

Report on the review of the Climate Change and Greenhouse Emissions Reduction Act 2007 (South Australia)

Prepared under **Section 21** of the
Climate Change and Greenhouse Emissions Reduction Act 2007 (South Australia)

September 2021



Government of South Australia

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Report on the review of the *Climate Change and Greenhouse Emissions Reduction Act 2007* – September 2021,
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Executive Summary

South Australia's [Climate Change and Greenhouse Emissions Reduction Act 2007](#) (the Act) sets a framework for government to work with business and the community to reduce greenhouse gas emissions and build resilience to the impacts of climate change.

Section 21 of the Act requires a review of its operation, the extent to which the Act's objects are being achieved, additional legislative measures that may be required to achieve the targets set by the Act, and any other relevant matters determined by the Minister for Environment and Water (the Minister).

This is the fourth Section 21 review and covers the period 2018 to 2021.

This Section 21 review has found that progress is being made towards achieving the objects of the Act.

Some key highlights over the reporting period include:

- Setting goals to reduce South Australia's greenhouse gas emissions by more than 50% below 2005 levels by 2030, and to achieve net zero emissions by 2050.
- Achievement of 56.6% renewable energy generation in 2019-20 which exceeded the legislative target of 33% by 2020.
- Developing the state's renewable energy industry with more than \$20 billion of renewable energy projects in the pipeline and initiatives to drive renewable hydrogen production under South Australia's [Hydrogen Action Plan](#).
- Accelerating uptake of electric and hydrogen fuel vehicles through initiatives under South Australia's [Electric Vehicle Action Plan](#).
- Setting climate change policy directions through the [Directions for a Climate Smart South Australia](#) policy statement released in December 2019.
- The '[South Australia's Climate Change Challenges and Opportunities](#)' report from Australia's most respected climate economist, Professor Ross Garnaut, released in September 2020.
- The [South Australian Government Climate Change Action Plan 2021-2025](#), released in December 2020, that sets out government led actions to help build a strong, climate smart economy, further reduce greenhouse gas emissions and support South Australia to adapt to a changing climate.
- Increased investment in urban greening to create greener and cooler neighbourhoods, and in securing the future of our coastal environment against increased coastal erosion.
- Accelerating the transition to a circular economy and managing food waste through the state's new waste strategies - [Supporting the Circular Economy - South Australia's Waste Strategy 2020-2025](#) and [Valuing our food waste - South Australia's strategy to reduce and divert household and business food waste 2020-2025](#).
- Accelerating action to protect and restore coastal ecosystems through the [Blue Carbon Strategy for South Australia](#), released in November 2019.
- Release of the [Climate Change Science and Knowledge Plan for South Australia](#) which identifies the critical science and information needed to inform climate change risk assessment, mitigation, planning and adaptation responses in South Australia.
- Delivery of a number of initiatives to build the resilience of South Australians including [Stronger Together - South Australia's Disaster Resilience Strategy](#) and investment in [bushfire risk management and recovery](#) actions.

Consultation was undertaken with relevant business, environment groups, and community organisations. Feedback provided will be considered by the government in delivering future measures to progress the objects of the Act.

Consultation

Section 21(3) requires the Minister to take reasonable steps to consult with relevant business, environment groups, and community organisations in the conduct of the review of the Act, and to ensure that there is consultation with the Premier's Climate Change Council.

Consultation on a draft report was undertaken during August 2021 with a range of business, environment groups, and community organisations, and the feedback provided has informed this final report.

Feedback on potential changes to the Act as well as opportunities to improve climate change management to meet the objects of the Act was provided and key themes are summarised below.

