South Australian Government

CLIMATE CHANGE ACTIONS





















The South Australian Government is delivering a range of foundational actions to tackle climate change.

These government actions will help to build a strong, climate ready economy, further reduce greenhouse gas emissions, and support adaptation to a changing climate.

1. CLEAN ENERGY

- Accelerate the renewable energy economy
- Develop a world-class renewable hydrogen industry

Action	Description	Lead Agency (and key partners)
Action	- Description	(and key partners)
1.1 Drive the continued development of renewable energy and energy storage	The government will continue to unlock investment in, and support growth of, renewable electricity generation and storage, to enable South Australia to become a 100% net renewable energy generator by 2030.	DEM (with DTI)
1.2 Fast-track construction of a new South Australia to New South Wales high capacity electricity interconnector	The government is fast-tracking a new interconnector between South Australia and New South Wales to improve energy security, enable increased energy export and facilitate the transition to low emissions energy sources.	DEM
1.3. Regulation of emerging technology and services	The government will appropriately regulate emerging energy and smart technologies to allow South Australians to move to secure and affordable 100% net renewable energy.	DEM
1.4. Implement energy demand management and productivity programs	The government will implement a range of policies and projects to manage electricity demand and improve energy efficiency to align with wind and solar generation and new modes of energy storage and to reduce costs. This includes the <i>Retailer Energy Productivity Scheme</i> .	DEM
1.5 Increase renewable electricity generation in remote communities	Renewable energy will be integrated into the Remote Area Energy Supply Scheme, to reduce diesel consumption and emissions and to ensure a safe, reliable and cost-effective supply is available in remote South Australian towns.	DEM
1.6 Support the scale-up of renewable hydrogen production for export and domestic use.	The government is delivering a range of renewable hydrogen initiatives to accelerate the growth of the state's hydrogen economy. This includes delivering South Australia's Hydrogen Jobs Plan to build a world-leading hydrogen power plant, electrolyser and storage facility.	OHPSA and DEM

2. ECONOMY

- Attract and grow businesses and industries powered by renewables
- Support climate smart business innovation, risk management and growth
- Develop a more circular economy
- Develop a climate smart resources sector

Action	Description	Lead Agency (and key partners)
2.1 Integrate climate change considerations into economic policy development and implementation	Integrate consideration of climate-related economic opportunities and risks into government's work with business and industry in developing and implementing economic policy.	DPC (with DEM, DEW, DIIS, DTI, GISA and other relevant agencies)
2.2 Support the growth and attraction of businesses and industries powered by renewables	The government will provide investment attraction initiatives and policy settings to encourage investment in, and development of energy-intensive industries, technology manufacturers and renewable energy services, and enable greater value-adding in other export sectors such as mining and food and agribusiness.	DTI (with DEM and GISA)
2.3 Coordinate delivery of climate smart business engagement	The government will work with targeted industry sectors to identify partnerships and additional industry-supported initiatives that will help businesses to manage climate risk, reduce emissions and harness new business opportunities	DEW (with DTI, DIIS, PIRSA, DPC, DEM, GISA)
2.4 Support research and development to deliver new climate smart innovation	The Office of the Chief Scientist will collaborate with Department for Environment and Water and other agencies to support new climate smart industry and research collaborations, such as new cooperative research centres and other scalable research capability for South Australia.	DEW (with DIIS, GISA, SA and interstate universities and CSIRO)
2.5 Support the development and commercialisation of innovative climate smart products and services	The government will provide support for entrepreneurs and start-ups that produce low-emission and climate adaptation products and services through the Research and Innovation Fund and other relevant programs.	DIIS (with GISA)
2.6 Support development of renewable energy and climate smart industry training products and pathways	The government will work with industry to develop training products, skills training and qualifications to meet emerging needs in renewable and climate smart industries. This includes considering opportunities for government subsidised training and building capacity of local training organisations.	Education

