

Our shared path to a zero emissions future.

The City of Melbourne has a goal to achieve Zero Net Emissions for the municipality. To achieve this goal the City has a climate change mitigation strategy which outlines the greenhouse gas emissions impact of the municipality creating a path to reduce these emissions.

Zero Net Emissions or being 'carbon neutral' means that the net greenhouse gas emissions, associated with the city's activities, are equal to zero. It is achieved through a combination of measuring and reducing carbon emissions along with the purchasing and cancelling of carbon offsets.

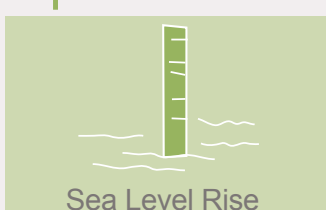
Achieving zero net emissions helps address the issue of climate change. Climate change is a change in the average pattern of weather over a long period of time. There is clear evidence that our climate is changing largely due to human activities. Human-induced climate change is caused by the release of greenhouse gasses into the Earth's atmosphere.

The six main greenhouse gases are:

- CO2** carbon dioxide
- CH4** methane
- N2O** nitrous oxide
- HFCs** hydro-fluorocarbons
- PFCs** per-fluorocarbons
- SF6** sulphur hexafluoride

ZNE = Total Emissions in CoM - Emissions Reduction - Offsets

Climate change directly impacts Melbourne and Victoria



Currently...

From 1998 to 2007, Victoria experienced rainfall **14%** below average.

Every year since 1993, there has been average sea level rises in areas near Melbourne of up to **2.8mm**

Flood risks exist in precincts near the Yarra and Maribyrnong rivers and Moonee Ponds Creek including Docklands, Southbank and Fishermans Bend. This is due to high tides and extreme rainfall events.

On average we experience **9 very hot days** in Melbourne (temperature exceeds 35°C).

And in the future...

By 2070, annual average rainfall is expected to decrease by **11%** but come in more intense bursts.

By 2070, the sea level along Victoria's coast is expected to increase by **26 - 59cm**

Increased likelihood and **severity** of floods and events such as storm surges in Melbourne.

By 2070, we expect to experience **26 very hot days** in Melbourne and increased frequency of heat waves (five or more consecutive days of temperatures exceeding 35°C).

There are global policies in place to govern climate change.

UNFCCC
United Nations Framework Convention on Climate Change
International climate change treaty joined by countries around the world.

COPENHAGEN ACCORD
Recognises "the scientific view that the increase in global temperature should be below 2°C."

KYOTO PROTOCOL
International agreement of the UNFCCC Parties, which set internationally binding emissions targets for 2008 - 2012.

Climate change is a global issue.