- Amend the legislated targets in the Act in line with current policy goals. For example, state-wide goals to achieve net zero emission by 2050 and to achieve 100% net renewable energy generation by 2030.
- Include a new object to the Act regarding ecosystem restoration, conservation, and improvements in land management (nature based solutions) to mitigate climate change.
- Make changes to the Act to support consultation with children and young people in the development and review of climate policy; and to support a focus on intergenerational equity and impacts on vulnerable communities.
- Amend the process for engaging local government in the Premier's Climate Change Council membership process.
- Consider links to other legislation and standards to improve the effectiveness of action to meet the objects of the Act, for example links to the *Planning, Development and Infrastructure Act 2016* to better incorporate emissions reduction and adaptation into land use planning.
- Explore development of sectoral targets for emissions reductions and setting a carbon budget for the state along with measures to achieve the budget.
- Deliver education and information to help inform and educate business, community and individuals about sustainable options and the risks and opportunities associated with the changing climate.
- Develop sector agreements across a range of sectors of the economy including transport and universities.
- Develop measures for strategic, science-informed large-scale restoration and enhancement of ecosystem services on both public and private land.
- Develop ways to better measure adaptation outcomes.
- Support innovation to accelerate uptake of climate clever technologies, production and practices in the agriculture and land management sectors.

The feedback will be considered by the government in delivering future measures to achieve the objects of the Act, including through implementation of the *South Australian Government Climate Change Action Plan 2021-2025*.

Introduction

The [Climate Change and Greenhouse Emissions Reduction Act 2007](#) (the Act) provides for measures reduce greenhouse gas emissions, foster the use of renewable sources of energy, and facilitate adaptation to climate change.

Section 21 of the Act requires a review of the operational performance of the Act on a four yearly basis. In particular:

- (a) the extent to which the objects of the Act are being achieved
- (b) the extent to which additional legislative measures (if any) are considered necessary to achieve the targets set by the Act within the periods contemplated by this Act, including by the introduction of performance standards and other mandatory requirements
- (c) other matters determined by the Minister to be relevant to a review of this Act.

The objects are outlined in section 3 of the Act. Section 14 of the Act provides for the setting of policies that will assist in reducing emissions, promoting or facilitating adaptation and achieving the objects of the Act.

This is the fourth Section 21 review and covers the period 2018 to 2021.

Reports of past reviews are located at <https://www.environment.sa.gov.au/about-us/our-reports/climate-change-greenhouse-emissions-reduction-reports>.

The previous section 21 review was undertaken for the period 2012 to 2017. South Australian government responses to the outcomes of this 2018 review are outlined below.

Table 1: Responses to recommendations from the 2018 review report

Recommendation	Response
Work with the Premier's Climate Change Council to raise awareness of legal and fiduciary risks of climate change	The Premier's Climate Change Council and the Department for Environment and Water partnered with the Australian Institute of Company Directors and KPMG to deliver briefings to business on legal and fiduciary risks of climate change.
Include robust climate risk assessments in government operations	Climate risk assessments are being undertaken for a range of infrastructure projects, strategic emergency management planning and other initiatives. Work is underway to further embed consideration of climate change risk and opportunity into government policy and practices consistent with the government's commitments under the <i>South Australian Government Climate Change Action Plan 2021-2025</i> .
Recast future sector agreements as 'Voluntary Climate Change Agreements' and ensure the diverse range of partners required to achieve transition to a low carbon economy are captured in these future agreements	The nomenclature has been updated on the relevant website and new agreements will be called climate change sector agreements.
Provide combined Section 7 and Section 21 reports in the years in which reporting requirements of those sections align to streamline reporting processes	In 2021 the Section 7 and Section 21 reports will be provided to the government and tabled in Parliament at the same time.

Progress against the objects of the Act

Object 1: Achievement of ecologically sustainable development by addressing issues associated with climate change

Relevant extract from Act: Section 3(1) (a): to assist in the achievement of ecologically sustainable development in the State by addressing issues associated with climate change and, in particular —

- i. by setting a target (the SA target) to reduce by 31 December 2050 greenhouse gas emissions within the State by at least 60 per cent to an amount that is equal to or less than 40 per cent of 1990 levels as part of a national and international response to climate change; and*
- ii. by setting related targets (the renewable electricity targets)—*
 - (A) to increase the proportion of renewable electricity generated so that it comprises at least 20 per cent of electricity generated in the State by 31 December 2014.*
 - (B) to increase the proportion of renewable electricity consumed so that it comprises at least 20 per cent of electricity consumed in the State by 31 December 2014.*

In addition, to the legislative targets specified in Section 3 of the Act, an additional target of achieving 33% of South Australia's electricity generation to come from renewable energy by 2020 was determined in 2009.

