



Western Australian Climate Policy

A plan to position Western Australia
for a prosperous and resilient
low-carbon future



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Department of Water and Environmental Regulation

Prime House, 8 Davidson Terrace
Joondalup Western Australia 6027

Telephone +61 8 6364 7000
Facsimile +61 8 6364 7001
National Relay Service 13 36 77

dwer.wa.gov.au

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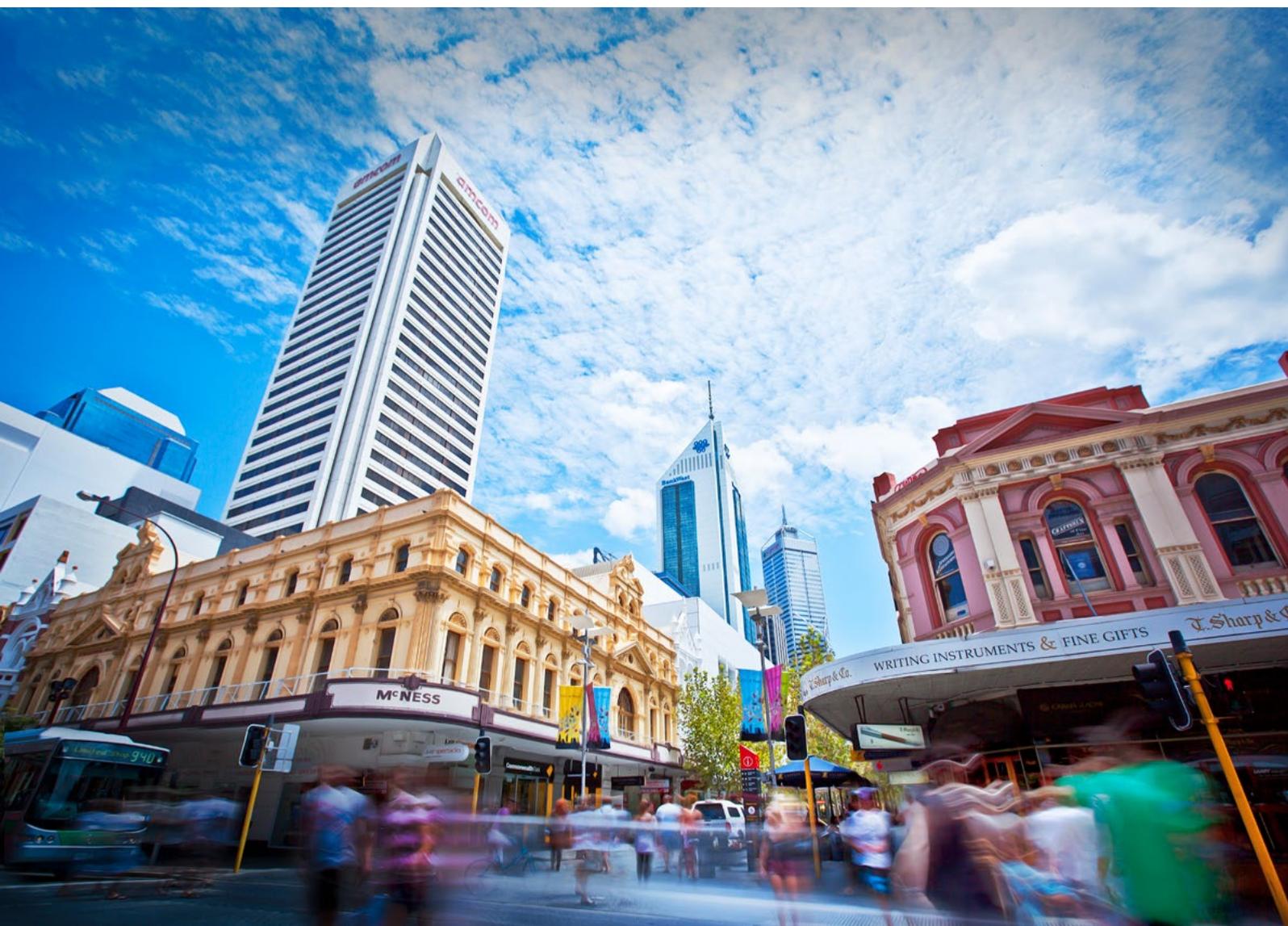
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Contents

Contents	3
Minister's foreword	4
Introduction	7
Current action – at a glance	12
Western Australian Climate Policy	13
Clean manufacturing and future industries	14
Transforming energy generation and use	18
Storing carbon and caring for our landscapes	20
Lower-carbon transport	22
Resilient cities and regions	24
Government leadership	26
Appendix A Western Australian Climate Policy	28



Minister's foreword



The Western Australian Climate Policy supports the McGowan Government's commitment to a prosperous and resilient low-carbon future for our State.

Consultation on the State Government's *Climate Change in Western Australia – Issues paper* indicates overwhelming support for climate action, reflected in more than 3,700 submissions from individuals, business and industry, local government, environment groups, peak bodies and research institutions. Feedback on the issues paper shows that Western Australians are keenly aware of the challenges climate change poses for our environment, economy and community. It's also clear our communities and our businesses are ready to be part of the global low-carbon transition, and share in the benefits of greener jobs and new industries.

Western Australia's resource-based economy is currently emissions intensive. Reducing our greenhouse gas emissions and contributing

to Australia's international commitments will require strong commitment, clear policy direction and action from the private sector as well as all levels of government.

National leadership and economy-wide policy is critical to delivering our international commitments under the Paris Agreement. The McGowan Government is not waiting for national action, however, and is taking steps to lay the foundations of the low-carbon transition, build the industries of the future and adjust to unavoidable climate change.

The Climate WA Health Inquiry has been established to review the health system's capacity to respond to the effects of climate change and make recommendations for improvement. The Energy Transformation Strategy, launched in March 2019, will improve the way we integrate large and small-scale renewables for low-cost, low-emissions energy. The State Government has set out an Electric Vehicle Strategy for Western Australia to

facilitate a low-emissions transport sector. We are also supporting development of a renewable hydrogen industry, future battery industries and a robust carbon farming industry in the State. Collectively, these initiatives will support national and global action to reduce emissions and enhance the resilience of our community.

In August 2019, we announced our aspiration of net zero emissions for Western Australia by 2050, and a commitment to working with all sectors of the economy to achieve that goal. Since then, the COVID-19 pandemic has delivered the most severe economic shock since the Great Depression.

Through investments we are making under the WA Recovery Plan, we can accelerate the energy and technology transformations already underway and get Western Australians back to work in a cleaner, greener economy.

The Western Australian Climate Policy draws together a suite of climate change actions underway and sets out new commitments to support our vision of a resilient, low-carbon future. These include initiatives to support the net zero transition across the public sector; initiatives for low-carbon energy, mining and agriculture; and commitments to guide decarbonisation across the rest of our economy.

These actions demonstrate the State Government's commitment to our net zero aspiration, and provide our community with the tools to enhance resilience and for business to thrive in a low-carbon future.



**Hon Stephen Dawson MLC
Minister for Environment**



Introduction

The Western Australian Climate Policy sets out the McGowan Government's plan for a climate-resilient community and a prosperous low-carbon future. The policy underscores our commitment to adapting to climate change and working with all sectors of the economy to achieve net zero greenhouse gas emissions by 2050.

The policy also creates a unique opportunity to develop low-carbon jobs and new industries. These actions will support economic recovery from COVID-19 and reduce our greenhouse gas emissions at the same time.

Climate change is a pressing global issue that creates both challenges and opportunities for Western Australia. All levels of government, along with business and the community, have a role to play in responding to the challenge.

Western Australia's vision of a prosperous, resilient low-carbon future can be achieved if we all work together.

The State Government continues to advocate for national action to reduce carbon pollution effectively and fairly. By acting now, however, we can minimise the costs of the transition and ensure we don't miss out on the benefits of a low-carbon future for our State. Important opportunities presented by the low-carbon

transition include new manufacturing and export industries, regional development, lower energy costs, enhanced global competitiveness and a stronger, more diversified economy.

The policy outlines the priority themes and practical actions the State Government is taking to enhance climate resilience and support the low-carbon transition.

This policy looks beyond business-as-usual measures to highlight the most significant, high-impact actions that we are taking in collaboration with industry and the community, to reinvigorate our economy, prepare for climate change and achieve our aspiration of net zero emissions by 2050.

Action is outlined in the following themes:

	Clean manufacturing and future industries
	Transforming energy generation and use
	Storing carbon and caring for our landscapes
	Lower-carbon transport
	Resilient cities and regions
	Government leadership



Managing Western Australia's transition to net zero emissions

Western Australia's aspiration of net zero emissions by 2050 will ensure business is well placed to thrive in a low-carbon world and Western Australians can look forward to a secure, sustainable future.