2.7 Work with Environment Protection Act 1993 licensees to understand climate change risk and liabilities and enable adoption of risk management strategies	The Environment Protection Authority will assist licensees exposed to climate related risk by reviewing license conditions and supporting action to improve arrangements for dealing with more frequent extreme weather events.	EPA (with DEW)
2.8 Support business and communities to adopt circular economy practices	Green Industries SA will work with other government agencies on education, engagement and incentives to encourage businesses, schools and the community to implement circular economy opportunities and boost sustainable growth and address resource security.	GISA (with EPA and SA Water)
2.9 Implement South Australia's Waste Strategy 2020–2025	South Australia's Waste Strategy 2020–2025 outlines a range of actions that will help reduce emissions by increasing recycling and resource reuse and reducing methane from landfills.	GISA (with EPA)
2.10 Implement South Australia's Food Waste Strategy	South Australia's Food Waste Strategy - Valuing our Food Waste - will be implemented to capture and divert 50% of household and business food waste from landfill into higher value uses, such as compost. This will keep this material circulating back into natural systems and reduce emissions in the form of methane.	GISA (with EPA and PIRSA)
2.11 Deliver a stronger regulatory framework to reduce waste and encourage greater reuse of materials to support a circular economy	The Environment Protection Authority will establish and implement a range of new and enhanced regulatory measures, such as material flow reporting and stockpile controls, to encourage business and industries to reduce waste, improve resource recovery and keep materials in use longer.	EPA
2.12 Develop and implement policies to facilitate investment in largescale carbon capture and storage	Work will be undertaken with industry to develop and implement policies, standards and regulations to facilitate and provide investment incentives for carbon capture and storage. The government will promote the potential for carbon capture and storage projects in South Australia.	DEM (with EPA)
2.13 Develop projects and strategies to facilitate the discovery of minerals that support technology and a low emissions economy	The government will develop and implement projects and strategies that facilitate the discovery in South Australia of minerals that support technology and a low emissions economy.	DEM
2.14 Investigate climate change regulatory risk that may apply to the minerals sector in South Australia	The government will undertake a review to understand climate change hazards and potential risk scenarios, including consideration of resilience and climate change adaptation, which may apply to the minerals sector in South Australia.	DEM
regulatory framework to reduce waste and encourage greater reuse of materials to support a circular economy 2.12 Develop and implement policies to facilitate investment in largescale carbon capture and storage 2.13 Develop projects and strategies to facilitate the discovery of minerals that support technology and a low emissions economy 2.14 Investigate climate change regulatory risk that may apply to the minerals sector in	this material circulating back into natural systems and reduce emissions in the form of methane. The Environment Protection Authority will establish and implement a range of new and enhanced regulatory measures, such as material flow reporting and stockpile controls, to encourage business and industries to reduce waste, improve resource recovery and keep materials in use longer. Work will be undertaken with industry to develop and implement policies, standards and regulations to facilitate and provide investment incentives for carbon capture and storage. The government will promote the potential for carbon capture and storage projects in South Australia. The government will develop and implement projects and strategies that facilitate the discovery in South Australia of minerals that support technology and a low emissions economy. The government will undertake a review to understand climate change hazards and potential risk scenarios, including consideration of resilience and climate change adaptation, which may apply to the minerals sector in	DEM (with EPA)

3. AGRICULTURE, LANDSCAPES AND HABITATS

- Support the agriculture sector to adapt, innovate, and reduce net emissions
- Support expansion of carbon farming and blue carbon
- Ensure secure, climate resilient regional and urban water supplies
- Build the climate resilience of landscapes, habitats and natural resources