South Australia has made good progress against the targets (Table 2). This assessment is based on the latest state greenhouse gas inventory data provided by the Australian Government Department of Industry, Science, Energy and Resources. The assessment has been reviewed by the Commonwealth Scientific and Industrial Research Organisation (CSIRO).

Table 2: Progress against legislative targets

Greenhouse Gas Reduction Target	Status – Progressing
To reduce, by 31 December 2050, greenhouse gas emissions within this State by at least 60% to an amount that is equal to or less than 40% of 1990 levels.	A reduction of 36% from 1990 levels was achieved in 2018-19.
Renewable Energy Targets	Status - Achieved
To increase the proportion of renewable electricity generated so that it comprises at least 20% of electricity generated in the State by 31 December 2014.	This target was achieved in 2010-11 when the result was 22% of electricity generated in the State. In 2013, the CSIRO concluded that this target has been met. Source: 2013 Section 7 report
To increase the proportion of renewable electricity consumed so that it comprises at least 20% of electricity consumed in the State by 31 December 2014.	This target was achieved in 2010-11 when the result was 24.1% of the electricity consumed in the State. In 2013, the CSIRO concluded that this target has been met. Source: 2013 Section 7 report
An additional target of achieving 33% of South Australia's electricity generation to come from renewable energy by 2020 was tabled under Section 5 of Act in 2009.	The electricity generation target was exceeded in 2013-14 when the result was 39%. In 2018, the CSIRO concluded that this target has been met. Source: 2018 Section 7 report

Object 2: Emissions reduction targets, policies and programs

Relevant extract from Act: Section 3(1)(b): to promote commitment to action within the State to address climate change through—

- i. the development of specific targets (as appropriate) for various sectors of the State's economy; and*
- ii. the development of various interim targets; and*
- iii. the development of policies and programs for the reduction of greenhouse gas emissions and for other relevant purposes.*

Commitment to net zero emissions by 2050

In addition to the legislated greenhouse gas reduction target, the South Australian government has committed to net zero emissions across the state by 2050.

Development of sectoral and interim targets

To guide an orderly transition to net zero emissions, an interim goal to reduce net emissions by more than 50% (from 2005 levels) by 2030 has been adopted. The government also has an ambition to achieve 100% net renewable energy generation by 2030. In the 2019-20 financial year, the state achieved 56.6% renewable energy generation.

Policies and programs

In 2019, the South Australian government released [Directions for a Climate Smart South Australia](#) which sets the government's agenda for achieving the long term outcomes of a more liveable and resilient state, low emissions jobs and growth, and net zero emissions by 2050.

The [South Australian Government Climate Change Action Plan 2021–2025](#) was released in December 2020 and is the next step to address climate change that builds on past and existing initiatives. The Action Plan outlines government led actions to help build a strong, climate smart economy, further reduce greenhouse gas emissions and support South Australia to adapt to a changing climate. The Action Plan was developed with input from renowned climate economist Professor Ross Garnaut, through his report '[South Australia's Climate Change Challenges and Opportunities](#)'.

Some examples of major initiatives for the reduction of emissions relevant to the reporting period are outlined below. Further examples are outlined in other sections of this report.