While the net zero transition will support the industries and jobs of the future, reducing Western Australia's emissions will be a considerable challenge given our energy-intensive industries and projected growth in the resources sector. Western Australia's greenhouse gas emissions are rising, and are expected to grow in the short to medium term under business as usual. Our State's transport emissions are also increasing steadily, and slow vehicle stock turnover means that policy changes we make now will take time to have an impact.

Reversing these trends – and continuing to grow our economy while transitioning toward net zero emissions – will require enduring commitment, investment in technology, and leadership from both the State and Australian Government.

The Australian Government's safeguard mechanism applies to all facilities with direct emissions over 100,000 tonnes per annum carbon dioxide equivalent. A robust framework for Australia's largest emitters is critical to an effective and equitable transition to net zero emissions. It is also crucial to Western Australia realising its net zero aspiration, as around half our State's emissions are attributable to safeguard facilities.

The State Government has sought assurances from the Australian Government that the national policy framework will deliver on our international commitments to 2030 and beyond and will continue to support strong national action.

The State Government is doing its part by requiring new proposals or expansions undergoing environmental impact assessment under the *Environmental Protection Act 1986* to set interim and long-term emission reduction targets consistent with the State's net zero aspiration.

Our mining and manufacturing businesses are already responding to policy signals and falling technology costs, embracing the imperative of achieving net zero emissions by 2050.



Reducing emissions in some sectors of the Western Australian economy is straightforward while abatement in other sectors is difficult or 'hard to reach'. Decarbonising heavy industry, in particular, requires innovation and mechanisms to de-risk future investment. To address these critical challenges, the State Government will collaborate with businesses and research institutions to support development of new technology and demonstration at scale. We will also facilitate the move to net zero emissions for existing industries through the adoption of alternative energy sources and energy-efficient processes.

The policy builds on existing State Government reforms to lay the foundation for the net zero transition. Commitments outlined in this document will help mainstream innovation and adoption of new technologies; reinvigorate our economy around lower-emissions value chains and operations; and maximise our sequestration potential to offset residual emissions from hard-to-reach sectors.

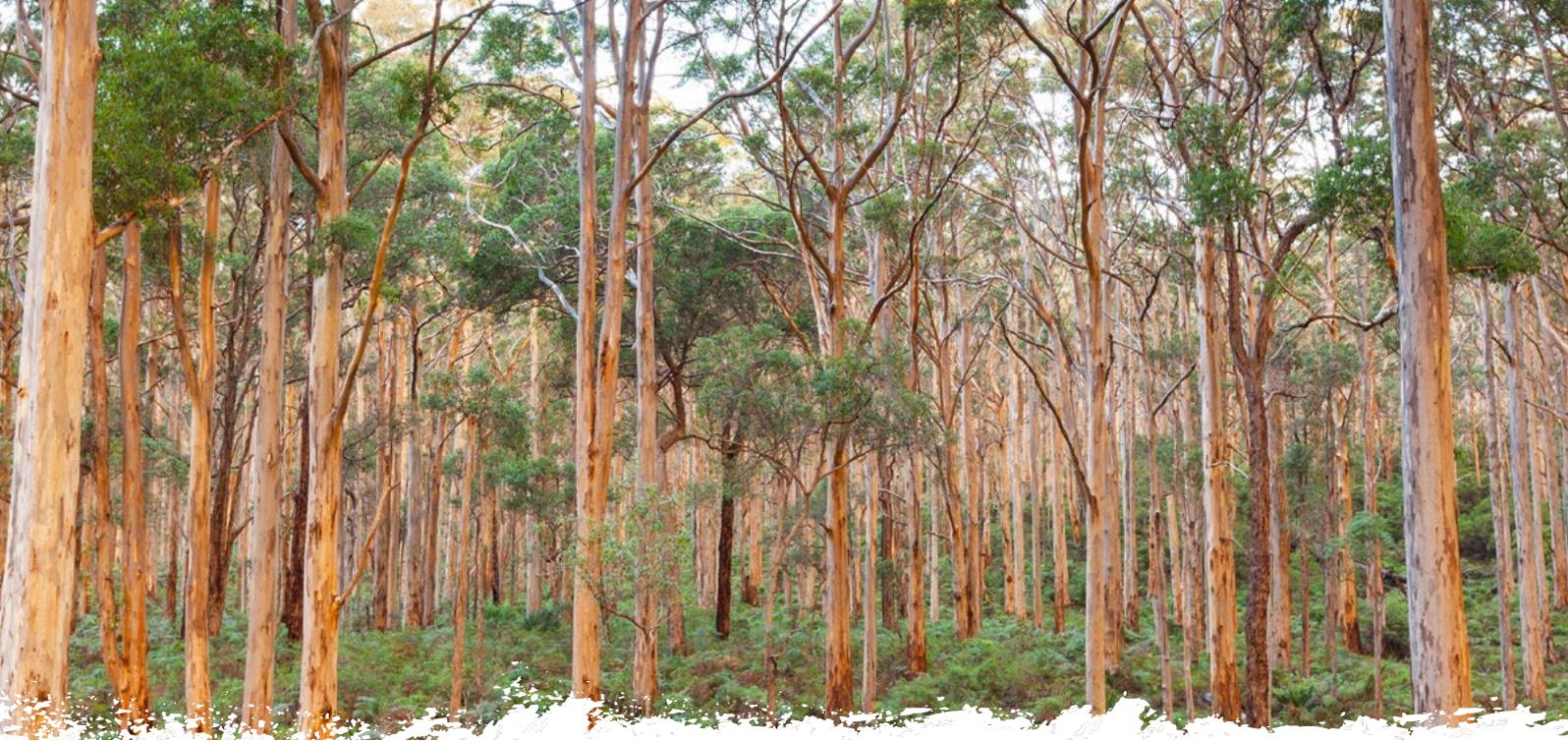
The State Government will also continue to work with the Australian Government and local government to provide our community with the tools to achieve net zero emissions.

Coupling the low-carbon transition with economic recovery

The COVID-19 pandemic has had a profound effect on the State's economy with the full extent of the impact yet to be realised. Combined with the WA Recovery Plan, the Western Australian Climate Policy provides a unique opportunity to lay the foundation for economic recovery and a return to full employment, while preparing Western Australia for the net zero transition.

By combining the objective of job creation with emissions reduction, we can leverage our State's natural competitive advantages, maximise the value of our investments, and accelerate the shift to low-emissions technologies and cleaner production.

Through the policy and WA Recovery Plan, the State Government will make significant new investments in cleaner energy solutions and low-carbon industries. These include new commitments for renewable energy generation and energy storage; additional support for renewable hydrogen and future battery industries including battery manufacturing; and programs to restore our unique landscapes and enhance our carbon sinks.



The State Government is also improving the energy efficiency of social housing, and investing in infrastructure to enhance our climate resilience and facilitate the low-carbon transition, through coastal adaptation and protection grants and electric vehicle fast charging infrastructure.

Together, these investments will generate short-term jobs and boost productivity, while ensuring our economy remains strong and our industries are competitive into the future.

Enhancing our climate resilience

Transitioning our economy to net zero emissions will help reduce the impact of climate change, but some changes are inevitable. Safeguarding the health and resilience of our community requires an understanding of the ways our climate will change, and strategies to enhance our preparedness.

Adapting to climate change can include a range of responses such as changing how we do business; supporting healthy, connected cities and regions; building climate-resilient infrastructure; and addressing existing stressors on our environment.

Western Australians are already adapting to a drier and warmer climate, particularly in response to the multi-decadal decline in rainfall in the south-west of our State.

The Gallop Government in 2001 recognised that climate change was dramatically affecting water availability and began investing in sustainable, climate-resilient water sources



such as desalination. With the support of the State Government, 42 local governments are now endorsed through the Waterwise Council program, leading the way towards a Waterwise Western Australia.

The State Government is also working with industry and research organisations to support adaptation across the agricultural sector. Our work is supporting innovation in cultivation techniques and varieties and the use of different crop and pasture rotations. Despite declining rainfall, agricultural productivity has increased over the past 30 years. These gains are attributed to development of drought-tolerant grain varieties, investment in weather forecasting and seasonal projections, improved agronomic practices, and better risk management.

The understanding of climate impacts for Western Australia varies across different sectors. The challenges of climate change are well understood by our primary industries, with agricultural businesses implementing both incremental and transformational changes to boost productivity. In other areas, the implications of climate change are less well understood.

Greater focus is needed to identify climate impacts for different regions, to communicate adaptation options, and to promote resilience.

