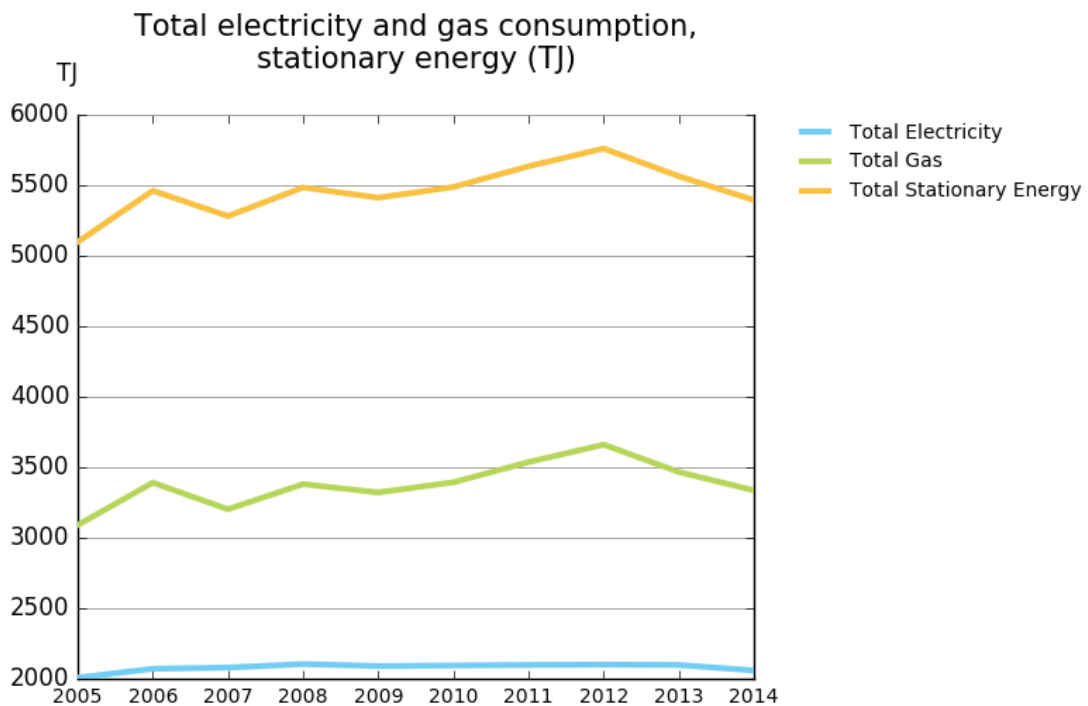
Moreland's energy consumption



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).

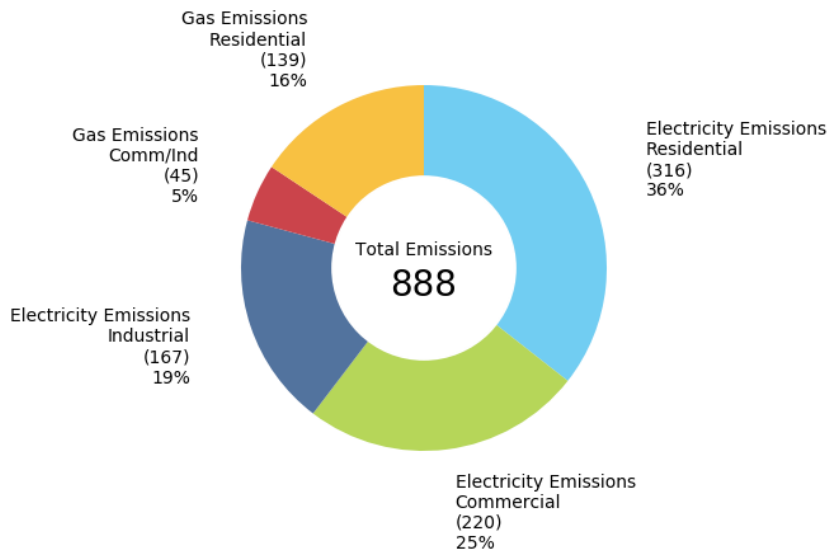
Moreland's average daily household usage of electricity is lower than the NAGA average