- South Australia's [Hydrogen Action Plan](#) – aims to scale up renewable hydrogen production for export and domestic consumption by facilitating investment in hydrogen infrastructure, establishing a world-class regulatory framework, deepening trade and supply capabilities, fostering innovation and workforce skill development, and integrating hydrogen into the state's energy system.
- South Australia's [Electric Vehicle Action Plan](#) – aims to accelerate electric vehicle uptake and smart charging, including supporting deployment of a state-wide public charging network and other actions to optimise the benefits for South Australians.
- [South Australia's Energy Solution: a secure transition to affordable renewable energy](#) – includes critical energy and smart technology actions to allow South Australians to move to secure and affordable 100% net renewable energy. The plan is supported by the four pillars of: home batteries; grid scale storage; distributed energy; and the construction of an interconnector between South Australia to New South Wales.
- [SA Water's Zero Cost Energy Future](#) - SA Water is working towards a zero cost energy future, including the installation of around 370,000 solar panels. The panels will generate 242 GWh of energy – equivalent to the power needs of 50,000 average South Australian homes. For every year of operation, this will assist in reducing emissions equivalent to planting 7 million trees or removing more than 32,000 cars from the road.
- [Blue Carbon Strategy for South Australia](#) - will deliver practical actions and research to help land managers and investors to establish blue carbon projects to store carbon and protect and restore marine and coastal environments.

- [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.
- [Valuing Our Food Waste 2020 - 2025](#) - will be implemented to capture and divert 50% of household and business food waste from landfill into higher value uses, such as compost, and help reduce emissions.
- [Single-use and Other Plastic Products \(Waste Avoidance\) Act 2020](#) - prohibits the sale, supply and distribution of certain single-use plastic products and establishes a framework for adding other products in the future.
- The Department for Infrastructure and Transport is implementing a number of initiatives including embedding emissions reduction targets into contracts with service delivery partners (e.g. the new Adelaide Metro Rail Operator); electrification of the Gawler rail line; and the evaluation of electric and hybrid bus procurements to further contribute to reductions in transport emissions.
- The South Australian government continues to work with the agriculture sector to reduce net emissions. Examples include supporting development of the carbon farming industry, investigating the potential for a commercial seaweed industry to reduce livestock emissions, and working with industry stakeholders to investigate ways to reduce methane emissions from manure.
- Support for innovation districts, such as Lot Fourteen, Tonsley, Waite and Mawson Lakes, assists to develop clean-technology innovation and manufacturing.

Section 14 of the Act also requires that government develops policies that demonstrate its leadership in addressing climate change through the management and reduction of its own emissions and through the development of related reporting mechanisms. The government is delivering an across-agency greenhouse gas emissions reduction program to support agencies to reduce emissions in a cost-effective manner.

Object 3: Encouraging energy efficiency and conservation

Section 3(1)(c): to encourage energy efficiency and conservation

Over the reporting period energy efficiency and conservation was encouraged in the residential, commercial, transport and government sectors. The government provides public information to strengthen understanding of energy efficiency and clean energy options and engages with industry groups to support capacity and skills in improving home energy performance and Building Code compliance. Other examples of key initiatives are outlined below.

Retailer Energy Productivity Scheme

The South Australian Retailer Energy Productivity Scheme (which replaces the Retailer Energy Efficiency Scheme) supports households and businesses to reduce their energy costs while also maximising the benefits to the power system. Typical activities include replacing or upgrading a water heater, installing an efficient air conditioner or installing water efficient shower heads, helping save water heating costs.

Energy Partners Program

The Energy Partners Program worked with around 100 organisations across the state, with projects focused on improving energy education and information to help South Australians manage their energy use and costs. The program complements the [Energy Advisory Service](#), which offers free independent energy advice to households.

Government buildings energy efficiency measures

The *Government Buildings Energy Strategy 2013-2020* provided guidance for tracking, managing and reporting energy use in government buildings. A new \$60 million initiative to improve energy efficiency of government buildings was announced in late 2020.

The Department for Infrastructure and Transport has also incorporated emission reduction requirements into the new Across Government Facilities Management Agreement (AGFMA) contract, due to commence December 2021.

The government plans to make the new Women's and Children's Hospital Australia's first all-electric hospital to enable a net zero operational energy hospital.

