COMMITTEE FOR PERTH

Working Group Submission

Decarbonisation

Shaping the Future of Perth: Climate Transition Plan for Perth

December 2025

Acknowledgement of Country

Committee For Perth acknowledges the traditional custodians throughout Western Australia and their continuing connection to the land, waters and community. We pay our respects to all members of the Aboriginal communities and their cultures; and to Elders both past and present.

Foreword

Following the publication of the Perth 2050 report, which identified three key themes, Committee for Perth invited all members to nominate for our proposed working groups: Decarbonisation, Densification and Economic Diversification. We sought individuals passionate about exploring ideas and opportunities that could deliver 'quick wins' as well as longer-term strategies to address these challenges. While we recognise that a single working group cannot solve every issue, bringing together passionate experts creates the potential for fresh, practical suggestions for Government and the community to consider. Each group was tasked with developing practical initiatives to help guide Perth's long-term future.

I am so incredibly proud of Francien Boom and Kelly Campbell who led the three groups independently organising the selection of the Chair and Deputy Chair roles of each group and the meeting rhythm and cadence, all the while having the end of the year vision to present the three white papers to Government, Opposition, members and the community with recommendations and proposed solutions to assist future proofing Perth.

Thank you to Ben Haddock (ARUP), Chair of Densification, and Deputy Chair Dan Pearce (Hatch); Julie McKay-Warner (Keystart), Chair Decarbonisation, and Deputy Chair Steve Mills (CME WA); and Lance Glare (KPMG), Chair of Economic Diversification. Your hard work and dedication in maximising the value and impact of this collective effort has been profound. This is especially impressive when you consider that every member and leader holds demanding, high-profile full-time roles. Thank you for volunteering to lead the groups, your commitment has ensured the white papers will deliver real value for Perth's future.

I reflect on the incredible value these working groups have delivered. It is like having three consulting teams applying their significant expertise to our three key levers for transforming Perth's future.

Here's what the numbers show:

Diversification

20	7	140
# of members	# of meetings	# of hours

Guest speakers

- John Langoulant, ACIL Allen
- Sian McGill, DEED

Decarbonisation

20	6	120
# of members	# of meetings	# of hours

Guest speaker

- Prof. Peta Ashworth, Director of Curtin Institute of Energy Transition (CIET)

Densification

24	8	192
# of members	# of meetings	# of hours

Guest speaker

- Malcolm Smith, Arup

Collectively

452
# of hours

Collectively, that's 452 hours of work outside regular day jobs, all dedicated to shaping recommendations that will help Perth achieve its best possible future in 2050 and beyond. This effort focuses on practical, forward-looking solutions for environmental sustainability, urban growth, and economic resilience.

A massive shoutout to our three volunteer working groups, who have generously donated their time and expertise to tackle Perth's biggest challenges. In total, this represents months of expert thinking, freely given—equivalent to three months of full-time professional work, valued at up to almost $100,000 in consultancy terms.

This extraordinary gift of time and knowledge demonstrates the power of member-led ambitious thinking in crafting a sustainable and resilient future for Perth.

We know there were moments of frustration and fatigue, but together you delivered. On behalf of the Committee for Perth board and members, I applaud and celebrate what you have achieved.