This policy sets out the high-level priorities the State Government will implement to support a more climate-resilient community. The approach to climate adaptation recognises our exposure to climate impacts, the diversity of our regions and our existing capability to manage and adapt to climate change. The policy outlines actions we will take to guide the response by business, the community, local governments and State Government agencies to develop well-informed, timely and practical adaptation responses.

Current action – at a glance

2017

► METRONET (2017)

Offer people alternative and sustainable travel choices and support more diverse and compact communities around transport nodes.

2018

► Bushfire Centre of Excellence (April 2018)

Australia's first bushfire Centre of Excellence to enhance the training and bushfire management practices delivered locally to firefighters across Western Australia.

2019

► Future Battery Industry Strategy (January 2019)

Position Western Australia to capture future battery industry opportunities from global growth in electric vehicles and battery-based energy storage systems.

► Plan for Our Parks (February 2019)

Create 5 million hectares of new national and marine parks and reserves across Western Australia to expand the conservation estate and secure habitat for threatened species.

► Renewable Hydrogen Strategy (July 2019)

Build on the State's renewables potential to position Western Australia as a key player in the future hydrogen economy.

► Climate Health WA Inquiry (March 2019)

Investigate the implications of climate change, including more frequent and intense weather events, on health.

► Greenhouse Gas Emissions Policy for Major Projects (August 2019)

Require major new projects or project expansions with significant emissions to set interim and long-term emissions reduction targets to support the State's aspiration of net zero emissions by 2050.

► Energy Transformation Strategy (March 2019)

Improve the way we plan and access our power system, and integrate new generation technologies, distributed resources and energy storage.

2020

► Distributed Energy Resources Roadmap (April 2020)

A five-year plan to guide better integration of distributed energy resources, including solar panels, battery storage and electric vehicles.

► Carbon farming for pastoralists (December 2019)

Open the way for pastoralists to undertake carbon farming (human-induced regeneration) activities on pastoral leasehold land.

► Clean Energy Future Fund (July 2020)

Invest an additional \$10 million to support new renewable energy projects via the Clean Energy Future Fund.

► Carbon for Conservation (August 2020)

Invite market-led proposals for carbon farming (sequestration and emissions avoidance) projects on the conservation estate, supporting Aboriginal employment and biodiversity benefits.

► Renewable energy investment (July 2020)

\$44.5 million in renewable energy infrastructure in the north-west, including battery energy storage systems in regional communities.

► Investment in renewable hydrogen (August 2020)

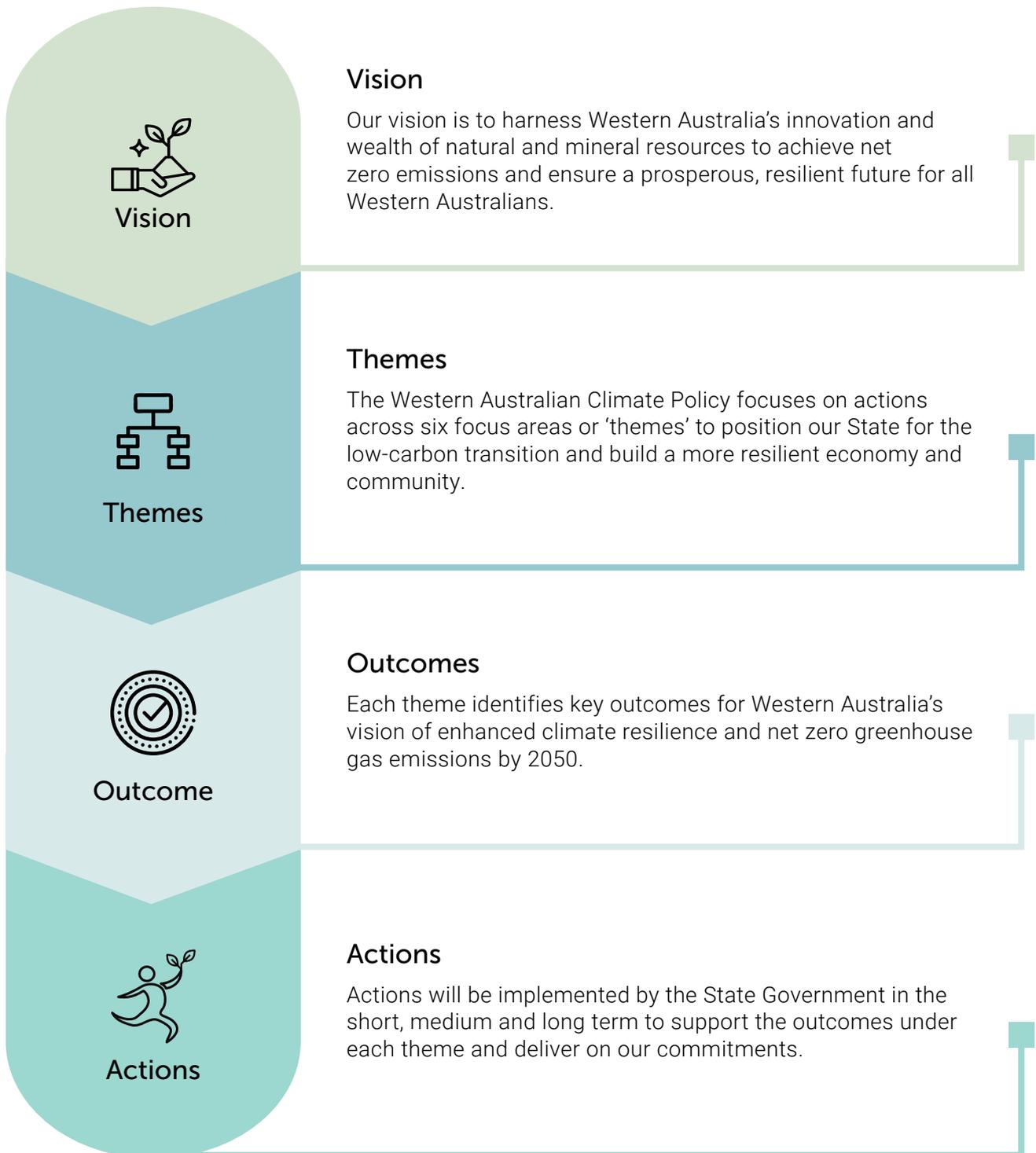
Bring forward the Renewable Hydrogen Strategy's 2040 targets by a decade and invest \$22 million to support development of a renewable hydrogen industry.

► Electric Vehicle (EV) Strategy (November 2020)

An action plan to support efficient and coordinated uptake of EVs, including new infrastructure, standards and government fleet investment.

Western Australian Climate Policy

Overview





Clean manufacturing and future industries

The low-carbon future presents exciting opportunities for new jobs, manufacturing and export industries, such as renewable hydrogen, future batteries and hydrogen-intensive commodities like 'green' steel. New low-carbon industries also have the potential to support regional development and economic diversification, ensuring our communities and our economy remain strong in the face of global finance and policy trends.

Our State has outstanding renewable resources, as well as abundant land and mineral wealth, a highly skilled workforce and established export markets. Given these comparative advantages – and with the right policy settings – Western Australia can reap the benefits of the global low-carbon transition.

The State Government has taken significant steps to

support clean manufacturing and export industries with the [Renewable Hydrogen Strategy](#) and [Renewable Hydrogen Fund](#), the [Future Battery Industry Strategy](#) and investment in the [Future Battery Industries Cooperative Research Centre](#).

Development of Western Australia's value-adding clean manufacturing capacity will help reduce emissions and support global decarbonisation

by enabling low-carbon supply chains. For existing industries, renewables and energy storage offer significant potential to reduce emissions and energy costs, while helping industries gain a competitive advantage. Making the most of these opportunities will help us grow and restructure our economy, while reducing emissions and safeguarding our future prosperity.

Outcomes

- New jobs in clean industries in Western Australia.
- Greater adoption of low-carbon technologies in the resource and primary industry sectors.
- Global decarbonisation through export of renewable energy and reduced supply chain emissions.
- Enhanced economic diversification and resilience.



Photo: Yara Pilbara Fertilisers

Our actions

► Green steel project

Map the development pathway and technology needs to create green steel in Western Australia.

► Green industry transformation

Identify the policy, regulatory and infrastructure requirements to unlock the transformational potential of large-scale, low-cost renewable energy projects and stimulate new energy-intensive and clean manufacturing industries.

► Net zero emissions mining

Initiate projects which target lowering overall energy costs and reducing the carbon footprint from mining and mineral processing through adoption of alternative energy sources and energy-efficient processes.