Action	Description	Lead Agency (and key partners)
3.1 Identify and develop climate smart aquaculture opportunities	The government will work with industry to investigate and support industry development in new aquaculture opportunities, such as new climate-resilient species and commercial-scale seaweed for feed supplements to reduce livestock methane emissions.	PIRSA
3.2 Support primary producers in adaptation planning, reducing net emissions and identifying economic opportunities	The government will engage with primary producers, industry peak bodies and key stakeholders on climate related risks and opportunities, provide relevant information and connect them to opportunities that will support climate resilience, adaptation and net emissions reduction.	PIRSA (with DEW, GISA and Landscape Boards)
3.3 Implement the Blue Carbon Strategy for South Australia	The Blue Carbon Strategy for South Australia will deliver practical actions and research to help coastal managers and investors to establish blue carbon projects to store carbon and protect and restore marine and coastal environments.	DEW (with PIRSA, SA Water, Landscape Boards and EPA)
3.4 Support uptake of carbon farming opportunities	The government will implement a Carbon Farming Roadmap to identify opportunities and remove barriers to uptake of emissions reduction and carbon sequestration opportunities in soils, vegetation, forestry and livestock management.	PIRSA and DEW (with GISA, SA Water and Landscape Boards)
3.5 Develop carbon sequestration opportunities on conservation land	This initiative will facilitate carbon offset opportunities in regeneration, and planting of native vegetation on parks and reserves to offset emissions and enhance conservation outcomes.	DEW
3.6 Increase climate resilient water supplies, water reuse and efficient use of water	SA Water will expand climate resilient water supply options through the development and delivery of fit-for-purpose water from sustainable sources and innovations in water efficiency.	SA Water
3.7 Undertake water security planning for priority regional areas	The government will work with stakeholders and local communities to develop targeted water security strategies for key water resources or priority growth industries where water demand has potential to exceed supply. Strategies will consider opportunities for new or augmented supplies from all viable water sources and the use of new water technologies	DEW (with Landscape Boards, SA Water and PIRSA)

3.8 Develop a framework to deliver integrated urban water management and inform investment decisions	The government will develop an Integrated Urban Water Management Framework for all viable urban water sources. The framework will underpin management and investment decisions to meet community and economic growth needs in a hotter, drier future. The work will consider urban greening needs, and stormwater management to minimise flood risk.	DEW (with SA Water and Green Adelaide)
3.9 Develop climate smart, long-term coastal adaptation planning	Work will be undertaken to assess risks to key coastal assets, human settlements and coastal environments under a changing climate and to facilitate long-term coastal adaptation planning for South Australia.	DEW and Coast Protection Board (with Landscape Boards and coastal councils)
3.10 Assess the implications of climate change for South Australia's ecosystems to inform critical adaptation strategies	Work will be undertaken to identify the critical climate change impacts for ecosystems, particularly those affecting conservation and primary production. This will inform practical adaptation strategies for regional landscape planning and protected area management.	DEW (with Landscape Boards, PIRSA, SA Water and DTI-PLUS)
3.11 Develop and apply a dynamic biodiversity fire management planning tool for conservation outcomes	A Biodiversity Fire Planning Tool, incorporating climate change forecasts, will be developed to support the strategic use of fire to maintain biodiversity while reducing fuel loads and the risk of bushfires to life and property. The tool will initially be developed for the Kangaroo Island, and Hills and Fleurieu landscape regions.	DEW (with Landscape Boards and CFS)
3.12 Landscape planning will consider climate change mitigation and adaptation for natural resources and landscapes	Development of the State Landscape Strategy and Regional Landscape Plans will take into account best available climate science and recognise the need for mitigation and adaptation in management of natural resources.	Landscape Boards and DEW

4. TRANSPORT

- Support the uptake of low and zero emissions vehicles and fuels
- Align transport and urban planning with low emissions transport outcomes
- Increase the use of public transport and active travel