Paula Rogers
CEO
Committee for Perth

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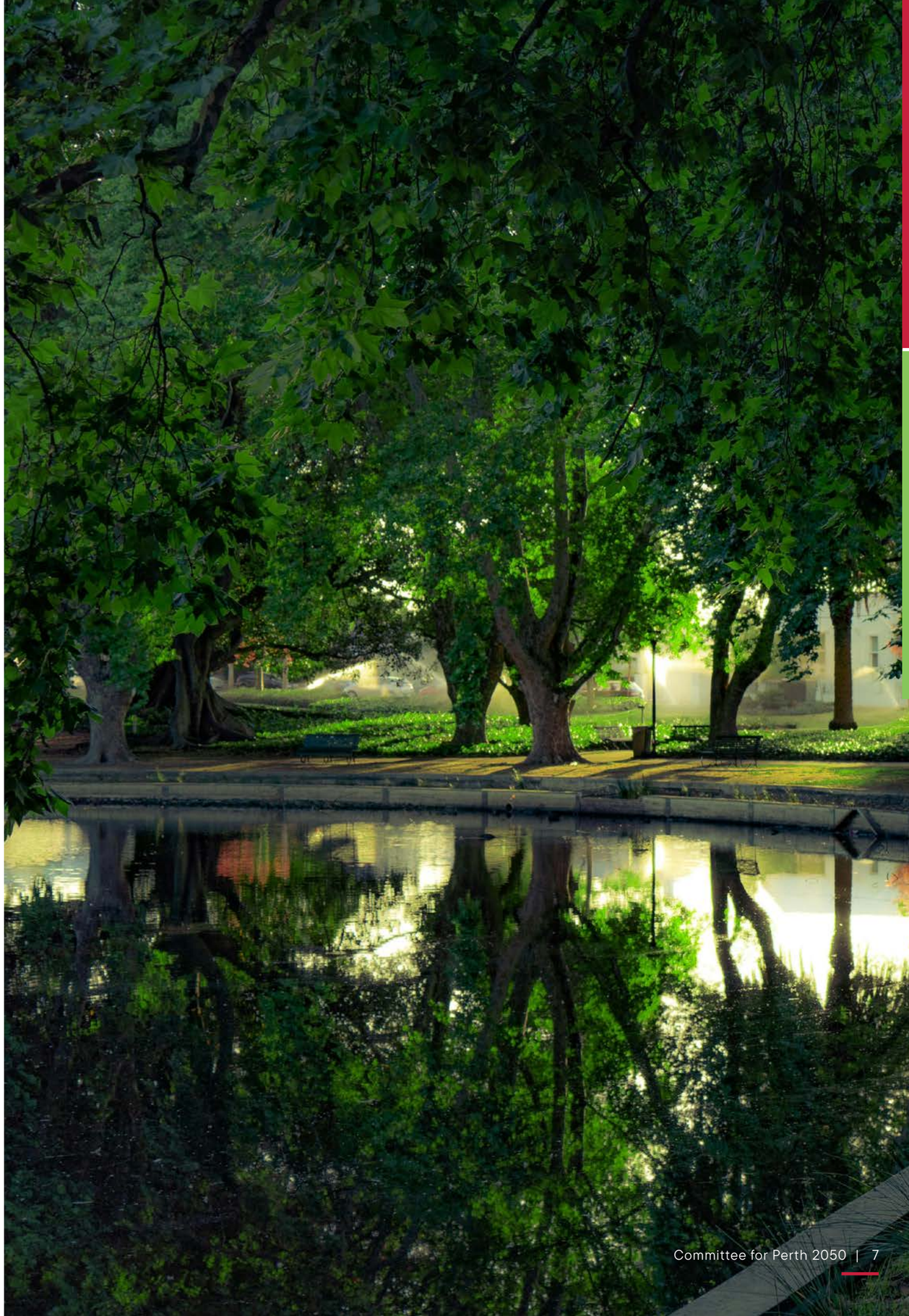
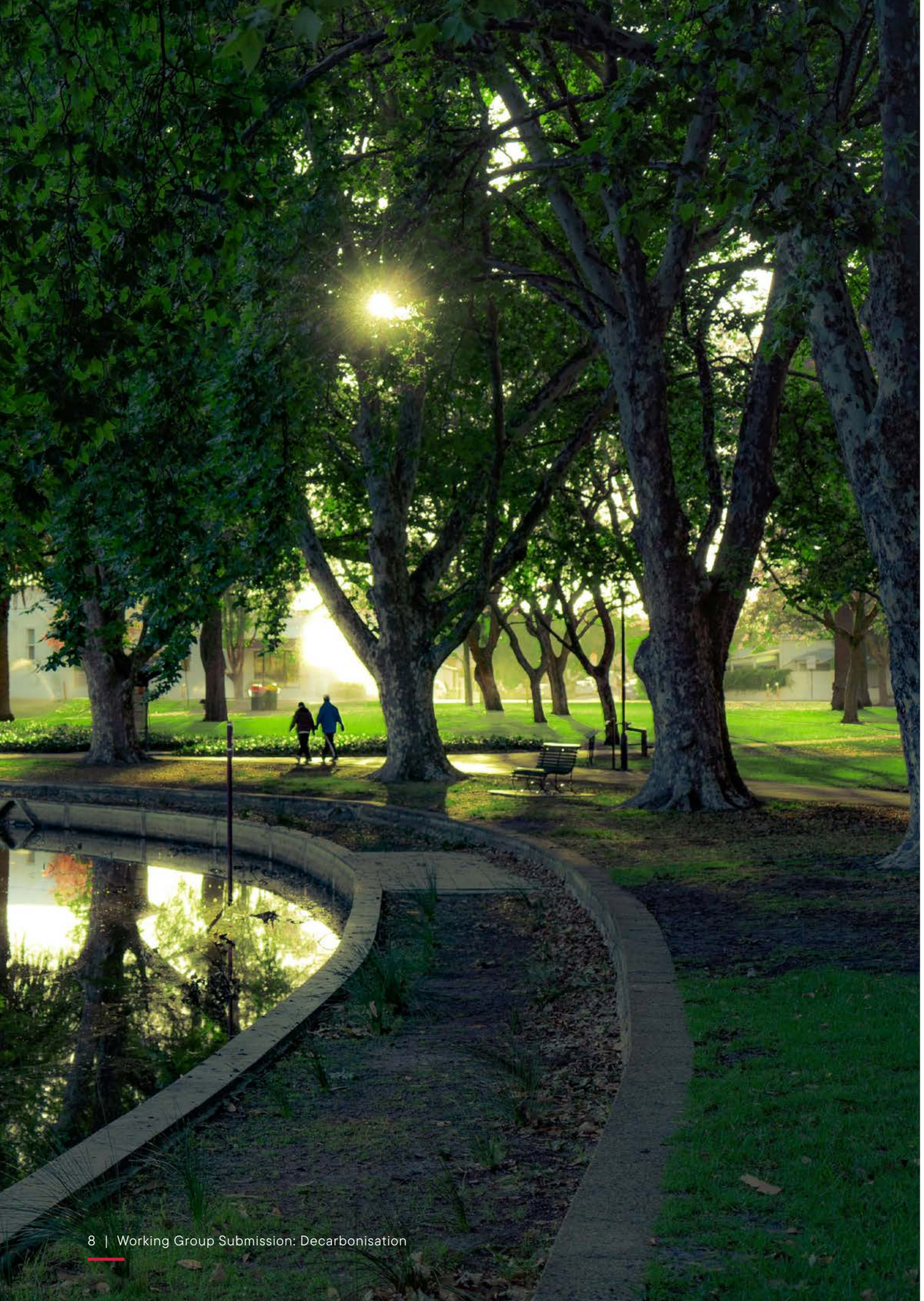




1.0 Executive Summary

Perth and Peel are entering a decisive decade. Climate impacts are intensifying, global markets are shifting, and communities, investors and regulators are demanding credible and coordinated action on climate change.

Without unified leadership, the region risks fragmented responses, escalating costs, and missed opportunities to strengthen resilience, enhance liveability, and maintain global competitiveness.

Committee for Perth advocates for the development of a Perth and Peel Climate Transition Action Plan (CTAP) — a practical, integrated roadmap that brings together work already underway, sets clear priorities, and accelerates decarbonisation, and adaptation to an already-changing climate.