Building Upgrade Finance

Building Upgrade Finance is a mechanism that helps building owners to access loans to improve the energy, water and environmental efficiency of existing commercial buildings. Heritage upgrades of non-residential heritage buildings are also eligible for Building Upgrade Finance.

Object 4: Promoting research and development

Section 3(1)(d): to promote research and development with respect to the development and use of technology to reduce or limit greenhouse gas emissions or to support adaptation to climate change, including by developing ways to remove greenhouse gases from the atmosphere.

The South Australian government, research organisations and the private sector were involved in a wide range of research and development to reduce greenhouse gas emissions or to support adaptation. A snapshot of some of these activities is outlined below.

Tonsley Park Innovation Precinct

The South Australian government collaborated with industry, through the Tonsley Park Innovative Precinct, to encourage research and development in new technologies to stimulate investment and create economic opportunities in taking action on climate change.

Cooperative Research Centres

The South Australian government has been, and continues to be, involved in a number of Cooperative Research Centres (CRCs) that support climate change mitigation and adaptation actions, including:

- [CRC for Low Carbon Living](#) – a research and innovation hub dedicated to driving Australia's built environment sector towards a globally competitive low carbon future.
- [CRC for Water Sensitive Cities \(now Water Sensitive Cities Australia\)](#) – focuses on the water sensitive design, build and management of cities and towns.
- [Bushfire and Natural Hazards CRC](#) – conducting research to build a disaster-resilient Australia.
- [Future Fuels CRC](#) – an industry focussed research, development and demonstration partnership enabling the decarbonisation of Australia's energy networks.
- [Future Battery Industries CRC](#) – six-year research and development program to target all segments of the battery value chain and deliver commercial, proprietary outcomes to accelerate industry expansion and grow a vibrant, emerging battery industry sector.
- [Fight Food Waste CRC](#) – focuses on improving the competitiveness, productivity and sustainability of the Australian food industry.
- [RACE for 2030 CRC](#) – investing to catalyse lower energy costs and a substantial reduction in carbon emissions.
- [Heavy Industry Low-carbon Transition CRC](#) – focusing on transforming the heavy industry for the low-carbon economy through integrating green energy sources such as hydrogen, ammonia and solar into the high-heat and high-emissions manufacturing processes for products like steel, aluminium, and cement.
- [CRC for High Performance Soils](#) - aims to enable farmers to increase their productivity and profitability by providing them with knowledge and tools to improve the performance of their soils.
- [Marine Bioproducts Cooperative Research Centre](#) (MB-CRC) – aims to accelerate the growth of the emerging export-focussed marine bioproducts industry, such as seaweed and marine micro-algae.

Goyder Institute

The South Australian government is a key partner in the [Goyder Institute for Water Research](#). The Goyder Institute undertakes work on climate change issues in water, emissions reduction, adaptation and extreme events. For example, the Goyder Institute is working in partnership with the Department for Environment and Water on the Healthy Coorong Healthy Basin Climate Change Adaptation project to provide an understanding of how the Coorong can be managed in the face of future ecological change driven by climate change.

Climate Change Science and Knowledge Plan

The [Climate Change Science and Knowledge Plan for South Australia](#), released in 2020, identifies critical science and information that is needed to inform climate change risk assessment, mitigation, planning and adaptation responses in South Australia.

Climate Change Projections

The [Guide to Climate Projections for Risk Assessment and Planning in South Australia](#) provides a summary of the changes in climate that are projected to occur in South Australia over the coming 80 years, drawing on information from a range of sources, primarily the CSIRO, BoM, Intergovernmental Panel on Climate Change (IPCC) and the Goyder Institute for Water Research.

NARCLiM

The NARCLiM (NSW and ACT Regional Climate Modelling) project is a New South Wales Government led partnership between the NSW, ACT and SA governments and the Climate Change Research Centre at the University of NSW. South Australia joined the NARCLiM partnership in 2020. The project provides high resolution climate change projections for south-eastern Australia. In 2022, the project will provide updated high-resolution climate projections aligned with the global climate change projections of the forthcoming Sixth Assessment Report of the IPCC.