Action	Description	Lead Agency (and key partners)
4.1 Drive the transition to electric vehicles	The government is supporting initiatives to increase the uptake of hydrogen and battery electric vehicles by motorists in South Australia.	DEM (with DIT and DTF)
4.2 Plan to transition the public transport system aligned with net zero emissions targets	The government will plan for a staged transition of the public transport fleet and operations to align with the government's net zero emissions targets. The work will be informed by a trial of commercially available and operationally proven hydrogen and/or electric buses and an investigation into conversion of remaining diesel-powered suburban train lines to alternative power/fuel sources. Emissions reduction will be supported in contracts for procurement, operation, maintenance and service delivery of the public transport fleet.	DIT
4.3 Investigate mechanisms to reduce the emissions intensity of freight and heavy vehicle transport	The government will investigate ways to facilitate and encourage low emissions freight and heavy vehicle transport in South Australia and to prepare for low and zero emissions vehicles. This includes a Freight and Supply Chain Strategy to inform the development of the sector over the next 20 years.	DIT
4.4 Plan for development and urban renewal that creates walkable, connected neighbourhoods and reduces the need for car journeys	Land use policy and planning will provide for neighbourhoods that are more walkable and connected and that support public transport uptake. For example, locating development near areas well serviced by public transport and other infrastructure.	DTI-PLUS
4.5 Align transport planning with net zero emissions outcomes	State and government emissons reduction goals will be embedded in transport and infrastructure planning and investment frameworks. This will ensure that investment decisions consider construction and operational emissions, transport user emissions and low emissions mobility technologies.	DIT (with DEW, DTF, ISA, DTI-PLUS and DPC)
4.6 Drive increased patronage of public transport through delivery of services that are more efficient, integrated and customer-focused	The government will deliver a modern and customer- focused public transport network to encourage greater uptake and thereby reduce private car use and associated greenhouse gas emissions. This includes investigating more on-demand transport services.	DIT
4.7 Develop and deliver an active travel and mobility program for Greater Adelaide	The government will plan for prioritised delivery of improvements to key cycling and walking routes to increase opportunities for active travel. Priority greenways will be completed and the bikeways network will be expanded and separated as funding is made available. In addition, provision for pedestrians, cyclists and public transport in road network planning and upgrades will be increased.	DIT

5. BUILT AND URBAN ENVIRONMENTS

- Provide for development and design that is low emissions and climate resilient
- Accelerate strategic urban greening
- Understand and reduce climate change risks to infrastructure

	and the second s	
Action	Description	Lead Agency (and key partners)
5.1 Strengthen climate smart planning, building and design policies and their implementation in the planning system	South Australia's land use planning system will continue to identify and implement improvements in planning policies, practices and assessments for low emissions and climate resilient planning and development outcomes.	DTI-PLUS (with DEW, GISA and CFS)
5.2 Embed strategic climate impact assessment into Regional Plans	The best available understanding of climate related risk will inform development of regional plans under South Australia's modernised planning system. Regional Plans provide regionally specific strategic direction for integrated land use planning, transport infrastructure and economic development and identify areas for conservation and protection.	DTI-PLUS (with DEW)
5.3 Support development and implementation of stronger climate smart standards in the National Construction Code	The South Australian government will contribute to improvements in standards in energy efficiency, emissions and climate resilience in the National Construction Code and relevant South Australian standards. This includes supporting development of guidance to assist developers and home owners to apply the standards.	DTI-PLUS and DEM (with DEW and GISA)
5.4 Promote opportunities to encourage the private and public sector to go 'beyond compliance' in climate smart design	Work will be undertaken to develop opportunities, including guidance or targeted guidelines, that encourage consumers, designers, developers, builders and assessors to understand and apply climate smart design that goes 'beyond compliance' with relevant standards.	DTI-PLUS (ODASA) (with Renewal SA)
5.5 Support climate smart development for public housing, affordable private dwellings and urban renewal projects	The government will support environmentally sustainable design and construction of public housing, affordable housing solutions and innovative urban precinct developments. This includes consideration of thermal performance, energy efficiency, solar and battery storage systems and health and wellbeing outcomes.	Renewal SA/ SA Housing Authority
5.6 Deliver low-emission infrastructure and operations	Agencies will use specifications and contract tools to help drive low emissions infrastructure design, construction, operation and maintenance. Where feasible, agencies will encourage the use of low and zero emissions technology and materials, and support recycling and reuse as part of a more circular economy.	DIT and all agencies