The White Paper focuses on three themes that represent the most effective and appropriate courses of action for Perth and Peel:

Built environment: electrifying homes and businesses, improving energy performance, expanding rooftop solar and batteries, retrofitting older buildings, and increasing canopy cover to reduce heat and improve health.

Transport and infrastructure: accelerating low- and zero-emission mobility through electrification, public and active transport, and reduced reliance on private vehicles.

Circular economy: designing out waste, keeping materials in use, regenerating natural systems, and preparing for significant waste streams generated through the energy transition.

Across these themes, the working group stresses the importance of targeted education and engagement to drive behavioural change, build trust and ensure shared ownership of the transition.

Three imperatives form the case for action:

1. **Climate and community resilience** – coordination is essential to protect people, infrastructure and ecosystems from increasing climate risks, and to support adaptation to an already changing climate.
2. **Economic opportunity and cost savings** – electrification, efficiency and circularity can reduce operating costs, unlock new markets and attract investment.
3. **Strategic alignment and accountability** – a unified framework is needed to consolidate existing plans, avoid duplication, and transparently measure progress.

By adopting the recommendations outlined in this White Paper — anchored by the CTAP — Perth and Peel can strengthen resilience, support economic diversification, and secure a low-carbon, climate-ready future to 2050 and beyond.

2.0 Introduction

Committee for Perth is developing a practical and coordinated pathway for shaping the future of the Perth and Peel regions by 2050. Guided by the lenses of diversification, densification and decarbonisation — the priorities identified in the Perth 2050 report commissioned by Committee for Perth and Scitech and authored by Dr Ben Hamer — this paper focuses on decarbonisation as a central pillar of Perth's climate transition.

In this paper, decarbonisation is used in its broadest sense encompassing both:

- **Mitigation:** actions to reduce direct and indirect greenhouse gas emissions; and
- **Adaptation and resilience:** actions to prepare for, and respond to, the physical impacts of climate change.

Perth and Peel are deeply interconnected urban, industrial and environmental systems.

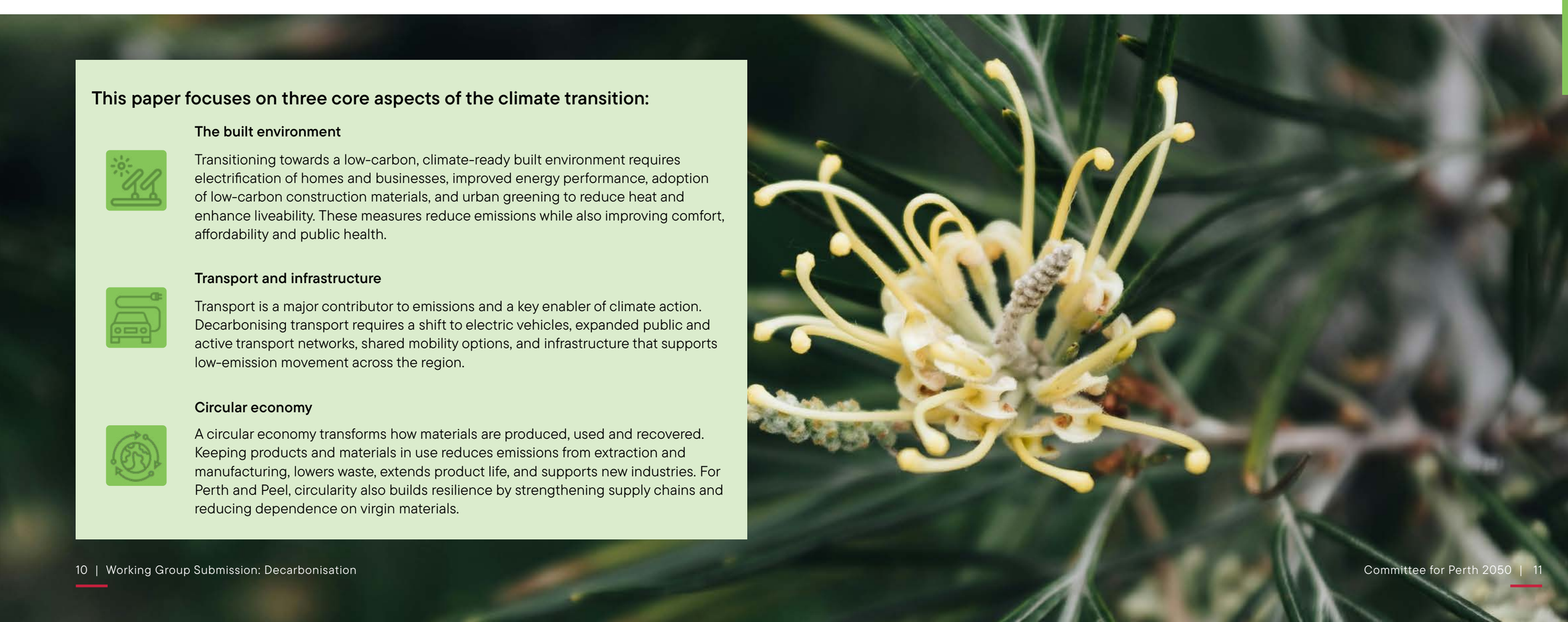
Perth is home to the headquarters of some of the world's largest resources companies, while Peel includes a critical industrial estate linked to production in the Pilbara and Midwest. As a result, the region faces both significant opportunities and complex transition challenges. Achieving net zero by 2050 will require coordinated ambition across households, industry, government and communities.

These three aspects were selected by the decarbonisation working group as they are particularly relevant to the geography, structure and future growth of Perth and Peel, and closely aligned with Western Australia's strategic priorities and global best practice.