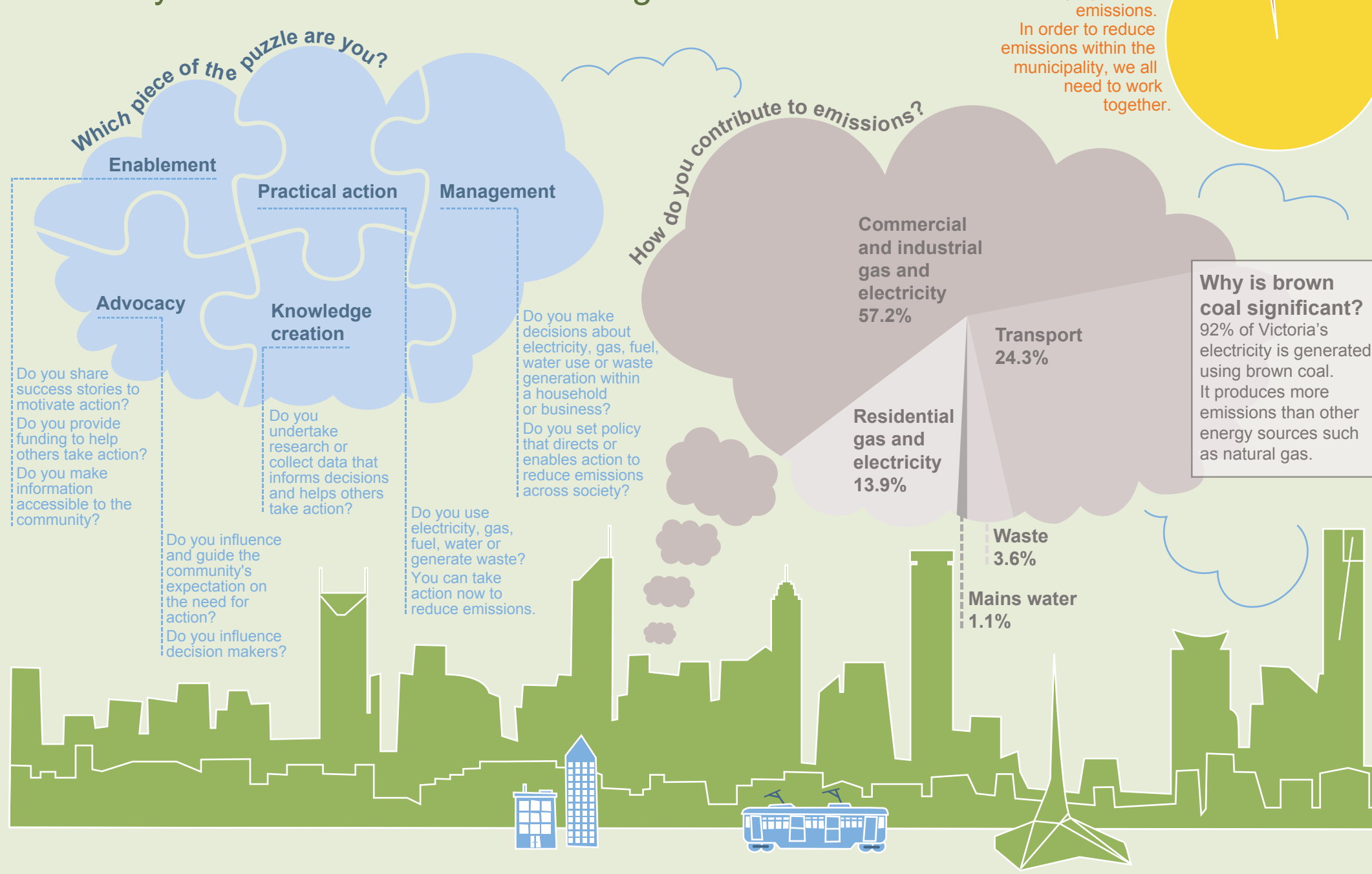


No matter where emissions are generated, the impacts of climate change are felt across the world. These impacts are only predicted to worsen if we do not take action. It is a global issue to which every country contributes, yet those countries that have the lowest impact are some of our most vulnerable.