5.7 Develop and implement approach for assessing and regulating climate change risks on development applications referred to the Environment Protection Authority for direction	Develop and implement approach for assessing and regulating how climate related changes, such as sea level rise and more frequent extreme weather events, increase risks to, or alter the environmental impacts of the proposed development.	EPA (with DEW and DTI-PLUS)
5.8 Identify strategic opportunities for urban greening in metropolitan Adelaide	Green Adelaide will work collaboratively to increase green infrastructure across metropolitan Adelaide to address the heat island effect and optimise social, economic and environmental benefits.	Green Adelaide (with DTI-PLUS, DEW, DIT and SA Water)
5.9 Develop improved policies, tools and guidance for the new planning system to achieve greener and cooler neighbourhoods	The government will work to improve standards, incentives and guidelines aligned with the South Australian Planning System to support greater uptake of green infrastructure across the state.	DTI-PLUS (with DEW)
5.10 Increase implementation of green infrastructure through capacity building and incentives	Green Adelaide and state government agencies will collaborate on an integrated program of measures to increase greening in public and private spaces, including funding grants, capacity building, and greening of suitable infrastructure projects.	Green Adelaide, DIT and DTI-PLUS (with Renewal SA)
5.11 Develop a South Australian critical infrastructure strategy	The government will develop a strategy for supporting and achieving resilient critical infrastructure that considers all hazards and threats, including the impacts of natural hazards under a changing climate.	DPC (with SA Police and relevant infrastructure agencies)
5.12 Assess and address climate change risk in government infrastructure decisions, risk assessment and audit processes.	Agencies will manage climate change risk in long-term infrastructure decisions, including infrastructure investment, location, design, construction and material selection. This includes using climate change projections and scenarios to inform risk assessment, management and audit processes.	DIT and DEW (with all agencies)

6. COMMUNITIES

- Support communities and businesses to build resilience and adapt
- $\bullet \ \ \text{Enhance climate change adaptation in emergency management and health services}$
- Provide high-quality and accessible climate change science and information

Action	Description	Lead Agency (and key partners)
6.1 Implement the National Disaster Risk Reduction Framework and Stronger Together: South Australia's Disaster Resilience Strategy	The framework and strategy will support practical actions across agencies to reduce disaster risk and build community resilience in the face of more frequent and severe bushfires, storms, floods and heatwaves.	SAFECOM (with CFS, MFS, SES and other relevant emergency management organisations)
6.2 Build the resilience of small businesses and not-for-profit organisations to climate change, natural disasters and adverse events	Small businesses and not-for-profit organisations will have access to information and resources to improve continuity planning and build resilience to climate change, natural disasters and adverse events.	DIIS
6.3 Engage with the community about the increasing frequency and severity of emergencies and disasters	Climate change information and impacts will be incorporated in emergency management sector education and engagement to create greater awareness and understanding of being more prepared for hazards and natural disasters.	SAFECOM (with CFS, MFS, SES and other relevant emergency management organisations)
6.4 Support Regional Climate Partnerships to deliver local adaptation and mitigation projects	The government will partner with local government and other regional organisations through the Regional Climate Partnerships network to support projects that help communities adapt and mitigate climate risk.	DEW (with Regional Development Australia, local councils, Green Adelaide and Landscape Boards)
6.5 Build the capability and capacity of emergency services to mitigate and adapt to climate related risks; including an adaptive volunteer workforce	Incorporate new data and technology to better understand and respond to the impacts of climate change on emergency services, including the volunteer workforce. Adaptation and mitigation priorities will be identified and strategies developed to strengthen capacity and build future capability.	SAFECOM (with CFS, MFS and SES)
6.6 Embed climate change adaptation into emergency services governance, policy, and decision making	The emergency services sector will integrate climate risk management and responses to the increased frequency and intensity of natural hazards into organisational policy, planning and operations, including investment in new assets and technology.	SAFECOM (with CFS, MFS and SES)
6.7 Assess and plan for future health services, programs and policy needs, and for health assets and infrastructure in a changing climate	SA Health will assess the vulnerability of its assets and programs, develop a model for assessing health service and policy needs, and develop a sustainability policy to guide the development and delivery its future projects, partnerships, policies and programs. SA Health will work in partnership with other agencies to mitigate and adapt to the changing climate.	SA Health