To progress decarbonisation across these areas, the working group proposes two overarching actions:

1. The development of a Perth and Peel Climate Transition Action Plan (CTAP) – a centralised, cross-government framework that aligns existing programs, defines responsibilities, sets targets and metrics, and ensures measurable, coordinated action.
2. A commitment to comprehensive stakeholder engagement – essential to building shared understanding, trust and momentum. Collaboration with businesses, residents, Indigenous People, local governments and industry will ensure transition strategies are practical, locally informed and widely supported.

By advancing decarbonisation through coordinated and inclusive actions, Committee for Perth can help drive a transition that strengthens resilience, supports economic diversification, and delivers a sustainable, low-carbon future for the Perth and Peel regions by 2050.



This paper focuses on three core aspects of the climate transition:

The built environment

Transitioning towards a low-carbon, climate-ready built environment requires electrification of homes and businesses, improved energy performance, adoption of low-carbon construction materials, and urban greening to reduce heat and enhance liveability. These measures reduce emissions while also improving comfort, affordability and public health.

Transport and infrastructure

Transport is a major contributor to emissions and a key enabler of climate action. Decarbonising transport requires a shift to electric vehicles, expanded public and active transport networks, shared mobility options, and infrastructure that supports low-emission movement across the region.

Circular economy

A circular economy transforms how materials are produced, used and recovered. Keeping products and materials in use reduces emissions from extraction and manufacturing, lowers waste, extends product life, and supports new industries. For Perth and Peel, circularity also builds resilience by strengthening supply chains and reducing dependence on virgin materials.

3.0 Perth's Climate Transition

What we mean by Perth's climate transition

Decarbonisation in this paper refers to Perth's climate transition, which includes two complementary goals:

1. Mitigation – reducing emissions
Actions that lower the greenhouse gases Perth and Peel produce directly or indirectly.
Examples include:

- Electrifying homes, businesses and vehicles
- Expanding firmed renewable energy generation and storage
- Improving energy efficiency
- Reducing material use through circular economy systems

2. Adaptation & resilience – preparing for climate impacts
Actions that reduce vulnerability to rising temperatures, extreme weather and long-term climate change.
Examples include:

- Increasing urban tree canopy and green infrastructure
- Ensuring homes and infrastructure perform in hotter conditions
- Strengthening supply chain resilience and resource recovery
- Protecting natural systems and community health

Many actions deliver both outcomes.
Urban greening reduces heat (adaptation) **and** lowers energy demand (mitigation).
Transport mode shift reduces emissions (mitigation) and improves air quality **and** health (adaptation).
Building retrofits improve comfort during heatwaves (adaptation) **and** cut energy use (mitigation).

Why a Climate Transition Action Plan is needed

Perth and Peel currently have multiple climate-related strategies, sectoral plans and decarbonisation initiatives in progress. However, these efforts are not coordinated under one clear framework. A **Perth and Peel Climate Transition Action Plan (CTAP)** would provide the strategic alignment needed to accelerate both emissions reduction and climate resilience across the region.

The Case for a CTAP
A CTAP would:

- Consolidate existing work across transport, planning, energy, water, waste, industry and the environment
- Create a single baseline for greenhouse gas emissions and climate risk
- Set clear metrics, targets and timelines consistent with State and National priorities
- Clarify responsibilities across government departments, local governments, industry and communities
- Support coordinated investment in infrastructure and innovation
- Ensure transparent reporting and community confidence
- Avoid duplication and improve efficiency across government initiatives

Without a central plan, Perth and Peel risk fragmented action, inconsistent decision-making, higher costs and missed opportunities for economic diversification and climate resilience.

Scope of a CTAP

The CTAP should draw on established global and national frameworks, including the International Financial Reporting Standards (IFRS) climate disclosure standards, the Transition Plan Taskforce guidance and the C40 Cities Climate Leadership Group Climate Action Planning Framework—but adapt them for a metropolitan, cross-sector context.

The CTAP should include:
1. Foundations

- A robust greenhouse gas emissions baseline
- Regional climate risk and vulnerability assessments
- Clear targets for mitigation and adaptation
- A statement of strategic ambition for Perth and Peel

2. Implementation Strategy

- Prioritised actions across transport, built environment and circular economy
- A delivery roadmap with timelines and milestones
- Data systems to support monitoring, reporting and continuous improvement
- Integration with local and State Government planning frameworks

3. Governance

- Clear roles, responsibilities and accountability
- Cross-government steering mechanism
- Reporting requirements and public transparency
- Partnerships with business, communities and First Nations People
- Alignment with economic, planning, infrastructure and energy strategies

Why the CTAP must be the first and primary recommendation

All three focus areas: transport, built environment and circular economy, depend on the CTAP to:

- align policy direction
- prioritise investment
- coordinate agencies
- guide local government
- mobilise business and community
- ensure consistent messaging and education
- measure progress and adapt over time

The CTAP is the mechanism that turns individual actions into a **whole-of-region transition.**

4.0 Focus Areas

4.1 Built Environment

Context

The built environment — the homes, workplaces and public and commercial buildings across Perth and Peel — is central to both emissions' reduction and climate resilience. Buildings account for a significant share of regional energy use, while urban design strongly influences heat exposure, mobility options, liveability and public health.

Perth's building stock presents both a major challenge and a major opportunity. More than 800,000 homes in Perth and Peel remain connected to gas, and many buildings – residential and commercial alike – were built before modern energy standards, leaving them 2–4 times more vulnerable to heatwaves, which are already one of WA's deadliest natural hazards.