► Carbon neutral agriculture demonstration project and certification scheme

Showcase carbon pollution reduction options for Western Australian broadacre farming at the Katanning Research Facility and develop a carbon neutral agriculture certification scheme.

► Western Australian Bioeconomy Strategy

Develop a State Bioeconomy Strategy to facilitate the growth of bioenergy and bio-product industries in Western Australia.

► Renewable Hydrogen Fund

Support renewable hydrogen feasibility studies and capital works projects to fast-track renewable hydrogen industry development across the State and allocate additional grant funding to support key hydrogen opportunities and leverage funding from the Australian Government.

► Electrolyser Manufacturing Initiative

Conduct a feasibility study into the local manufacture, assembly or maintenance of electrolysers to support the domestic renewable hydrogen industry.

► Renewable Hydrogen Strategy

Support development of Western Australia's renewable hydrogen industry by delivering regulatory reforms and enabling studies and systems which are required to increase investment confidence including:

- identifying opportunities for international hydrogen partnerships and investment attraction
- modelling Western Australia's supply chains to identify bottlenecks and limitations affecting the hydrogen industry
- identifying suitable locations for geological hydrogen storage
- developing options to blend hydrogen in Western Australian gas distribution systems
- identifying optimal locations for the development of hydrogen hubs.

► Future Battery Industry Strategy

Grow Western Australia's future battery industries by:

- providing investment attraction, project facilitation, research and technology sector development, and adoption of battery technologies
- supporting certification of Western Australia's battery minerals
- providing funding to support investment in the next step of the battery value chain: Cathode Active Materials manufacturing.

► Wind Turbine Manufacturing Initiative

Conduct a feasibility study into local manufacture of wind turbine components.

► Collie Green Aluminum Smelter Study

Undertake a scoping study into the feasibility of establishing a green aluminum smelter in the Collie-Bunbury region.

► Greenhouse Gas Emissions Policy for Major Projects

Administer the Greenhouse Gas Emissions Policy for Major Projects to require major emitters assessed under the *Environmental Protection Act 1986* to set emissions reduction targets and outline their contribution to the State's net zero aspiration.

Case study 1: Producing renewable hydrogen from wastewater

In an Australia-first project, the Water Corporation has partnered with Hazer Group to pilot the production of renewable hydrogen and graphite from wastewater.

The project, based at the Woodman Point Wastewater Treatment Plant in Munster, will produce about 100 tonnes of low-emission hydrogen and 380 tonnes of graphite per year. The technology will utilise the waste product biogas – primarily composed of methane and carbon dioxide – which is released during the wastewater treatment process as solid matter (biosolids) breaks down.

The Commercial Demonstration Project (CDP) will be an important milestone in commercialising the Hazer technology, originally developed by the University of Western Australia.

The CDP is projected to create up to 20 new jobs and help sustain more than 100 others in the contractor and supply chain.

Hazer Group is also partnering with the City of Mandurah to explore the establishment of hydrogen refuelling infrastructure hubs and associated transport applications. The project feasibility study is supported by the State government through the WA Renewable Hydrogen Fund.



Photo: Water Corporation



Photo: Asian Renewable Energy Hub

Case study 2: Large-scale renewable energy for renewable hydrogen and green ammonia production

The Asian Renewable Energy Hub is designed to generate 26 GW of renewable energy in Western Australia. Up to 3 GW of generation capacity will be dedicated to large energy users in the Pilbara region, which could include new and expanded mines and downstream mineral processing. The bulk of the energy will be used for large-scale production of green hydrogen and green ammonia products for domestic and export markets. From

a 14,000 km² initial land package, 6,500 km² of land in the East Pilbara region of Western Australia were selected to accommodate wind turbines and solar photovoltaic panels.

The project has been granted lead agency status by the State Government and has just received environmental approvals for its first 15 GW stage. It has also secured major project status by the Australian Government.



Transforming energy generation and use

Western Australia's energy sector presents significant opportunities for cost-effective carbon abatement. Energy efficiency is one of the most effective ways to cut energy consumption, reduce emissions and enhance productivity. In addition, the falling cost and rapid uptake of renewable generation is transforming the electricity sector, enabling it to reduce its own emissions and emissions in sectors that electrify their processes and operations, such as manufacturing, resources and increasingly transport.

Western Australia has some of the best quality solar resources in the world. With the support of State and national programs, Western Australians have embraced rooftop solar. Close to one in three households have rooftop solar installed and this is expected to become one in two over the next 10 years. There has also been a doubling of the capacity of large-scale renewable energy generation over the past decade, with capacity due to reach 1200 megawatts by the end of 2020.

The [Energy Transformation Strategy](#) is guiding a revolution in how electricity is generated, distributed and used in Western Australia, and helping to decarbonise the energy sector. The strategy includes a [Distributed Energy Resources \(DER\) Roadmap](#) to support continued uptake and better integration of resources like rooftop solar, batteries and electric vehicles. It also incorporates a [Whole of System Plan](#) to identify the investments needed for higher levels of lowest-cost renewable

generation and battery storage. In addition, the State Government is conducting technology trials and progressing reforms to the wholesale electricity market and network access to improve connection and integration of new renewable generation and storage.

In our regions, Horizon Power is a global pioneer of hybrid and microgrid systems and Australia's first utility to start the shift to off-grid renewable energy power solutions which reduce carbon emissions and energy costs for regional customers.

Outcomes

- Better integration of large-scale renewable and distributed energy resources and reduced carbon emissions.
- Lower costs and better choices for consumers.
- Enhanced reliability and security of energy supply.
- Support for new technologies, new businesses and new Western Australian jobs in the fast-growing clean energy sector.

Case study 3: Delivering the Energy Transformation Strategy

Key components of the State Government's Energy Transformation Strategy are already being delivered.

These include:

- deploying community batteries to strengthen the electricity network and help households to maximise the benefits of rooftop solar without paying the up-front cost of their own battery system
- leading edge trials of how to orchestrate rooftop solar with batteries and electric vehicles, such as a new program to create virtual power plants based around new battery systems that Synergy will install at selected schools
- accelerating deployment of Standalone Power Systems in regional areas, providing more reliable, lower-emissions solar and battery-based electricity to customers while reducing the bushfire risks and costs of long transmission lines.

Our actions

► **Energy Transformation Strategy**

Implement the actions within the DER Roadmap, reform essential system services and capacity markets to maintain system security, and introduce constrained access that will enable more large-scale renewables to connect to the State's main grid.

► **Whole of System planning for net zero emissions**

Require future Whole of System planning to include scenarios for renewable energy and storage penetration consistent with national and State emissions reduction goals and the South West Interconnected System's contribution to those goals to map out ideal renewable generation and storage investments.

► **Horizon Power: no diesel from 2025**

Commit to Horizon Power not deploying any new standalone diesel generation from 2025.

► **South West Interconnected System (SWIS) big battery**

Install and commission a large battery to enable more renewable generation to be stored while maintaining system security in the SWIS.

► **Standalone Power Systems (SPS)**

Significantly increase the deployment of SPS across remote parts of Western Power and Horizon Power's networks including remote Aboriginal communities.

► **Trial innovative technologies**

Trial new technologies to support the transition, such as micro pumped hydro and distributed energy resources orchestration.

► **Distributed Energy Buyback Scheme**

Introduce payments for energy exported to the grid from eligible home batteries and electric vehicles to support their uptake.

► **Household Energy Efficiency Scheme**

Provide assistance to households, including those in energy retailer hardship programs, to enhance energy efficiency and reduce energy costs.

► **Energy storage in regional towns**

Deploy utility batteries in regional communities to enable more households and businesses to install rooftop solar and lower their emissions and energy costs.

► **Horizon Power Denham hydrogen microgrid demonstration project**

Deploy an Australian-first hydrogen renewable energy microgrid in the Gascoyne town of Denham, using a new solar power system to produce hydrogen.

► **Solar Schools Program**

Increase State Government use of renewable energy by installing solar on school rooftops.

► **School Virtual Power Plants (VPP)**

Transform selected schools into smart, green VPP, integrating rooftop solar and batteries to cut school power bills, support the transition to clean energy and make local electricity grids more stable and reliable.

► **Clean Energy Future Fund**

Implement the fund, including additional investment announced under the WA Recovery Plan, to support deployment of low-carbon energy solutions.





Storing carbon and caring for our landscapes

Western Australia's significant land mass and extensive coastline provide enormous potential for carbon sequestration (storage) in vegetation and soils. Our rangelands occupy about 2.2 million square kilometres and can sequester large amounts of carbon, improving rangeland conditions and financial resilience for pastoralists.