Excite Strategy

EXCITE is a 10-year research and innovation strategy to place South Australia in the top quartile of OECD nations by 2030 for key measures of performance in the research and innovation value chain which are key to delivering better health, our climate smart goals and economic growth, employment and productivity.

Object 5: Encouraging the commercialisation of renewable technologies

Section 3(1)(e): to encourage the commercialisation of renewable energy and of technologies that will reduce or limit greenhouse gas emissions or support adaptation to climate change.

A range of actions and initiatives aim to encourage the commercialisation of renewable energy and emissions reduction technologies. A snapshot of initiatives relevant to the reporting period is outlined below.

Renewable Technology Fund

The South Australian government administers grants and loans awarded to dynamic renewable technology projects and initiatives including grid-scale batteries, virtual power plant, renewable hydrogen bioenergy, and thermal storage.

Development of energy storage options

- The Grid Scale Storage Fund is designed to facilitate the development of new storage technologies capable of addressing the intermittency of South Australia's electricity system.
- The state government established a state-wide Virtual Power Plant (VPP), with solar photovoltaic (PV) and batteries provided to South Australian housing trust homes. Following the success of the first two phases, the program is being expanded into Phase 3 that will bring the total number of participating households to 4,100.
- The Home Battery Scheme provides subsidies and low interest loans to install battery systems on up to 40,000 households. Eligible households can then enrol their home energy system in a VPP if one is available.

- The Hornsdale Power reserve 100 MW grid-scale battery was completed in December 2017 and a 50 MW expansion is completed.

Demand management trials

Demand management trials to support integration of distributed generation, demand response and demand aggregation assets to increase grid efficiency and incentivise consumers to manage their own electricity demand.

Other initiatives

Other key state government strategic plans and initiatives that encourage the commercialisation of renewable energy and of technologies are referenced under Object 2 and include South Australia's [Hydrogen Action Plan](#); [Electric Vehicle Action Plan](#); and [South Australia's Energy Solution](#).

Object 6: Recognising achievements

Section 3(1)(f): to provide recognition to bodies and persons who commit to addressing climate change by achieving reductions in greenhouse gas emissions, by increasing the use of renewable energy sources, by introducing emissions off set programs or by adopting other relevant initiatives.

South Australian Climate Leaders Awards

The Premier's Climate Change Council hosted two South Australian Climate Leaders Awards in [2018](#) and [2021](#) to recognise individuals and organisations taking action to address climate change. Entries were received from many different industries and sectors, including local councils, the building industry, community organisations and more.

Carbon Neutral Adelaide

In November 2019, the second [Carbon Neutral Adelaide Awards](#) celebrated the contributions by Carbon Neutral Adelaide partners, individuals and households towards making the City of Adelaide a carbon neutral city. There were five award categories recognising innovation, action and leadership in the economy and at home.

Object 7: Business and community consultation

Section 3(1) (g): to encourage and facilitate business and community consultation and early action with respect to issues surrounding climate change.

Premier's Climate Change Council

The Premier's Climate Change Council (PCCC) provide independent advice to the Minister and have broad representation across business and community sectors. The Council has a leadership role in engaging with business, the environment and conservation movement and the wider community.

In April 2021, the PCCC and the Environment Protection Authority Board co-hosted a Summit titled 'Climate change: risk, liabilities and remedies', which provided practical information for businesses to understand the potential impacts from climate change and ideas for practical action.

Climate Change Action Plan

The [South Australian Government Climate Change Action Plan 2021–2025](#) outlines a wide range of initiatives which involve community and business engagement. Engagement with industries, businesses, communities, local government and the Australian Government will be important to implement the plan and encourage action beyond the role of government.

Climate Change Sector Agreements

Section 16 of the Act provides for the development of voluntary [climate change sector agreements](#). These underpin partnerships between the South Australian government, local government and other regional organisations to help facilitate responses to climate change. Since the commencement of the Act's operation

in 2007, the South Australian government has entered into over 25 sector agreements that support climate change adaptation and mitigation action, and innovation in technologies and practices.