Electrifying homes and commercial buildings, improving energy performance and expanding rooftop solar and batteries can dramatically reduce energy bills and operational costs. Modelling from the Climate Change Authority shows households can save up to $4,300 per year by switching from gas to electric appliances, installing rooftop solar and batteries, and adopting an electric vehicle, while similar energy efficiency upgrades in commercial buildings can substantially cut operating expenses and emissions.

Perth can therefore create a built environment that is low-carbon, cooler, healthier and more affordable benefitting households, businesses, and the wider community — with immediate and long-term benefits.

Acknowledgement of Existing Government Action

State Government initiatives provide momentum:

- Introduction of **7-star minimum energy standards** in the National Construction Code.
- Expansion of **urban greening**, lifting canopy cover from 16% (2020) to 22% (2024).
- **Solar and battery rebates,** making renewable energy more accessible.
- Climate risk and emissions planning through the Sectoral Emissions Reduction Strategies (SERS).

Further coordination and scale are required to achieve region-wide impact.

Challenges

- **Cost and affordability:** Upfront investment remains a barrier. Many households face a "green premium" for efficient electric appliances, insulation and battery storage, even though lifetime savings are substantial.
- **Skills and capacity:** Builders and trades often lack familiarity with low-carbon materials, electrification and heat-responsive design — slowing adoption.
- **Ageing building stock:** Much of Perth's housing predates modern standards, making it inefficient, costly to cool and more exposed to heat stress.
- **Urban heat:** Urban areas can experience temperatures 1–3°C higher than surrounding suburbs due to low canopy and heat-absorbing surfaces.
- **Split incentives:** Renters often cannot benefit from investments made by landlords, slowing upgrades in the private rental market.

Opportunities

Significant household savings
Electrification and renewable energy deliver strong economic benefits:

- **$1,200/year:** rooftop solar + household battery
- **$2,070/year:** switching to an EV
- **$860/year:** electrifying space heating
- **$140/year:** electrifying water heating
- **$40/year:** switching to electric cooktops

These savings improve cost-of-living outcomes and reduce vulnerability to energy price volatility.

Rooftop solar and battery leadership
Perth already has the highest per-capita rooftop solar capacity in Australia. Doubling capacity and expanding battery uptake would significantly reduce emissions and peak demand.

Cooling the city
Increasing canopy cover to 30% could reduce household cooling energy use by 10–15% and reduce temperatures by 1–3°C in many suburbs.

Low-carbon construction materials
Adopting green concrete, low-carbon steel and recycled materials can reduce embodied emissions in new developments — especially when enabled through procurement policy.

Public health benefits
Cooler, well-designed homes reduce heat-related illnesses and hospitalisations, improving community health and reducing demand on the health system.

4.0 Focus Areas

Recommendations

1. Accelerate household and business electrification
- Require all new residential, commercial and industrial buildings to be fully electric.
- Provide targeted financial incentives for households to install electric appliances, rooftop solar and battery storage.
- Prioritise support for low-income households, renters and vulnerable populations through retrofit programs.

2. Introduce a metropolitan-wide retrofit program
- Fund insulation, shading, efficient HVAC systems and rooftop solar for older buildings.
- Support small and medium-sized businesses to transition away from gas and adopt low-carbon technologies.
- Establish standards for climate-ready homes that reflect projected future temperatures.

3. Strengthen government procurement for low-carbon materials
- Require State Government building projects to use certified low-carbon materials where feasible.
- Encourage local governments and developers to adopt similar procurement practices to stimulate supply and economies of scale.

4. Expand and integrate urban greening
- Adopt and implement the Perth and Peel Urban Greening Strategy.
- Increase canopy cover from 22% to 30% by 2030 through coordinated planting, incentives and planning controls.
- Require light-coloured roofs and heat-reflective surfaces in new developments and major renovations.

5. Support skills and workforce transition
- Partner with TAFEs, industry associations and vocational providers to train tradespeople in electrification, retrofitting and low-carbon construction materials.
- Promote awareness and acceptance of alternative building systems.

6. Improve community awareness of benefits
- Launch public campaigns that highlight cost savings, comfort improvements and health outcomes of electrification and energy-efficient homes.
- Provide simple guidance for households on switching to electric appliances and preparing for hotter summers.

Co-benefits

Actions in the built environment deliver substantial benefits:
- **Mitigation:** reduced emissions from energy-efficient electric homes, renewable energy and low-carbon materials.
- **Adaptation:** greater cooling, reduced heat exposure and climate-ready building performance.
- **Economic:** thousands of dollars in annual household savings; new jobs in retrofitting, construction, materials and installation.
- **Health:** fewer heat-related illnesses, better indoor air quality and improved wellbeing.
- **Liveability:** greener, cooler, more comfortable suburbs with higher amenity.

4.2 Transport and Infrastructure

Context

Transport is one of the largest and fastest-growing sources of emissions in Western Australia, accounting for 18% of the State's greenhouse gas emissions. Passenger and light commercial vehicles contribute more than half of these emissions. Road transport alone represents around 75% of the entire sector.

Electrification of vehicles, mode shift to public and active transport, and infrastructure that supports low-emissions mobility are essential to Perth and Peel's climate transition. These measures provide significant mitigation benefits while also improving public health, transport affordability, air quality and the resilience of the city's movement networks. Despite Perth's strong investment in METRONET and active transport, the region remains highly car-dependent. In the past year, 47% of all car trips were under 5 km and 10% were under 1 km, indicating enormous potential for mode shift to cycling, walking and other modes of active transport.

Accelerating transport decarbonisation represents one of the clearest opportunities for Perth and Peel to reduce emissions rapidly while improving liveability and economic competitiveness.