6.8 Implement the Climate Change Science and Knowledge Plan for South Australia	The Climate Change Science and Knowledge Plan identifies key actions to improve and share science and knowledge to enable informed decision-making on managing climate risk. This includes improving on-line access to scientific and technical information for climate change response planning.	DEW (with DTI-PLUS, DPC, SAFECOM, CFS, SES, CPB, SMA and Landscape Boards)
6.9 Integrate future climate change risk into hazard mapping and information	The Department for Environment and Water will work with local government and other government agencies to improve mapping, modelling and information on how risks from flood, bushfire, extreme heat and coastal inundation will be affected by climate change.	DEW (with DTI-PLUS, DPC, SAFECOM, CFS, SES, MFS, CPB and SMA)

7. GOVERNMENT LEADERSHIP

- $\mbox{\ \ Embed climate change risk and opportunity into government policy and practice}$
- Accelerate work towards net zero emissions in government

Action	Description	Lead Agency (and key partners)
7.1 Ensure climate risk and opportunity are addressed across government policy and practice	A coordinated Climate Risk Ready Government initiative will build agencies' capability to identify and respond to climate related risk and opportunities. All agencies will take action to ensure climate related risks and opportunities are understood and addressed.	All agencies and DEW (with key boards)
7.2 Explore and implement additional climate smart procurement reforms	Procurement requirements and guidance for government agencies to support greater adaptation and emissions reduction outcomes will be developed and implemented.	DEW and DTF (with DIT, GISA, PIRSA and EPA)
7.3 Explore innovative financing and investment approaches for adaptation and emissions reduction	The government will explore options for innovative financing and investment that can support public and private sector adaptation and emissions reduction projects.	DEW (with DTF)
7.4 Coordinate an across- agency government greenhouse gas emissions reduction program	An across-agency program will support agencies to reduce emissions from government assets and operations in a cost-effective manner. This will include implementing robust measurement and using new monitoring and reporting systems to track progress towards achieving net zero emissions.	DEW (with all agencies)
7.5 Develop and implement a government waste strategy for offices	The government will implement a South Australian Government Waste Strategy for offices to improve recycling and waste management in South Australian government office premises and, thereby, contribute to emissions reduction.	GISA (with all agencies)

Abbreviations

CCS Carbon Capture and Storage

CFS Country Fire Service

CPB Coast Protection Board

DEM Department for Energy and Mining

DEW Department for Environment and Water

DIIS Department for Industry, Innovation and Science

DIT Department for Infrastructure and Transport

DPC Department of the Premier and Cabinet

DTF Department of Treasury and Finance

DTI Department for Trade and Investment

DTI-PLUS Department for Trade and Investment

- Planning and Land Use Services

EPA Environment Protection Authority

GISA Green Industries SA

ISA Infrastructure SA

MFS Metropolitan Fire Service

ODASA The Office for Design and Architecture SA

PIRSA Primary Industries and Regions SA

SAFECOM South Australian Fire and Emergency Services Commission

SAHA SA Housing Authority

SES State Emergency Service

SMA Stormwater Management Authority

Acknowledgment of Country

The South Australian Government acknowledges Aboriginal peoples as the state's first peoples and nations, and that Aboriginal peoples' deep knowledge and relationship with Country continues to be critical in sustainably caring for our lands and waters.



With the exception of the Piping Shrike emblem, other material or devices protected by Aboriginal rights or a trademark, and subject to review by the Government of

South Australia at all times, the content of this document is licensed under the Creative Commons Attribution 4.0 Licence. All other rights are reserved.

© Crown in right of the State of South Australia.