Under the 2018 Section 21 report, the Premier's Climate Change Council suggested that the agreements could be broadly recast as voluntary climate change agreements to better reflect the role of the agreements in supporting partnerships for climate change mitigation and adaptation.

Other consultation

Consultation with stakeholders and/or the broader community has been undertaken by the state government to inform the development of state government initiatives that support climate change action, including:

- [Electric Vehicle Action Plan](#)
- [Stronger Together: South Australia's Disaster Resilience Strategy](#).
- [Landscape South Australia Act 2019](#) and landscape regional plans
- [Green Adelaide Regional Landscape Plan](#)
- [Sustainably Growing Energy and Mining in South Australia](#)
- [Planning Reforms](#) and the delivery of a digital platform to access relevant planning instruments
- [Draft state bushfire management plan](#)
- [Building a new biosecurity act for South Australia](#).

Object 8: Support and facilitate adaptation

Section 3(1)(h): to support measures to facilitate adaptation to circumstances that will inevitably be caused by climate change including by supporting measures that will improve the ability of the community species and ecosystems to deal with the effects of climate change.

The *South Australian Government Climate Change Action Plan 2021–2025* identifies practical actions to support communities and businesses to build resilience and adapt and reduce climate change related risk. These actions build on, and complement, existing and continuing measures, such as those outlined below.

- The South Australian State Emergency Service (SES) is responsible for planning and responding to extreme weather, including storms, heatwaves and flooding events. The [National Disaster Risk Reduction Framework](#) and [Stronger Together: South Australia's Disaster Resilience Strategy](#) support practical actions across state government agencies to reduce disaster risk and build community resilience.
- The South Australian government responded to the Independent Review of South Australia's 2019–20 Bushfire Season with significant additional investment in the state's Emergency Services Sector and the Department for Environment and Water to equip the state with stronger resources in preparation for future catastrophic bushfire events.
- Responding to climate change is included in [the State Public Health Plan 2019–2024](#). The [South Australian Health and Wellbeing Strategy 2020–2025](#) also provides directions for the public health response to climate change risks. The [Healthy In The Heat](#) public health campaign and a [guide](#) equips the community with information about dangers of heatwaves and their serious health effects, and helps to prepare for and cope with hot weather.
- Projects such as [New Life for our Coastal Environment](#) and [Securing the Future of our Coastline](#) address climate change risks by stabilising beaches, restoring sea grass meadows, and supporting research on protecting coastal environments.
- Implementation of the [Coast Protection Act 1972](#) supports the objects of the *Climate Change and Greenhouse Emissions Reduction Act 2007* through climate change considerations regarding hazard management and the application of development standards such as a coastal policy allowance of sea level rise.
- The government has revitalised [Heritage Agreement funding](#) to help landholders and farmers to conserve and protect native vegetation and increase biodiversity.

- The government partners with local government and regional organisations through the [Regional Climate Partnerships](#) network to help communities adapt and mitigate climate risk. Regional Climate Partnerships deliver local climate adaptation and mitigation projects ranging from hazard mapping, greening and smart irrigation projects, through to education programs and community capacity building.
- The government's [Climate Change Science and Knowledge Plan](#) seeks to provide accessible and high quality science and information to support South Australia's responses to climate change.
- [Landscape South Australia boards](#) deliver practical, on-ground programs that manage our water, land and soil, pests and biodiversity in a changing climate through a range of partnerships.
- The [Green Adelaide Landscape Board](#) supports activities to build climate resilience in metropolitan Adelaide and has a focus on greening and water sensitive urban design. Green Adelaide administers the [Greener Neighbourhoods Grants Program](#) to support metropolitan councils to help keep suburban streets green and cool.
- The Department for Primary Industries and Regions works with industry organisations and primary producers to support adaptation planning, including work being undertaken by the South Australian Research and Development Institute in the development of climate resilient crops and farming methods.