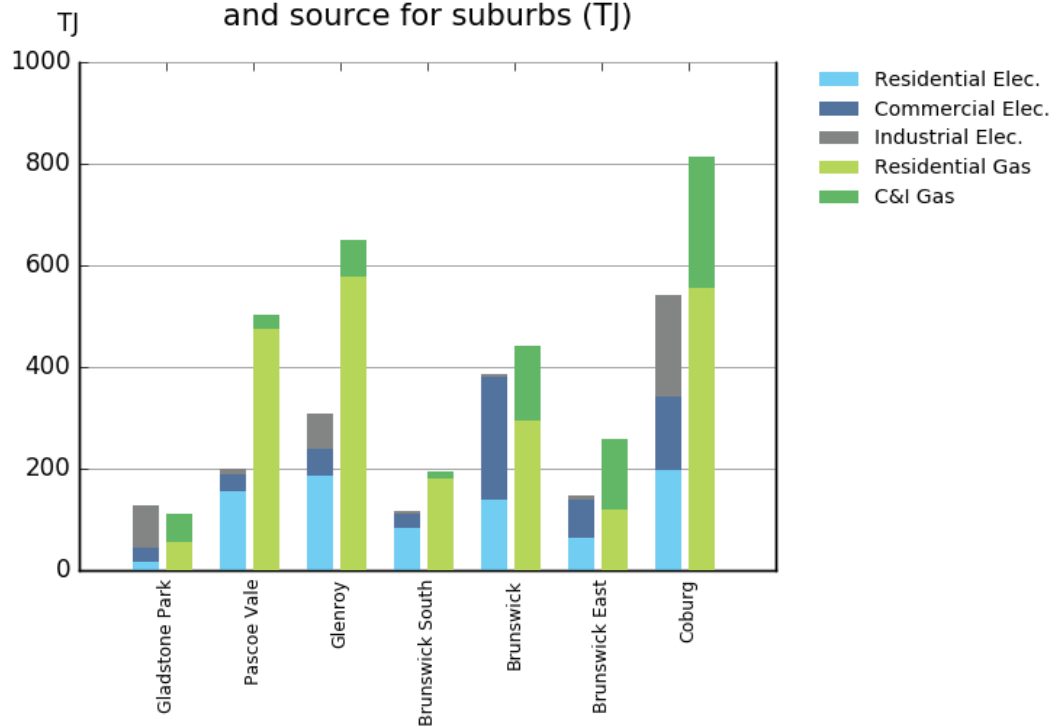
Energy consumption by sector

Emissions for electricity and gas consumption are lower compared to the previous year.

