

CLIMATE POSITIVE PERTH

A vision for a low carbon,
connected & liveable city



Perth's population is small by global standards, but our physical footprint is larger than mega-cities like Tokyo or Los Angeles and our emissions per capita are among the highest in the world.

So how do we address climate change while accommodating 3.5 million people in Perth by 2050?

Climate Positive Perth reframes this question as an opportunity to change the direction of our urban development with respect to energy, transport, greening and built form to create a better connected, more liveable, sustainable, and decarbonised Perth.

Climate Positive Perth demonstrates, as backed by the latest evidence, that a better future is possible. Getting there will require us to overcome a crisis of imagination and recognise that business as usual will not get us to where we need to go.

This report was developed in collaboration with a roundtable of WA's leading experts across urban research, practice and policy. Many of the great ideas are theirs, while any mistakes are mine. I thank them for volunteering their time and expertise. I hope this raises the debate on metro Perth's future and what is possible.



Hon Dr Brad Pettitt MLC

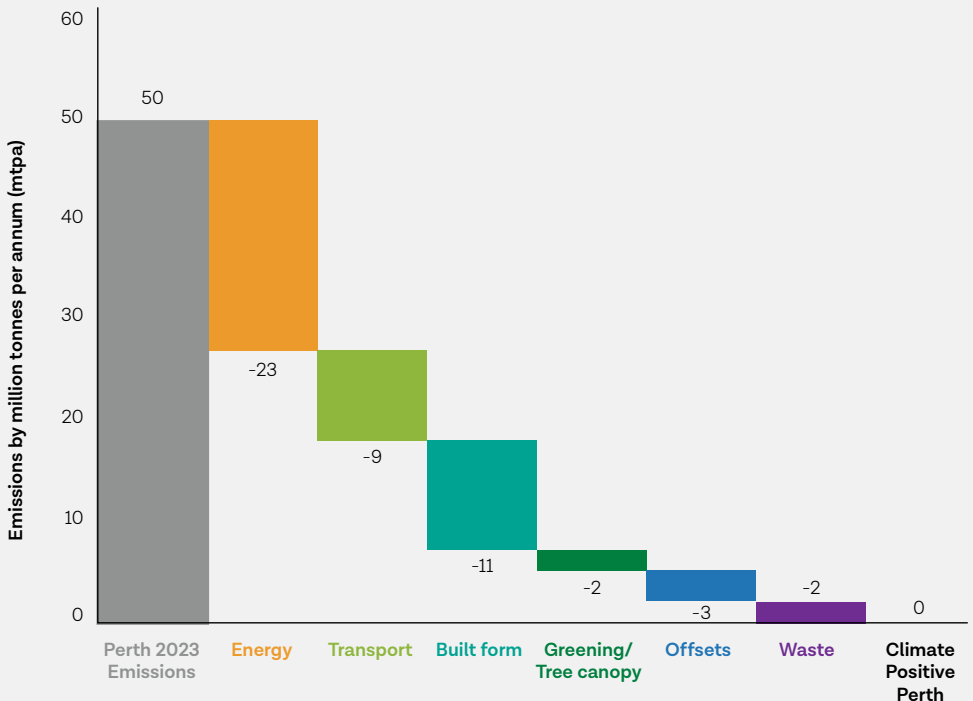
A Comprehensive Plan to Decarbonise Perth

To become a truly low carbon city we need to reduce greenhouse emissions across every sector.

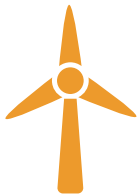
Climate Positive Perth recommends actions that will reduce or eliminate emissions in electricity production, public and private transport, and buildings, as well as enable more urban greening and increasing tree canopy cover.

Implementing these recommendations would result in our city achieving close to 100% emissions reductions from 2023 levels.

TOWARDS CLIMATE POSTIVE PERTH



Emissions reductions from implementing Climate Positive Perth recommendations.
Please note that the data used in this graph is approximate.



ENERGY

Triple renewable energy on the grid through investment in transmission, wind generation and storage.

BUSINESS-AS-USUAL

WA's main electricity network (the South West Interconnected System (SWIS)) can not currently facilitate the transition toward a climate-positive Perth. Without immediate investment in transmission, storage, and wind generation in the SWIS, the energy shortfall created by the planned closure of WA's coal-fired power stations cannot be met by renewable energy.





THE CLIMATE-POSITIVE VISION

An electricity grid built on renewable energy is the foundation of a Climate Positive Perth. Modelling by Sustainable Energy Now shows that with strong and immediate investment in transmission, wind generation and storage, we can triple the renewable energy we have today at a lower cost than business as usual.

HOW WE GET THERE

This will need major investment in wind, solar and batteries at the grid, community and household scale. We will also need to wind-back gas use in existing homes and stop putting reticulated gas into new houses. With a renewable energy grid in place, the basis for decarbonising Perth's transport and buildings will be set.