Homegrown carbon farming projects can yield multiple benefits for Western Australia, restoring landscapes, empowering traditional owners, delivering regional jobs and contributing to the State's low-carbon transition. Developing Western Australia's carbon offset market will also allow businesses seeking to offset emissions to reinvest back into the local community, supporting job creation and economic diversification.

In the Wheatbelt, there are opportunities to improve degraded land and provide additional revenue streams to farmers by integrating environmental plantings into existing farming systems. In the Kimberley, early dry season savanna burning offers a way to reduce emissions and deliver economic opportunities for traditional owners as well as biodiversity benefits.

The expansion of our conservation estate under [Plan for Our Parks](#), along with the [Carbon for Conservation](#) initiative and development of a Western Australian Carbon Farming Strategy, will enhance participation in carbon farming and support our aspiration of net zero emissions by 2050.

Outcomes

- Reduced emissions and increased carbon sequestration.
- Economic diversification and enhanced agricultural productivity.
- Jobs for traditional owners and regional communities.
- Improved biodiversity conservation and fire management outcomes.

Case study 4: Carbon farming on Western Australia's pastoral lease lands

The State Government is backing carbon farming on pastoral leases, allowing pastoralists to undertake projects to support the regeneration of native vegetation through managing cattle grazing, which sequesters carbon while improving pastoral productivity.

The State Government's announcement on eligible interest holder consent has led to the registration of 59 projects under the Australian Government's Emissions Reduction Fund (ERF), delivering an estimated 9 million tonnes of carbon abatement and around \$130 million in revenue for pastoralists.

An additional 15 million tonnes of carbon abatement are expected to be sold directly to major greenhouse gas emitters who need to purchase carbon credits to offset their emissions.

The decision follows extensive consultation with the mining industry, pastoralists and Aboriginal representative bodies and carefully balances the rights of pastoralists and mining interests.



Our actions

► **Western Australian Carbon Farming Strategy and Carbon Farming Industry Development Plan**

Identify and implement opportunities to enhance participation in carbon farming in Western Australia.

► **Carbon Farming and Land Restoration Program**

Develop a land restoration program to invest in carbon farming activities that deliver social and environmental co-benefits for Western Australia.

► **Savanna burning approvals framework**

Develop a guiding policy and approvals framework to support use of the savanna fire management (emissions avoidance) methods on Western Australian crown land (pastoral leases, unallocated crown land, and the various types of crown reserves).

► **Carbon for Conservation Initiative**

Provide opportunities for carbon farming service providers to work with the State Government to maximise environmental and economic benefits of carbon farming on the conservation estate.

► **Restoration of landscapes under Plan for Our Parks**

Enhance vegetation and carbon sequestration in new areas of the conservation estate established under Plan for Our Parks.

► **Native Vegetation Rehabilitation Scheme**

Invest in revegetation, habitat restoration and protection of existing vegetation to deliver at-scale environmental outcomes.

► **Main Roads offsets**

Support Main Roads to improve and increase roadside vegetation in the agricultural region to offset the impacts of roadworks.

► **Expansion of the softwood plantation estate**

Provide opportunities for private sector investment to support an expansion of Western Australia's softwood plantation estate, storing up to 7 million tonnes carbon dioxide equivalent.

► **Support Western Australia's Biodiversity Science Institute (WABSI)**

Continue to support WABSI to facilitate collaborative research to improve scientific knowledge and biodiversity outcomes, including enhanced climate resilience.

► **Support Western Australia's Marine Science Institution (WAMSI)**

Continue to support WAMSI to facilitate and advocate for marine science research that builds economic, environmental and social value, including enhanced climate resilience.

Case study 5: Katanning Research Facility Carbon Neutral 2030

The Department of Primary Industries and Regional Development's Katanning Research Facility (KRF) has the goal to achieve carbon neutrality by 2030. KRF is a 2000 ha mixed sheep and grain property in the Great Southern of Western Australia and shares this carbon neutrality goal with the Meat and Livestock Australia (MLA) industry objective of the Australian red meat industry being carbon neutral by 2030.

This will be achieved by detailing the carbon footprint of the KRF, including a carbon intensity measurement of sheep meat, wool and grains. Results will then form a strategy to mitigate emissions, including a focus on changes in land use and land practices, revegetation and productivity.

KRF will also provide opportunities for demonstration and trials of new methods, products and pasture systems.



Lower-carbon transport

The State Government’s rollout of **METRONET** is the most significant investment in public transport ever undertaken in Western Australia. It is helping to connect communities, support clever urban design, and reduce the need for car travel. METRONET is a core component of the State Government’s strategy for managing new residential development, delivering a multimodal transport system that promotes sustainable behaviour.

METRONET is complemented by world-class walking and cycling infrastructure, which supports active lifestyles, reduces emissions and makes the most of our natural environment.

Our State is also addressing transport emissions by facilitating cleaner fuels and technologies. For the international shipping sector, we are leading a push to establish a liquefied natural gas (LNG)

bunkering hub in the Pilbara to replace heavy fuel oils.

Battery electric vehicles and hydrogen fuel cell electric vehicles provide a transformational pathway to reduce emissions from road transport, while improving air quality and reducing Western Australia’s reliance on imported fuels. Electric vehicles can also provide services that will facilitate a more decarbonised and robust electricity grid.

Western Australia’s [Electric Vehicle Strategy](#) creates a plan to support uptake of battery electric vehicles and hydrogen fuel cell electric vehicles. It will increase the number of electric vehicles in the State Government fleet, support the rollout of fast charging infrastructure, and improve standards and guidelines to encourage uptake.

Outcomes

- Increased uptake of low- and zero-emissions vehicles, fuels and transport technologies.
- Lower greenhouse gas emissions and improved air quality.
- Improved public transport, freight transport and active transport options.

Case study 6: Water Corporation’s low-emissions vehicles

The Water Corporation is committed to becoming a net zero greenhouse gas emission utility by 2050. As part of this commitment, two fully electric vehicles have been introduced to the Water Corporation’s fleet adding to 30 hybrid electric vehicles.

Over the next five years, the Water Corporation will transition up to 40 per cent of its metropolitan fleet to electric vehicles. Electric vehicle charging stations have been installed at the Water Corporation’s Leederville office and further stations will be installed as the number of electric vehicles in the fleet increases.

At the end of each electric vehicle fleet lease, vehicles will be turned over to the second-hand car market. This will assist in building the second-hand electric vehicle market in Western Australia, improving access to affordable, clean vehicles.

Our actions

► METRONET

Continue to roll out Perth's most ambitious public transport plan to create a framework for sustainable growth and reduced car dependency.

► Electric Vehicle Strategy

Implement the State Electric Vehicle Strategy to accelerate uptake across Western Australia including:

- fast charging infrastructure
- State Government fleet targets
- guidelines, standards and planning
- industry development.

► Additional cycling infrastructure

Invest in improved cycling infrastructure and connectivity including a pedestrian and cycling bridge across the Swan River.

► Christmas Creek renewable hydrogen mobility project

Support the development of renewable hydrogen for transport at one of Fortescue Metals Group's Pilbara mines.

► ATCO hydrogen refueller project

Support the deployment and operation of the first green hydrogen refuelling station in Western Australia.

► LNG bunkering

Provide discounts in port dues to bulk vessels bunkering with LNG at Pilbara ports, encouraging an international LNG fueling hub that will reduce greenhouse gas emissions from shipping.



Artist impression of Airport Central Station



Resilient cities and regions

Climate change presents diverse challenges for our community – from declining rainfall and drought, to longer, hotter summers, extended bushfire seasons and increased coastal erosion.

Local governments are at the forefront of dealing with climate risk and the State Government is committed to working in partnership with the sector to ensure our communities are safe and our regions are resilient. The State Government supports local governments and communities to manage climate impacts through grant programs, such as [Coastal Adaptation and Protection Grants](#), through guidelines and policies, and with detailed studies including the [Coastal Erosion Hotspots in Western Australia](#). Government also provides training and

capacity building in bushfire management through the [Bushfire Centre of Excellence](#).

In response to our drying climate, the State Government is investing in climate-resilient water sources such as desalination and groundwater replenishment. In parallel, the [Waterwise Perth Action Plan](#) aims to position Perth as a leading waterwise city by 2030, ensuring more sustainable use of water and greener communities.

Government has also invested in breeding new drought-tolerant perennial pastures,

such as Lanza® Teder and Lebeckia ambigua, to help primary producers fill the autumn feed gap and become more resilient in the face of a variable and drying climate.

The State Government is also working with industry and research organisations to support adaptation across our farming and fisheries systems, leveraging our knowledge and experience to position our primary industries and regional communities to lead in responding to climate change risks and opportunities.