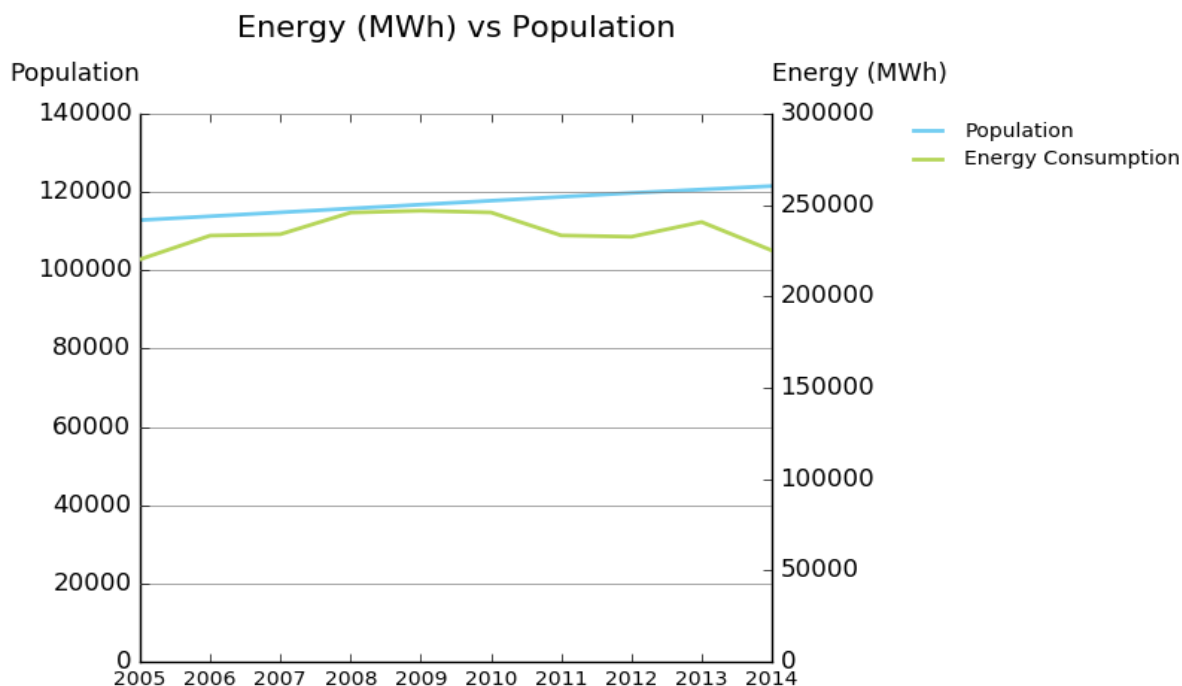
2014 Sector Emissions kt CO₂-e/year



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



*Shared with other municipalities



Residential Energy

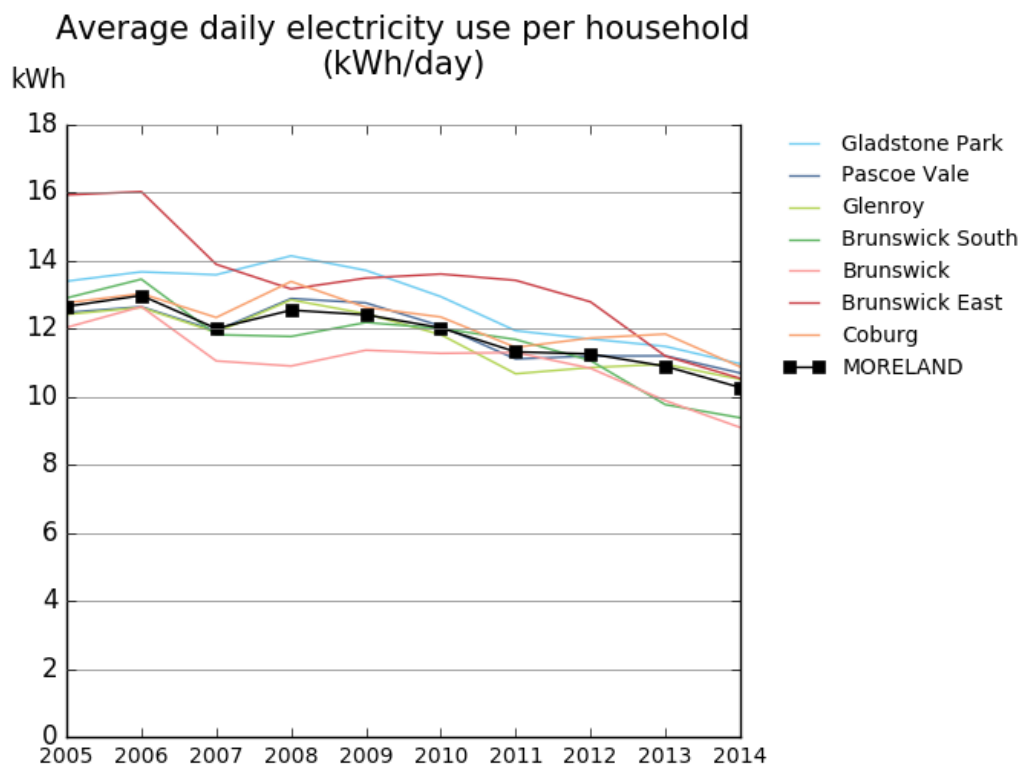
The population of Moreland continues to grow, however since 2009 this growth has not seen a significant corresponding increase in electricity consumption.