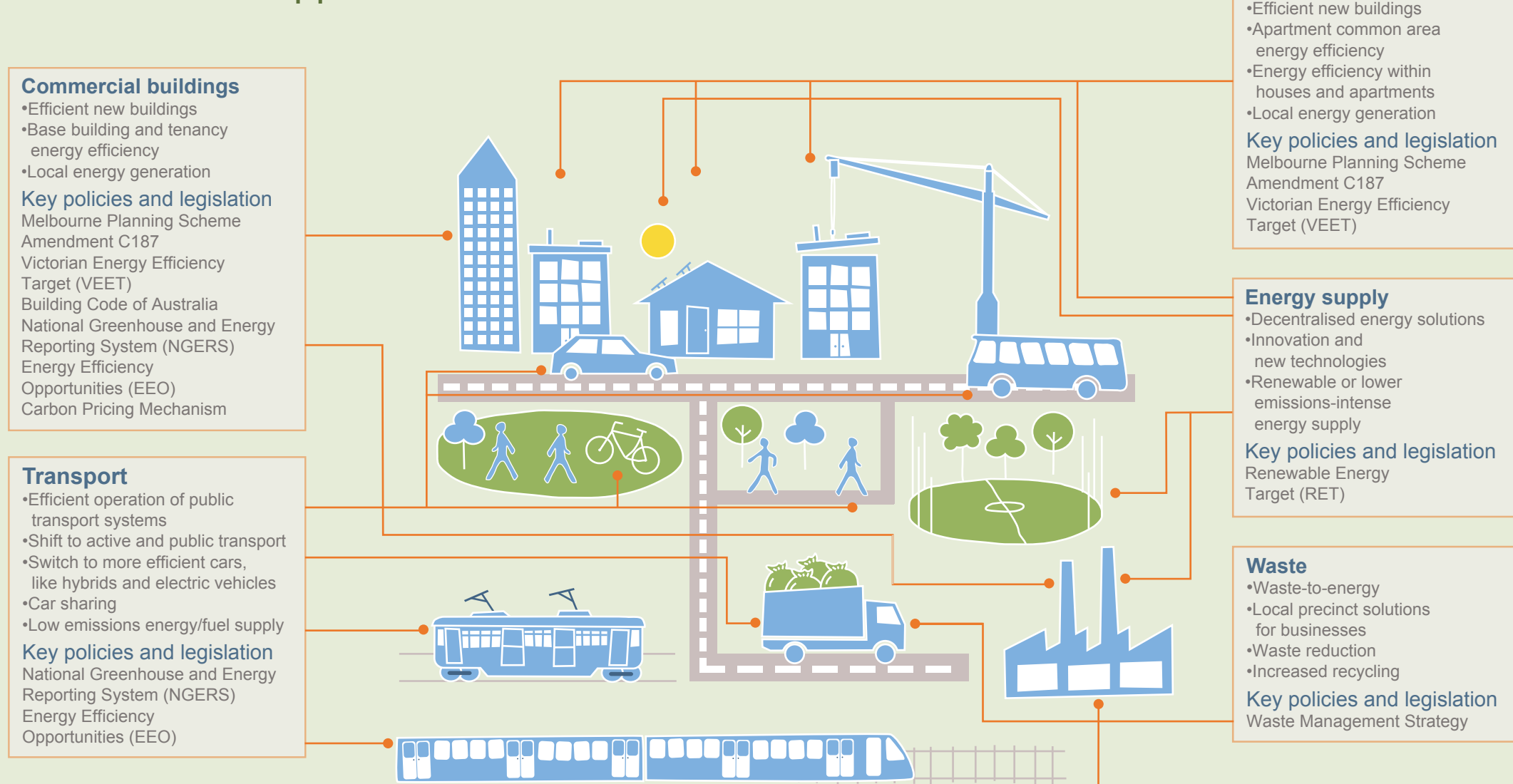
Did you know that Australia is the largest emitter per capita in the developed world? How does the City of Melbourne compare?..



This is what Melbourne's emissions profile looks like... and how you can contribute to achieving reductions.



Where are the opportunities to reduce emissions in Melbourne?



Sources
<http://www.melbourne.vic.gov.au/Sustainability/AdaptingClimateChange/Pages/AboutClimateChange.aspx>
http://unfccc.int/kyoto_protocol/items/2830.php
<http://www.unep.org/publications/ebooks/emissionsgapreport/chapter1.asp>
http://e360.yale.edu/images/digest/carbon_web.pdf
<http://ic40.org/c40cities>
http://ipcc-wg2.gov/SREX/images/uploads/SREX-SPMbrochure_FINAL.pdf
<http://climatecommission.gov.au/basics/climate-change-basics/the-great-barrier-reef-threat/>
<http://insid.org/arcticseaicenews/>
http://www.ipcc.ch/publications_and_data/ar4/wg2/en/ch4s4-4-11.html
 ClimateWorks Australia, City of Melbourne Roadmap to Zero Net Emissions May 2013

Industry
 •Energy efficiency
 •Local energy generation
 Key policies and legislation
 National Greenhouse and Energy Reporting System (NGERS)
 Energy Efficiency Opportunities (EEO)