Acknowledgement of Existing Government Action

Perth and Peel have benefited from substantial recent investment:
- **State Electric Vehicle Strategy:** more than $200 million invested in electric vehicle (EV) incentives, chargers and fleet transition.
- **WA EV Network:** 110 fast-charging points across 49 locations — Australia's longest continuous EV charging network.
- **METRONET:** 72 km of new rail, 23 new stations, electrified buses and improved interchanges.
- **Active transport:** more than 125 km of new shared paths since 2017; over $340 million committed to cycling and pedestrian infrastructure.
- **Fare reforms:** simplified fares, passenger concessions, contactless payment, and free Sunday travel.

These initiatives provide a strong foundation but are not yet producing the mode-shift and emissions reductions needed to reach net zero by 2050.

4.0 Focus Areas

Challenges

- **Slow EV uptake:** Battery electric and plug-in hybrid vehicles represented 13% of new car sales in Australia in 2024 — below the global average of 22%. EVs still make up only 2% of vehicles on Australian roads, far below what is needed to meet national emissions targets.
- **Charging access and range anxiety:** Australia has 45 EVs per public charger, compared with 10–30 in most International Energy Agency (IEA) countries. This leads to longer wait times, slower uptake and inconsistent charging availability across Perth and regional WA.
- **Car dependency and limited public transport coverage:** Perth's rail network is radial, converging on the CBD, leaving many outer suburbs without efficient east-west transit connections. Weekend and after-hours frequencies remain low on key routes, including airport access.
- **Lack of shared mobility options:** Perth remains one of the only major Australian cities without a car-sharing system. Without shared EV access, car dependency — and emissions — remain high in inner and middle-ring suburbs.
- **Active transport gaps:** While cycling participation is high, Perth's cycling network lacks full integration between Local Government Areas. Retrofitting bike lanes in established suburbs remains challenging.

Opportunities

Rapid emissions reductions
Passenger and light commercial vehicles make up over 50% of WA's transport emissions — the segment most ready to decarbonise through electrification.

Cost savings for households and businesses
EVs can reduce annual fuel and maintenance costs by $2,070 per year, supporting cost-of-living relief and business efficiency.

Mode shift for short trips
Nearly half of all car trips are under 5 km. Electric bikes, scooters and other modes of Active Transport can replace many of these journeys, reducing congestion and household transport costs.

Public health and air quality
Transitioning to low-emissions mobility reduces air pollution, lowers cardiovascular risk, and improves overall community wellbeing.

Better-connected suburbs
Investing in transport networks not only improves the reach, frequency, reliability, and connectivity of travel options across Perth and Peel but also supports decarbonisation by encouraging cleaner, more efficient modes of transport and reducing reliance on private vehicles.

Recommendations

1. Accelerate Electric Vehicle Uptake
- Continue and expand EV purchase incentives, prioritising lower-cost models.
- Calibrate any future road-user charges to avoid penalising EV adoption.
- Support businesses to transition light commercial fleets through grants and technical guidance.

2. Expand and Strengthen Charging Infrastructure
- Increase the density of fast-charging stations in metropolitan areas, and expand workplace, kerbside, and multi-unit dwelling charging.
- Provide grants for public charging at shopping centres, car parks and community hubs.
- Expand the WA EV Network to tourism hotspots, regional towns and national parks.
- Develop real-time apps showing charger availability and wait times.

3. Build a More Accessible and Attractive Public Transport System
- Increase service frequency on weekends, evenings and airport routes.
- Expand electric bus fleets and progress planning for low-emissions ferries.
- Explore additional east-west rapid transit corridors and potential future light rail.
- Provide free feeder buses from residential areas to train stations to reduce private car use.

4. Develop Shared Mobility and Car-Sharing Networks
- Support the establishment of EV car-sharing schemes in inner and middle-ring suburbs.
- Integrate car-sharing hubs into new apartment developments (particularly build-to-rent).
- Allow local governments to allocate parking bays for shared vehicles.

5. Enhance Active and Micro-Mobility
- Expand and upgrade the Perth bicycle network by implementing consistent standards across Local Government Areas (LGAs) and investing in separated bike lanes, protected intersections, and safe crossings. Support micro-mobility (bicycles/e-bikes, e-scooters) through incentives, safety regulation and integration with public transport.

6. Improve Community Awareness
- Launch campaigns that highlight the cost savings of EVs, the benefits of public transport investment, and the convenience of active travel for short trips, and support behavioural change programs to overcome range anxiety and increase confidence in e-mobility.

Co-benefits

Decarbonising transport delivers substantial cross-sector benefits:
- **Mitigation:** sharp reductions in emissions from passenger and light commercial vehicles.
- **Adaptation:** more flexible and resilient transport networks, especially during heatwaves and extreme events.
- **Economic**: lower household fuel costs, reduced fleet operating costs, and new jobs in charging infrastructure and electric bus manufacturing.
- **Health**: improved air quality, reduced noise pollution, more physical activity and fewer transport-related illnesses.
- **Liveability**: reduced congestion, better-connected communities and more vibrant urban centres.

4.0 Focus Areas

4.3 Circular Economy

Context

A circular economy replaces the traditional "take–make–dispose" model with one that designs out waste, keeps materials in use, and regenerates natural systems. It is both an emissions reduction tool (mitigation) and a resilience strategy (adaptation), supporting resource security, reducing environmental impact, and creating new industries and jobs.

Perth and Peel face unique challenges: low population density, long distances between settlements, limited local reprocessing capacity and fragmented waste systems across Local Government Areas.

Yet the region also has major opportunities, particularly given the projected waste streams associated with renewable energy technologies, infrastructure upgrades, and industrial decommissioning.

By embracing circular systems, Perth and Peel can significantly reduce emissions, lower resource consumption, strengthen supply chains and create new economic pathways through recovery, repair, remanufacturing and materials innovation.