Solar Energy

Installed solar capacity has increased significantly for Moreland, with the majority of the systems being installed in the residential sector. The installations to the end of 2014 are outlined below.

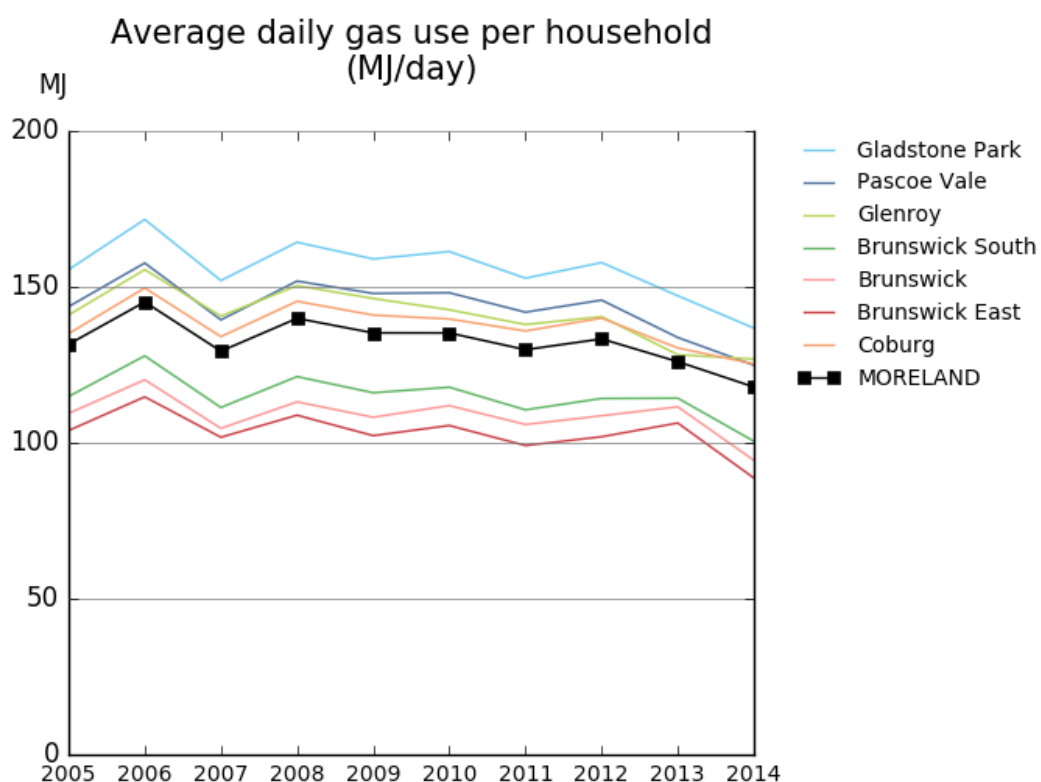
Suburb in 2014	Postcode	No. System	Installed PV kW
Gowanbrae	3043	114	336
Pascoe Vale	3044	664	1659
Glen,Had,OakPark	3046	791	2094
Brunswick West	3055	294	724
Brunswick	3056	487	1215
Brunswick East	3057	185	555
Coburg	3058	1036	2985
Fawkner	3060	316	888
Moreland Total		3906	10503

Residential Electricity



Overall electricity consumption is trending downwards for Moreland. The outer suburbs continue to see lower per-person electricity consumption, which is largely a factor of having slightly more occupants per dwelling than the inner suburbs.