Outcomes

- Increased adaptive capacity across our communities.
- Improved understanding and management of climate risks and natural hazards.
- Enhanced water security and certainty for water users.
- More resilient and better prepared regions.

Case study 7: New pasture species enhancing resilience in the Wheatbelt

In 2018, the Department of Primary Industries and Regional Development launched a new drought-tolerant pasture legume with the potential to make livestock pasture more resilient and profitable. The new species – *Lanza teder* – is a hardy, highly nutritious perennial, which provides a valuable feed option for livestock producers to fill feed gaps during the season.

The species' performance was tested in glasshouse and field trials, from which a supporting agronomic package was developed to optimise the variety's performance.

Lanza teder was developed as part of the department's pasture species breeding program in association with the Future Farm Industries Cooperative Research Centre.

Our actions

► **Western Australia Regional Climate Alliance**

Support regional local governments to drive action on climate change, energy and sustainability through regional partnerships.

► **Climate Resilience Action Plan 2022–25**

Develop a coordinated, collaborative plan to support Western Australian industries, cities and regions to identify and manage climate impacts and enhance climate resilience.

► **Pilot Sectoral Adaptation Plan**

Collaborate with government, industry and the community to pilot development of an adaptation plan for a priority sector.

► **CoastWA**

Implement a coastal adaptation program to deliver a strategic response to the recommendations of the Assessment of Coastal Erosion Hotspots report, including grants to support local governments to undertake coastal management for the public benefit.

► **Coastal Adaptation and Protection Fund**

Invest in adaptation and interim protection works for high-priority coastal erosion hotspots, including Port Beach.

► **Regional water infrastructure**

Invest in water infrastructure and water recycling to enhance security, efficiency and resilience of community water schemes.

► **Waterwise Perth**

Implement the Waterwise Perth Action Plan, including future actions to meet 2030 waterwise targets.

► **Water Resources Management Bill**

Introduce an improved legislative framework to address the challenge of climate change and provide certainty for water users.

► **Bushfire Risk Management Program**

Administer the Bushfire Risk Management Program to support bushfire risk management planning and underpin bushfire mitigation activities, in conjunction with Royalties for Regions grants for bushfire mitigation activities on unallocated crown land, unmanaged crown reserves, and crown reserves managed by local government authorities.

► **Enhanced Prescribed Burning Program**

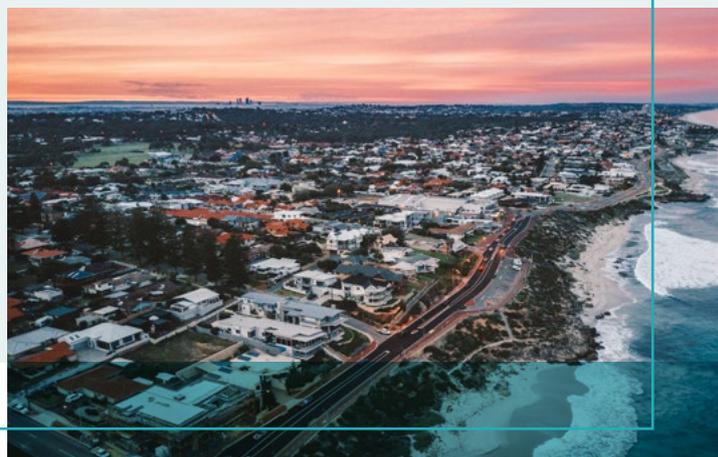
Implement the Enhanced Prescribed Burning Program to reduce the frequency and size of bushfires in forests in south-west Western Australia, meet prescribed burning targets and protect the community and the environment from the impacts of bushfire.

► **Enhance resilience to bushfire risk**

Consider findings of recent bushfire inquiries and the Royal Commission into National Natural Disaster Arrangements to ensure the approach to bushfire risk mitigation is contemporary and enhances resilience of Western Australian communities.

► **Develop and implement UNHaRMED for risk reduction**

Collaborate with the University of Adelaide and the Bushfire and Natural Hazards Cooperative Research Centre to develop and implement the Unified Natural Hazard Risk Mitigation Exploratory Decision (UNHaRMED) support system tool to assist in reduction of risks from natural hazards, including bushfires and coastal erosion and inundation.





Government leadership

The State Government is committed to working with all sectors of the economy, including industry and research organisations, to support technology pathways for net zero emissions. The State Government will develop sectoral emissions reduction strategies to guide cost-effective emissions reductions across key economic sectors. Importantly, the State Government is also leading by example, requiring development of net zero emissions transition plans for government agencies and government trading enterprises (GTEs).

Leading by example and using State Government purchasing power in procurement of goods and services will support broader action and outcomes across the community. The State Government – through the Department of Communities and DevelopmentWA – is the largest developer in Western Australia. This presents an opportunity to lead the market in adoption of renewables and low-carbon building practices.

DevelopmentWA’s Industrial Lands Authority is well placed to mainstream low-carbon industrial precincts. This can, in turn, create opportunities for renewable technologies and new, low-carbon manufacturing.

The State Government is actively managing a range of climate risks, from threats to our water security to the health effects of climate change, which are the focus of the

[Climate Health WA Inquiry](#). We are also adopting a new climate risk framework to manage climate impacts for our assets and operations, minimising risks of service disruption and costs to taxpayers.

In addition, the State Government is supporting better decision-making by investing in climate science to ensure informed risk assessment and good adaptation planning.

Outcomes

- Reduced emissions from State Government operations.
- Improved management of climate-related financial risk across the public sector.
- Greater adoption of low-carbon practices and technologies across the community.
- Better planning through regionally relevant climate science.

Case study 8: East Village at Knutsford – zero carbon strata development

DevelopmentWA’s East Village at Knutsford comprises 36 energy-efficient homes featuring a microgrid supply network for water and power derived from 100 per cent renewable sources – the first of its kind in Western Australia.

As a demonstration project, East Village at Knutsford will be a living laboratory, delivering valuable lessons from real-life initiatives to support a more sustainable way of living.

A range of water initiatives have been designed to bring waterwise living to life at the estate. Other features include electric vehicle fast charging, solar panels and battery storage, a shared electric vehicle scheme, and quality landscaped private and public spaces.

The initiative demonstrates DevelopmentWA’s commitment to championing change in Western Australia’s housing industry by demonstrating new technologies and sustainable living initiatives.

Our actions

► State Government net zero transition

Require State Government agencies, including GTEs, to develop and implement plans to transition toward net zero emissions by 2050.

► Net zero industrial estates

Through DevelopmentWA's Industrial Lands Authority, plan, design and deliver industry land and infrastructure, including technology precincts, to support those industry estates move towards net zero emissions by 2050.

► Energy-efficient social housing

Reduce carbon emissions from social housing by:

- aiming to achieve a 7-star Nationwide House Energy Rating Scheme (NatHERS) rating for new single and grouped dwellings constructed under the Housing Stimulus Program
- improving energy and water efficiency of 1,500 existing dwellings being refurbished
- delivering solar photovoltaic systems to approximately 500 social housing dwellings.

► CSIRO 'toward net zero' mission

Collaborate with the CSIRO to address critical challenges and support technology pathways for low-emissions industries in Western Australia.

► Sectoral emissions reduction strategies

Evaluate opportunities for cost-effective abatement across Western Australia's key economic sectors and develop strategies to guide emissions reduction.

► Climate resilient water supplies

Require water service providers to build climate resilience into long-term planning for water supplies.

► Climate Science Initiative

Fund regional climate change projections, downscaled to higher spatial resolution, for priority regions in Western Australia including the north-west.

► Health sustainable development unit

Establish a sustainable development unit in the Department of Health to promote sustainable development, reduce carbon emissions and energy costs, and improve health outcomes within the Western Australian health system.

► Climate health strategies

Undertake reforms in areas that include policy and procurement to mitigate the health system's environmental footprint. Plan and implement adaptations to reduce health risks of climate change for Western Australian communities.

► Climate risk framework

Implement a framework to monitor, assess and report on implications of climate change on the State's finances, infrastructure, physical assets and service delivery.

► Solar on public transport installations

Install rooftop solar at bus and rail stations.