ENERGY RECOMMENDATIONS

-  A plan for 95% renewable energy within a decade.
-  Increasing wind generation and winding back gas generation for electricity.
-  Enable shared solar PV and community-owned batteries.
-  No new gas connections in homes.





TRANSPORT

Electrifying our cars and providing transport choices with real investment in public and active transport.

BUSINESS-AS-USUAL

Our transport emissions are growing, and Perth remains car-dependent by design. This limits the connectedness of our communities and creates worsening congestion which costs us money, time, and air quality.

THE CLIMATE-POSITIVE VISION





With the right investments and policy settings this trend can be turned around and the transition to a better-connected, healthier, decarbonised Perth accelerated.

HOW WE GET THERE

We will need to electrify all of Perth's transport whilst making it easier for more of Perth's residents to move around by walking, cycling and public transport.

This will require shifting investment away from widening roads in favour of making cycling and walking more appealing and accessible and increasing public transport investment. This will be especially important in central areas where greater housing density is planned. In addition to creating better choices for how we move around, Perth's transition to Electric Vehicles needs to be ramped up by targeted incentives, supporting national fuel standards, and ensuring everyone can access EV charging. Add to this the rapid electrification of Transperth buses and freight movements, and decarbonised transport for Perth will be within reach.

TRANSPORT RECOMMENDATIONS

-  Ensure at least 20% of transport funding goes towards cycling and walking.
-  Invest in light-rail and trackless trams.
-  Create low speed and safe communities.
-  Reduce and electrify Perth's private vehicles.





URBAN GREENING

Protecting our trees and growing new canopy cover to cool the suburbs.

BUSINESS-AS-USUAL

Perth's suburbs have the lowest canopy cover in the country, and in many areas it's only declining further. The resulting urban heat island effect is seeing Perth's suburbs get hotter and less liveable.

THE CLIMATE-POSITIVE VISION

A low-carbon Perth needs its suburbs and centres to be greener, cooler, and more biodiverse.





HOW WE GET THERE

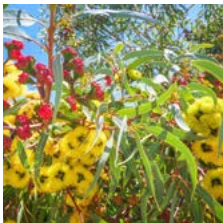
We will need to protect the trees and bushland that remain standing, while investing in a significant tree planting program in Perth's streets and parks.

Greening our homes will also be important, both through the retention of trees on private property and ensuring that new homes have sufficient room for large trees.

An ambitious plan for this urban greening will be essential for the realisation of a climate-positive Perth.

URBAN GREENING RECOMMENDATIONS

-  Set a 30% target by 2040 for Perth's tree canopy.
-  Protect and encourage trees on private land.
-  Set a target to protect 90% of the remaining urban bushland and cultural sites.
-  Increase the quality and quantity of public open space.





PLANNING AND BUILT FORM

Ending the sprawl and revitalising our communities with sustainable homes and thoughtful density.

BUSINESS-AS-USUAL

Metropolitan Perth is now one of the world's longest cities. This sprawl not only harms the environment and facilitates climate-damaging emissions, but also creates poor social and economic out-comes. Most of Perth's population growth is placed on the urban fringe, far from existing centres and most jobs, and this is contributing to traffic congestion, the failing of Perth's existing centres, and new suburbs that often feel isolating and incomplete.

THE CLIMATE-POSITIVE VISION





Instead of adding to sprawl, Climate Positive Perth envisages centres and suburbs that are more liveable, connected, and low carbon.

HOW WE GET THERE

A stronger focus is needed on creating good urban infill, with density targeted around existing centres (especially those with a good mix of uses and frequent public transport).

In addition to rethinking the 'where' and 'what' of new housing, we also need to ensure new homes are designed and built to be energy efficient and sustainable. The opportunity to lower household energy bills, reduce emissions, and improve the liveability of our homes needs to be seized, including for public housing tenants.

PLANNING AND BUILT FORM RECOMMENDATIONS

-  Stop Perth's urban sprawl with a clearly defined urban boundary.
-  Enable thoughtful infill and density, especially around established train stations.
-  Set a clear pathway to zero emissions for all new homes.
-  Insulate and electrify low-income homes.

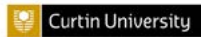


We'd love to get your feedback on our consultation draft report!
Scan the QR code or visit linktr.ee/climatepositiveperth and share your thoughts.

READ OUR
REPORT HERE



CLIMATE POSITIVE PERTH CONTRIBUTORS



Front cover image credits: People sitting under tree canopy (row 2/3); Two people walking a dog through a park (row 2/3) – Peter Bennetts and Hassel Studios. Hand touching a turtle sculpture (row 4); children in a park (row 4) – Robert Frith and Hassel Studios. Terrace Green, White Gum Valley (row 2); Booyeembara Park (row 2) – Tim Oliver.