Suburb in 2014	Postcode	Electricity kWh/hh/day	Electricity kWh/person/day
Gowanbrae	3043	11	4.7
Pascoe Vale	3044	10.7	4.7
Glen,Had,OakPark	3046	10.5	4.5
Brunswick West	3055	9.5	4.7
Brunswick	3056	9.1	4.4
Brunswick East	3057	10.5	5.3
Coburg	3058	10.9	4.6
Fawkner	3060	10.6	4.1
Moreland Average		10.3	4.6
NAGA Average		11.6	4.8

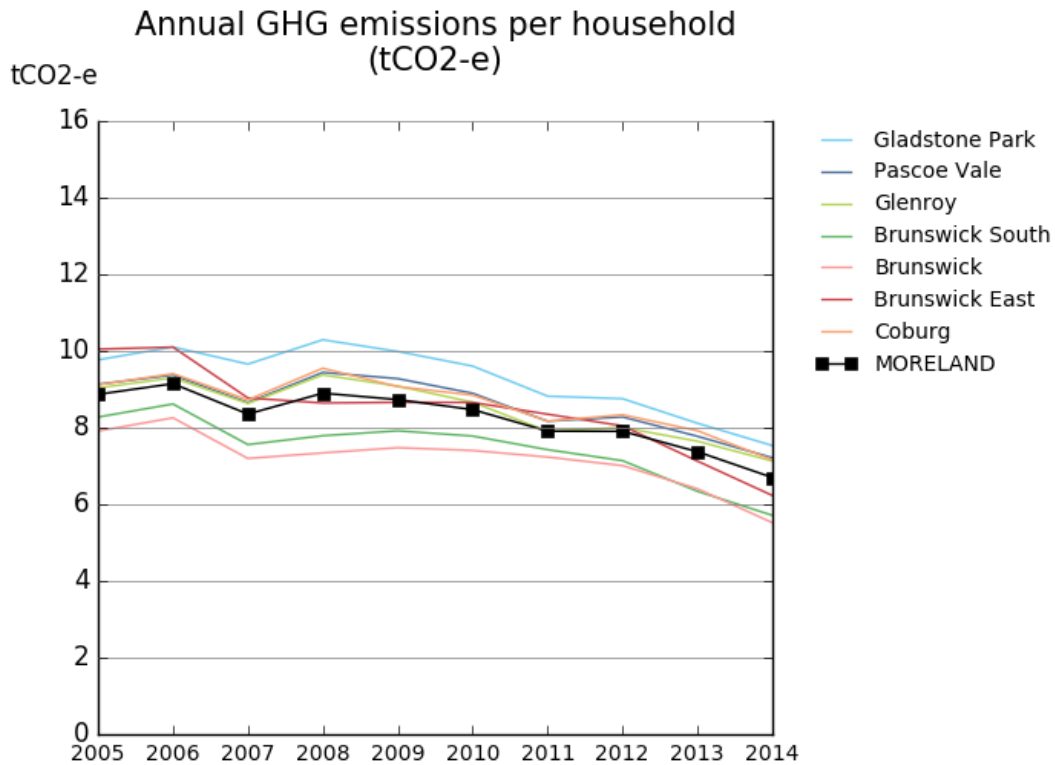


Residential Gas

Suburb in 2014	Postcode	Gas Usage MJ/hh/day
Gowanbrae	3043	136.8
Pascoe Vale	3044	124.9
Glen,Had,OakPark	3046	126.8
Brunswick West	3055	100.5
Brunswick	3056	94.4
Brunswick East	3057	88.7
Coburg	3058	125.3
Fawkner	3060	140.6
Fitzroy North	3068	97
Moreland Average		118
NAGA Average		137.6

Gas consumption per household in Moreland has declined over the last 5 years, and is notably below the NAGA average.

Residential greenhouse gas emissions



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

Suburb in 2014	Postcode	CO ₂ Emissions tCO ₂ e/hh/year
Gowanbrae	3043	7.5
Pascoe Vale	3044	7.2
Glen,Had,OakPark	3046	7.1
Brunswick West	3055	5.7
Brunswick	3056	5.5
Brunswick East	3057	6.2
Coburg	3058	7.2
Fawkner	3060	7.5
Fitzroy North	3068	6
Moreland Average		6.7
NAGA Average		7.5