Appendix A Western Australian Climate Policy

Actions and lead State Government agencies



Clean manufacturing and future industries

Action		Lead agency
Green steel project	Map the development pathway and technology needs to create green steel in Western Australia.	Minerals Research Institute of Western Australia
Green industry transformation	Identify the policy, regulatory and infrastructure requirements to unlock the transformational potential of large-scale, low-cost renewable energy projects and stimulate new energy intensive and clean manufacturing industries	Department of Jobs, Tourism, Science and Innovation
Net zero emissions mining	Initiate projects which target lowering overall energy costs and reducing the carbon footprint from mining and mineral processing through adoption of alternative energy sources and energy-efficient processes.	Minerals Research Institute of Western Australia
Carbon neutral agriculture demonstration project and certification scheme	Showcase carbon pollution reduction options for Western Australian broadacre farming at the Katanning Research Facility and develop a carbon neutral agriculture certification scheme.	Department of Primary Industries and Regional Development
Western Australian Bioeconomy Strategy	Develop a State Bioeconomy Strategy to facilitate the growth of bioenergy and bio-product industries in Western Australia.	Department of Primary Industries and Regional Development
Renewable Hydrogen Fund	Support renewable hydrogen feasibility studies and capital works projects to fast-track renewable hydrogen industry development across the State and allocate additional grant funding to support key hydrogen opportunities and leverage funding from the Australian Government.	Department of Jobs, Tourism, Science and Innovation
Electrolyser Manufacturing Initiative	Conduct a feasibility study into the local manufacture, assembly or maintenance of electrolysers to support the domestic renewable hydrogen industry.	Department of Jobs, Tourism, Science and Innovation

Action		Lead agency
Renewable Hydrogen Strategy	<p>Support development of Western Australia's renewable hydrogen industry by delivering regulatory reforms and enabling studies and systems which are required to increase investment confidence including:</p> <ul style="list-style-type: none"> • identifying opportunities for international hydrogen partnerships and investment attraction • modelling Western Australia's supply chains to identify bottlenecks and limitations affecting the hydrogen industry • identifying suitable locations for geological hydrogen storage • developing options to blend hydrogen in the Western Australia gas distribution systems • identifying optimal locations for the development of hydrogen hubs. 	Department of Jobs, Tourism, Science and Innovation
Future Battery Industry Strategy	<p>Grow Western Australia's future battery industries by:</p> <ul style="list-style-type: none"> • providing investment attraction, project facilitation, research and technology sector development, and adoption of battery technologies • supporting certification of Western Australia's battery minerals • providing funding to support investment in the next step of the battery value chain: Cathode Active Materials manufacturing. 	Department of Jobs, Tourism, Science and Innovation
Wind Turbine Manufacturing Initiative	Conduct a feasibility study into local manufacture of wind turbine components.	Department of Jobs, Tourism, Science and Innovation
Collie Green Aluminium Smelter Study	Undertake a scoping study into the feasibility of establishing a green aluminium smelter in the Collie-Bunbury region.	Department of Jobs, Tourism, Science and Innovation
Greenhouse Gas Emissions Policy for Major Projects	Administer the Greenhouse Gas Emissions Policy for Major Projects to require major emitters assessed under the <i>Environmental Protection Act 1986</i> to set emissions reduction targets and outline their contribution to the State's net zero aspiration.	Department of Water and Environmental Regulation



Transforming energy generation and use

Action		Lead agency
Energy Transformation Strategy	Implement the actions within the Distributed Energy Resources (DER) Roadmap, reform essential system services and capacity markets to maintain system security, and introduce constrained access that will enable more large-scale renewables to connect to the State's main grid.	Energy Policy WA
Whole of System planning for net zero emissions	Require future Whole of System planning to include scenarios for renewable energy and storage penetration consistent with national and State emissions reduction goals to map out ideal renewable generation and storage investments.	Energy Policy WA
Horizon Power: no diesel from 2025	Commit to Horizon Power not deploying any new standalone diesel generation from 2025.	Horizon Power
South West Interconnected System (SWIS) big battery	Install and commission a large battery to enable more renewable generation to be stored while maintaining system security in the SWIS.	Synergy
Standalone Power Systems (SPS)	Significantly increase the deployment of SPS across remote parts of Western Power and Horizon Power's networks including remote Aboriginal communities.	Western Power; Horizon Power
Trial innovative technologies	Trial new technologies to support the transition, such as micro pumped hydro and distributed energy resources orchestration.	Energy Policy WA
Distributed Energy Buyback Scheme	Introduce payments for energy exported to the grid from eligible home batteries and electric vehicles to support their uptake.	Energy Policy WA
Household Energy Efficiency Scheme	Provide assistance to households, including those in energy retailer hardship programs, to enhance energy efficiency and reduce energy costs.	Energy Policy WA; Synergy; Horizon Power
Energy storage in regional towns	Deploy utility batteries in regional communities to enable more households and businesses to install rooftop solar and lower their emissions and energy costs.	Horizon Power

Action		Lead agency
Horizon Power Denham hydrogen microgrid demonstration project	Deploy an Australian-first hydrogen renewable energy microgrid in the Gascoyne town of Denham, using a new solar power system to produce hydrogen.	Horizon Power
Solar Schools Program	Increase State Government use of renewable energy by installing solar on school rooftops.	Department of Education
School Virtual Power Plants (VPP)	Transform selected schools into smart, green VPP, integrating rooftop solar and batteries to cut school power bills, support the transition to clean energy and make local electricity grids more stable and reliable.	Synergy
Clean Energy Future Fund	Implement the fund, including additional investment announced under the WA Recovery Plan, to support deployment of low-carbon energy solutions.	Department of Water and Environmental Regulation; Energy Policy WA



Storing carbon and caring for our landscapes

Action		Lead agency
Western Australia Carbon Farming Strategy and Carbon Farming Industry Development Plan	Identify and implement opportunities to enhance participation in carbon farming in Western Australia.	Department of Primary Industries and Regional Development
Carbon Farming and Land Restoration Program	Develop a land restoration program to invest in carbon farming activities that deliver social and environmental co-benefits for Western Australia.	Department of Primary Industries and Regional Development
Savanna burning approvals framework	Develop a guiding policy and approvals framework to support use of the savanna fire management (emissions avoidance) methods on Western Australian crown land (pastoral leases, unallocated crown land, and the various types of crown reserves).	Department of Planning, Lands and Heritage
Carbon for Conservation Initiative	Provide opportunities for carbon farming service providers to work with the State Government to maximise environmental and economic benefits of carbon farming on the conservation estate.	Department of Biodiversity, Conservation and Attractions
Restoration of landscapes under Plan for Our Parks	Enhance vegetation and carbon sequestration in new areas of the conservation estate established under Plan for Our Parks.	Department of Biodiversity, Conservation and Attractions
Native Vegetation Rehabilitation Scheme	Invest in revegetation, habitat restoration and protection of existing vegetation to deliver at-scale environmental outcomes.	Department of Water and Environmental Regulation
Main Roads offsets	Support Main Roads to improve and increase roadside vegetation in the agricultural region to offset the impacts of roadworks.	Main Roads WA
Expansion of the softwood plantation estate	Provide opportunities for private sector investment to support an expansion of Western Australia's softwood plantation estate, storing up to 7 million tonnes carbon dioxide equivalent.	Forest Products Commission
Support Western Australia's Biodiversity Science Institute (WABSI)	Continue to support WABSI to improve scientific knowledge and biodiversity outcomes, including enhanced climate resilience.	Department of Jobs, Tourism, Science and Innovation
Support Western Australia's Marine Science Institution (WAMSI)	Continue to support WAMSI to facilitate and advocate for marine science research that builds economic, environmental and social value, including enhanced climate resilience.	Department of Jobs, Tourism, Science and Innovation



Lower-carbon transport

Action		Lead agency
METRONET	Continue to roll out Perth's most ambitious public transport plan to create a framework for sustainable growth and reduced car dependency.	Department of Transport; Public Transport Authority
Electric Vehicle Strategy	Implement the State Electric Vehicle Strategy to accelerate uptake across Western Australia including: <ul style="list-style-type: none">• fast charging infrastructure• State Government fleet targets• guidelines, standards and planning• industry development.	Department of Water and Environmental Regulation
Additional cycling infrastructure	Invest in improved cycling infrastructure and connectivity including a pedestrian and cycling bridge across the Swan River.	Department of Transport
Christmas Creek renewable hydrogen mobility project	Support the development of renewable hydrogen for transport at one of Fortescue Metals Group's Pilbara mines.	Department of Jobs, Tourism, Science and Innovation
ATCO hydrogen refueller project	Support the deployment and operation of the first green hydrogen refuelling station in Western Australia.	Department of Jobs, Tourism, Science and Innovation
Liquefied natural gas (LNG) bunkering	Provide discounts in port dues to bulk vessels bunkering with LNG at Pilbara ports, encouraging an international LNG fuelling hub that will reduce greenhouse gas emissions from shipping.	Pilbara Port Authority