Acknowledgement of Existing Government Action

The policy environment for circularity is strengthening:

- Commonwealth waste export bans and national packaging targets.
- State Government requirements for improved organic waste recovery (FOGO), construction standards and product stewardship schemes.
- Local government initiatives in verge collections, recycling streams, and community education.
- National Sustainable Procurement policies influencing materials used in public projects.
- These frameworks provide direction but require greater coordination, data transparency and metropolitan-wide alignment to unlock their full potential.

Challenges

- **Fragmented waste systems:** Different Local Government Areas use different FOGO, recycling and bin systems, creating confusion for households and businesses and lowering material recovery rates.
- **Limited local reprocessing capacity:** Western Australia has minimal facilities for recycling plastics, glass, metals and organic waste at scale, leading to offshoring and higher costs.
- **Low data availability:** There is no comprehensive, centralised system that tracks material flows across Perth and Peel. Without this, government and industry lack the insights needed to forecast demand, identify reuse opportunities and coordinate infrastructure planning.
- **Market barriers:** Low population density and high transport costs make recycling and repair operations harder to commercialise. Early adopters of circular materials often face higher upfront costs, reducing industry uptake.
- **Lack of public awareness:** Recycling "fatigue", confusion about what goes in which bin, and low awareness of repair/reuse options all undermine circular outcomes.
- **Decommissioning waste from renewables:** WA's transition to renewable energy will generate significant waste streams:
  - 200,000–300,000 tonnes of solar PV waste by 2050
  - 30,000–50,000 tonnes of wind turbine blade waste
    40,000–60,000 tonnes of lithium-ion battery wasteThese materials represent both a risk (landfill pressure) and an economic opportunity (recovery and recycling industries).

Opportunities

A new industry for WA: renewable energy materials recovery
Solar panels, batteries, wind turbine components and grid infrastructure all contain high-value materials. A coordinated recovery industry — particularly in Kwinana's industrial precinct — could turn WA into a national leader in clean-tech recycling.

Standardised metropolitan waste systems
A consistent FOGO and recycling system across Perth and Peel would dramatically improve participation, reduce contamination and enable efficient material recovery at scale.

Repair, reuse and remanufacturing industries
Repair hubs, tool/equipment libraries, second-life appliance centres and refurbishment facilities can reduce waste, create jobs and offer cheaper options for households.

Circular building materials
Green concrete, low-carbon steel and recycled aggregates reduce embodied emissions and can be stimulated through government procurement.

Regenerating natural systems
Returning organic waste to soil through composting and FOGO programs improves soil carbon, supports tree canopy growth and strengthens biodiversity corridors, enhancing climate resilience.

Job creation and skills development
Circular economy industries create new roles in:

- material sorting
- product disassembly
- component recovery
- repair and refurbishment
- composting and organics management
- logistics and infrastructure planning

These jobs are local, resilient and difficult to automate or offshore.

4.0 Focus Areas

Recommendations

1. Standardise waste and FOGO systems across Perth and Peel
- Align bin systems, naming conventions and accepted materials across all Local Government Areas.
- Deliver a coordinated education campaign to improve participation and reduce contamination

2. Develop a centralised circular economy data platform
- Track material flows across municipal, commercial, industrial and infrastructure waste streams.
- Enable predictive modelling of future waste, including renewable energy decommissioning.
- Facilitate cross-sector collaboration by providing access to reliable, transparent data.
- Support planning for new reprocessing and recycling facilities.

3. Support development of recycling and recovery industries
- Incentivise new facilities in strategic industrial precincts (e.g., Kwinana).
- Encourage innovation in solar panel, battery, wind turbine and electronics recovery.
- Provide grants or matched funding for circular infrastructure and technology.

4. Strengthen circular procurement policies
- Require State Government projects to prioritise recycled content and low-carbon materials.
- Encourage Local Government and large private developers to adopt similar requirements.
- Mandate circular construction and demolition waste targets for major builds.

5. Expand repair, reuse and remanufacturing initiatives
- Establish community repair hubs in partnership with LGAs and the Vocational Education and Training (VET) sector.
- Support tool, toy and equipment libraries.
- Promote business models that offer product leasing, take-back schemes and refurbishment.

6. Improve community awareness and engagement
- Launch campaigns that clearly explain FOGO, recycling and circular behaviours.
- Integrate waste literacy into primary and secondary school curricula.
- Provide transparent reporting on the performance of waste systems.

7. Regenerate natural systems using circular principles
- Scale up composting and organic waste recovery to support urban greening.
- Align tree canopy targets with soil health and compost application.
- Protect and expand biodiversity corridors and urban forests.

Co-benefits

Circular economy actions deliver broad benefits across the climate transition:
Mitigation: reduced emissions from manufacturing, materials extraction and waste decomposition.
Adaptation: improved soil health, stronger biodiversity, more resilient supply chains and reduced landfill reliance.
Economic: new industries, local jobs and innovation in materials recovery.
Environmental: reduced pollution, healthier ecosystems and regenerated natural systems.
Social: more affordable access to goods through repair/reuse options and stronger community participation.

Together, the built environment, transport and infrastructure systems, and the circular economy represent the most effective levers for reducing emissions and building resilience across the Perth and Peel regions. Each requires coordinated policy, targeted investment and active collaboration between government, industry and the community. A Climate Transition Action Plan (CTAP) provides the mechanism to bring these efforts together — setting the baseline, defining shared priorities, aligning responsibilities and ensuring transparent, measurable progress toward a low-carbon, climate-ready future.

4.4 Key Recommendations

Committee for Perth recommends that the Western Australian Government prioritise the development of a Perth and Peel Climate Transition Action Plan (CTAP) as the central framework to coordinate and accelerate climate mitigation and adaptation across the region.