Object 9: Reporting

Section 3(1)(i): to provide for reporting on progress being made within the State to meet the South Australian target, and other specific or interim targets associated with reductions in greenhouse gas emissions, and to meet targets associated with the use of renewable electricity.

A review of the Act and its operation every four years, is undertaken in accordance with section 21.

The Minister prepares a report every two years, on the operation of the Act in regard to emissions reduction and renewable energy targets, in accordance with Section 7 of the Act.

Copies of the Section 21 and 7 reports can be found at <https://www.environment.sa.gov.au/about-us/our-reports/climate-change-greenhouse-emissions-reduction-reports>.

Information on South Australia's progress in reducing emissions can also be found at <https://www.environment.sa.gov.au/topics/climate-change/south-australias-greenhouse-gas-emissions>.

The Department for Environment and Water includes in its annual report, information on work undertaken in the department on the development of climate change policy and related initiatives as required under Section 20 of the Act.

Object 10: Promote consistency with national and international policy and Object 11: Contribute and respond to national and international policy

Section 3(1)(j): to promote action within South Australia that provides consistency with national and international schemes designed to address climate change, including schemes that relate to emissions trading and emissions reporting.

Section 3(1)(k): to enhance the ability of the State to contribute to and to respond expeditiously to national and international developments associated with issues surrounding climate change.

The South Australian government has promoted action that is consistent with national and international policy.

Paris Agreement

The Paris Agreement¹ sets a framework for all countries to take climate change action from 2020. The Agreement further commits countries to set mitigation targets from 2020, to review targets every five years to build ambition over time, and to promote action to adapt and build resilience to climate impacts. Australia ratified the Paris Agreement in November 2016.

The South Australian government's policy targets to reduce net emissions by more than 50% by 2030 (from 2005 levels) and for net zero emissions by 2050; and its actions under its Climate Change Action Plan and other initiatives are consistent with the Paris Agreement.

Responsiveness to national and international developments

The South Australian government participates in key international and national forums. This includes ongoing participation in the annual United Nations Climate Change Conference of the Parties (COP), and in the annual Climate Week in New York City.

The state government is a member of a number of key international programs related to climate change.

- [Under2Coalition](#) – The South Australian government is an Under2Coalition Steering Group Member. The coalition is made up of more than 220 governments who share expertise on innovative policy, report on measurable climate actions, and drive emission reduction initiatives. South Australia is a signatory to the Global Climate Leadership Memorandum of Understanding (the Under2MOU), which aims for sub-national governments to reduce their greenhouse gas emissions towards net zero by 2050. South Australia contributes to the Under2 Ambition Tracker, an annual survey to assist in tracking progress of net zero emissions.
- [States and Regions Compact](#) – South Australia participates in the Network of Regional Governments for Sustainable Development (nrg4SD); R20-Regions of Climate Action (R20); and the CDP (formerly the Carbon Disclosure Project). South Australia contributes to the Annual Disclosure Report which provides a transparent, global picture of the impact, progress and climate action driven by state and regional governments.
- [RegionsAdapt](#) – South Australia is a member of RegionsAdapt which supports regional governments to collaborate, exchange knowledge and share best practice on adaptation and resilience to climate change.
- [Asia Pacific Climate Leader's Declaration](#) - On 4 June 2019, South Australia signed the Asia Pacific Climate Leader's Declaration, along with eight other governments pledging their support. The Declaration included protecting marine life, cutting emissions from the land sector and strengthening international cooperation and dialogue on climate action, in line with the goals of the Paris Agreement.

¹ https://unfccc.int/sites/default/files/english_paris_agreement.pdf

Additional legislative measures to meet targets

There were no additional legislative measures considered necessary or introduced within the reporting period to achieve the targets set by the Act.

Other relevant matters

Section 21(2)(c) requires a specific report on other matters that are determined by the Minister to be relevant to review of the Act.

No specific matters were requested by the Minister.