Resilient cities and regions

Action		Lead agency
Western Australian Regional Climate Alliance	Support regional local governments to drive action on climate change, energy and sustainability through regional partnerships.	Department of Water and Environmental Regulation
Climate Resilience Action Plan 2022–25	Develop a coordinated, collaborative plan to support Western Australian industries, cities and regions to identify and manage climate impacts and enhance climate resilience.	Department of Water and Environmental Regulation
Pilot Sectoral Adaptation Plan	Collaborate with government, industry and the community to pilot development of an adaptation plan for a priority sector.	Department of Water and Environmental Regulation
CoastWA	Implement a coastal adaptation program to deliver a strategic response to the recommendations of the Assessment of Coastal Erosion Hotspots report, including grants to support local governments to undertake coastal management for the public benefit.	Department of Planning, Lands and Heritage; Department of Transport
Coastal Adaptation and Protection Fund	Invest in adaptation and interim protection works for high-priority coastal erosion hotspots, including Port Beach.	Department of Transport; Department of Planning, Lands and Heritage
Regional water infrastructure	Invest in water infrastructure and water recycling to enhance security, efficiency and resilience of community water schemes.	Water Corporation; Aqwest; Busselton Water
Waterwise Perth	Implement the Waterwise Perth Action Plan, including future actions to meet 2030 waterwise targets.	Department of Water and Environmental Regulation; Water Corporation
Water Resources Management Bill	Introduce an improved legislative framework to address the challenge of climate change and provide certainty for water users.	Department of Water and Environmental Regulation

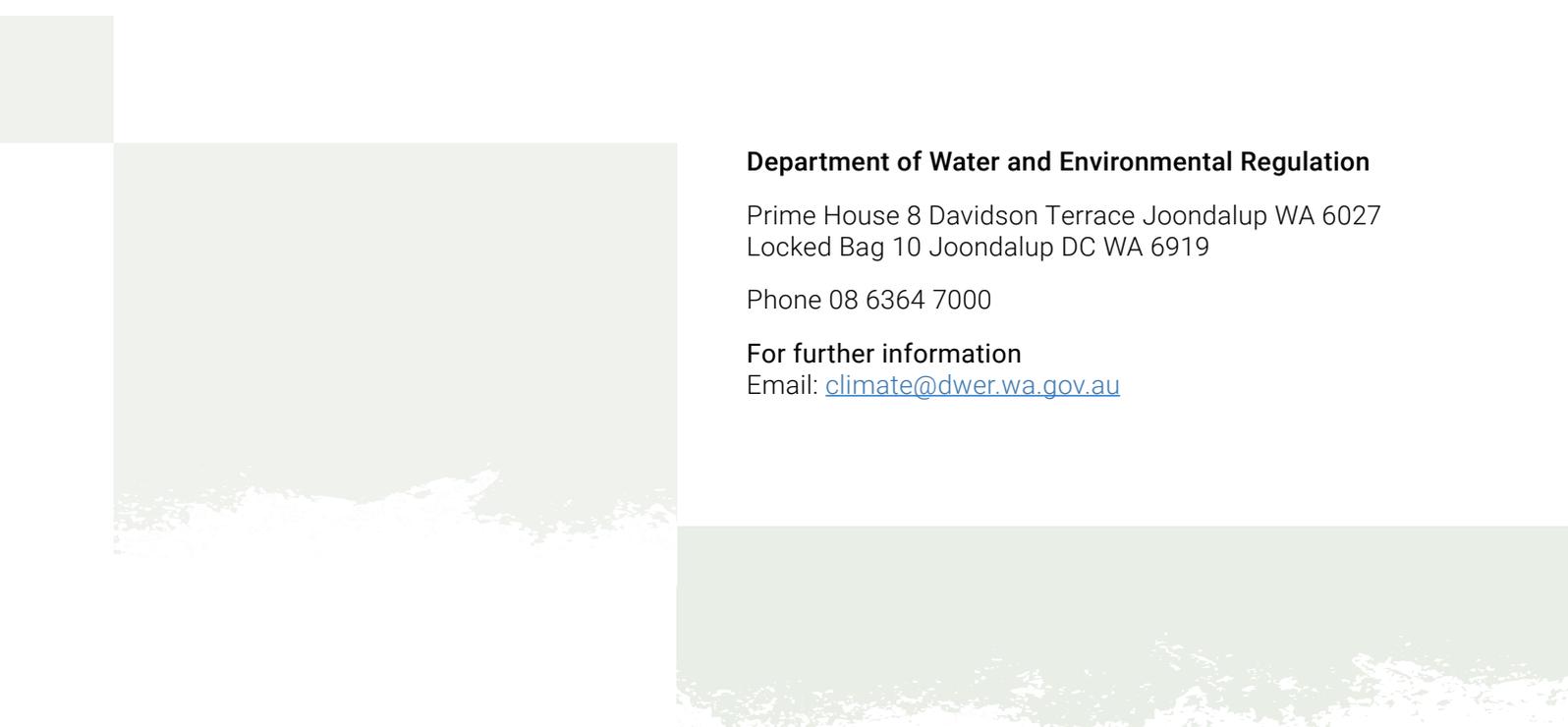
Action		Lead agency
Bushfire Risk Management Program	Administer the Bushfire Risk Management Program to support bushfire risk management planning and underpin bushfire mitigation activities, in conjunction with Royalties for Regions grants for bushfire mitigation activities on unallocated crown land, unmanaged crown reserves, and crown reserves managed by local government authorities.	Department of Fire and Emergency Services
Enhanced Prescribed Burning Program	Implement the Enhanced Prescribed Burning Program to reduce the frequency and size of bushfires in forests in south-west Western Australia, meet prescribed burning targets and protect the community and the environment from the impacts of bushfire.	Department of Biodiversity, Conservation and Attractions
Enhance resilience to bushfire risk	Consider findings of recent bushfire inquiries and the Royal Commission into National Natural Disaster Arrangements to ensure the approach to bushfire risk mitigation is contemporary and enhances resilience of Western Australian communities.	Department of Fire and Emergency Services; Department of Biodiversity, Conservation and Attractions
Develop and implement UNHaRMED for risk reduction	Collaborate with the University of Adelaide and the Bushfire and Natural Hazards Cooperative Research Centre to develop and implement the Unified Natural Hazard Risk Mitigation Exploratory Decision (UNHaRMED) support system tool to assist in reduction of risks from natural hazards, including bushfires and coastal erosion and inundation.	Department of Fire and Emergency Services



Government leadership

Action		Lead agency
State Government net zero transition	Require State Government agencies, including government trading enterprises, to develop and implement plans to transition toward net zero emissions by 2050.	Department of Water and Environmental Regulation
Net zero industrial estates	Through DevelopmentWA's Industrial Lands Authority, plan, design and deliver industry land and infrastructure, including Technology Precincts, to support those industry estates move towards net zero emissions by 2050.	DevelopmentWA
Energy-efficient social housing	Reduce carbon emissions from social housing by: <ul style="list-style-type: none"> • aiming to achieve a 7-Star NatHERS rating for new single and grouped dwellings constructed under the Housing Stimulus Package • improving energy and water efficiency of 1,500 existing dwellings being refurbished • delivering rooftop solar systems to approximately 500 social housing dwellings. 	Department of Communities
CSIRO 'toward net zero' mission	Collaborate with the CSIRO to address critical challenges and support technology pathways for low-emissions industries in Western Australia.	Department of Water and Environmental Regulation
Sectoral emissions reduction strategies	Evaluate opportunities for cost-effective abatement across Western Australia's key economic sectors and develop strategies to guide emissions reduction.	Department of Water and Environmental Regulation
Climate resilient water supplies	Require water service providers to build climate resilience into long-term planning for water supplies.	Department of Water and Environmental Regulation
Climate Science Initiative	Fund regional climate change projections, downscaled to higher spatial resolution, for priority regions in Western Australia including the north-west.	Department of Water and Environmental Regulation
Health sustainable development unit	Establish a sustainable development unit in the Department of Health to promote sustainable development, reduce carbon emissions and energy costs, and improve health outcomes within the Western Australia health system.	Department of Health

Action		Lead agency
Climate health strategies	Undertake reforms in areas that include policy and procurement, to mitigate the health system's environmental footprint. Plan and implement adaptations to reduce health risks of climate change for Western Australian communities.	Department of Health
Climate risk framework	Implement a framework to monitor, assess and report on implications of climate change on the State's finances, infrastructure, physical assets and service delivery.	Department of Treasury; Department of Water and Environmental Regulation
Solar on public transport installations	Install rooftop solar at bus and rail stations.	Public Transport Authority

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Department of Water and Environmental Regulation

Prime House 8 Davidson Terrace Joondalup WA 6027
Locked Bag 10 Joondalup DC WA 6919

Phone 08 6364 7000

For further information

Email: climate@dwer.wa.gov.au