The CTAP should:
- establish a unified emissions baseline and regional climate risk assessment;
- set clear, measurable targets for mitigation and resilience;
- identify priority actions across the built environment, transport and the circular economy;
- provide a coordinated delivery roadmap spanning State agencies, local governments, industry and communities;
- establish transparent reporting and inclusive stakeholder engagement.

Committee for Perth further recommends that the Government commit to implementing the detailed actions outlined under the three focus areas in this paper:
- **Built environment** — electrification, climate-ready design, urban greening and low-carbon materials.
- **Transport and infrastructure** — zero-emissions mobility, accessible public and active transport, and shared mobility solutions.
- **Circular economy** — consistent waste systems, materials recovery, circular procurement and regenerative land management.

Together, these actions will reduce emissions, strengthen resilience, support economic diversification and enhance liveability across the Perth and Peel regions.

5.0 Conclusion

Perth and Peel are at a defining moment in their development. The region has the opportunity to become one of the world's most climate-ready, liveable and economically competitive metropolitan areas — but this will only be realised through coordinated, decisive action on climate mitigation and adaptation.

A Climate Transition Action Plan (CTAP) is central to achieving this. It will provide a unified, long-term framework that consolidates existing strategies, guides investment, supports collaboration across sectors and ensures accountability for progress. The three focus areas outlined in this paper — the built environment, transport and infrastructure, and the circular economy — offer practical, high-impact courses of action to reduce emissions, reduce exposure to climate risks, strengthen resilience and enhance quality of life for all communities.

By adopting the recommendations in this paper, and by committing to a Climate Transition Action Plan for Perth and Peel, the Western Australian Government can drive a future that is low-carbon, prosperous and resilient. Committee for Perth stands ready to support this work and contribute to a climate-ready Perth by 2050.

6.0 Appendix

Recognition of current reports/plans/policies

- METRONET Program (transformational public transport and land use)
- Perth and Peel @ 3.5 Million Plan
- State Roads Infrastructure Plans
- Long-Term Cycling Network Plan
- WA Walking Strategy
- Electric Vehicle Strategy for WA
- WA Climate Policy (Net Zero 2050 commitment)
- Climate Adaptation Strategy (Water Security, Coastal Management)
- Perth Waterwise City and Water Corporation Waterwise Programs
- Urban Forest and Tree Canopy Initiatives (DLGSC + LGAs)
- Biodiversity Conservation Strategy
- Coastal Hazard Risk Management & Adaptation Planning Guidelines
- WA Renewable Hydrogen Strategy
- Distributed Energy Resources Roadmap
- Waste Avoidance and Resource Recovery Strategy
- Green Energy Approvals Streamlining
- South West Interconnected System (SWIS) Transformation
- Energy Transformation Strategy
- Climate Action and Sustainability Strategy 2024-2027
- City of Perth (2025) Sustainability Strategy 2022-2032. July 2025
- State Emissions Sectoral Reduction Strategy (SERS)

Additional Sources and References:

- Public Transport Authority Annual Report 2024/25 information on current usage numbers and effective initiatives, such as fare free travel.
- https://www.pta.wa.gov.au/Portals/15/AA_DOCUMENTS/Annual%20Reports/PTA%20Annual%20Report%202024_25.pdf?ver=9Idbd1wtCBj-je1G-M8RxA%3d%3d
- Urban Tree Canopy Dashboard (UTCD)
- Climate Change Authority (CCA) using the Australian Energy Market Commission Modelling – taken form article in 'The Australian' 19/10/2025
- WA: Waste Avoidance and Resource Recovery Strategy 2030; Plan for Plastics; FOGO rollout; Containers for Change; and the E-waste to landfill ban (2024).
- Solar PV Waste Projections: https://colab.ws/articles/10.1016/j.resconrec.2023.107316
- Clean Energy Council: https://cleanenergycouncil.org.au/for-consumers/fact-sheets/recycling-get-the-facts/recyling-wind-turbines-solar-panels-batteries
- Battery Storage Analysis: https://www.energycouncil.com.au/analysis/battery-storage-australia-s-current-climate/
- WA Grid Boost: https://www.energynewsbulletin.net/energy-transition/news-analysis/4409842/wa-government-clarifies-usd6bn-power-grid-boost-amid-decarbonisation-efforts
- Kwinana Energy Recovery Project: https://arena.gov.au/projects/kwinana-energy-recovery-project/
- https://www.transport.wa.gov.au/paving-the-way-for-a-safer-and-smoother-ride
- https://electricvehiclecouncil.com.au/media-releases/australia-makes-gains-in-ev-uptake-but-faces-steep-road-ahead-report-finds/

7.0 Working Group Members

As an apolitical, future-focused and independent organisation, Committee for Perth draws upon the expertise of its diverse membership, representing over 40 different industry sectors across the Perth region. The goal is to bring together our member's collective expertise to foster thought leadership and produce a white paper lead to real, practical and achievable impact.

Chair: Julie McKay-Warner
General Counsel
Keystart

Deputy Chair: Steven Mills
Climate & Energy Policy and Advocacy Manager
CME

Christina Olgaard
Associate
PwC

Danika Ferguson
Associate Director
Purple

Dave Jones
Sustainability Advisor
Western Power

Janine Barrow
Global Solutions Director
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Jessie Parrish
Project Manager Sustainable Development Goals
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Jo Garland
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HopgoodGanim Lawyers

Kelly Campbell
Executive Support Officer
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Kelly Worlock
Chief Operations Officer
Brightwater Care Group

Kylie Ashenbrenner

Lina Hockaday
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Marion Morton
Executive Manager, Social and Community Impact
RAC

Natalie Adams

Nickey Ludkins
Executive Education Manager
Edith Cowan University

Paul Vallelonga

Paula Rogers
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Shari Stockdale
Project Lead – Sustainability
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COMMITTEE FOR

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