

National Climate Resilience and Adaptation Strategy 2015



The Strategy sets out how Australia is managing the risks of a variable and changing climate. It identifies a set of principles to guide effective adaptation practice and resilience-building, and outlines the Australian Government's vision for a climate-resilient future.

KEY MESSAGES

Australia is well positioned to meet the challenge of climate change

We have well-established and effective natural resource management systems, mature financial, welfare and regulatory systems, well-governed institutions and internationally-renowned scientific expertise. We have developed a significant national resilience and adaptation capability.

Australia is a responsible player regionally and globally

Climate change is a global issue. Australia has a strong track record on addressing the challenge of climate change, working with others to reduce domestic greenhouse gas emissions. Beyond our borders, Australia helps developing countries, particularly across Asia and the Pacific, with effective disaster risk reduction, climate change science, adaptation planning and capacity building.

The choices we make today will affect our future vulnerability to climate change

Acting to reduce greenhouse gas emissions will limit the magnitude of future climate change. To remain a vibrant, safe and productive society we must also build our national resilience to climate variability and the changes to the climate that global emissions reduction cannot help us avoid.

We all have a role to play in understanding and managing the risks

Governments at all levels, businesses, communities and individuals have complementary but different roles in managing climate risks. Individuals and businesses, for example, are best placed to manage the climate risks associated with their homes and commercial assets. One of the most important roles of governments is ensuring that others within society can make informed choices about how to adjust their behaviour and choices in response to climate risks, by providing authoritative climate information and effective regulatory systems.

Australia has long experienced extreme weather events and climate variability

Australia's climate can vary greatly from one year to the next, as a result of Australia's small landmass in relation to the expanse of ocean that surrounds it and its location across tropical, subtropical and temperate climate zones. Extreme events like heat waves and floods can have significant social, environmental and economic costs, but we are building on our experience managing variability and extremes to address the challenges of climate change.

VISION FOR A CLIMATE RESILIENT AUSTRALIA


We act together to support prosperity and wellbeing in Australia and beyond by building the resilience of communities, the economy and the environment to a variable and changing climate.



The climate has already changed. More change is unavoidable as it is locked in to the climate system from past emissions.



0.9°C
increase in average surface temperature in Australia since 1910

0.19m 
increase in global average sea level between 1901 and 2010



There has been an observed decrease in rainfall in south-west Australia since 1970s

MANAGING A CHANGING CLIMATE REQUIRES A DUAL APPROACH

CLIMATE CHANGE MITIGATION WORKS TO AVOID THE RISKS

of a changing climate by reducing the emission of greenhouse gases and preventing more severe climate change.



CLIMATE CHANGE ADAPTATION WORKS TO MANAGE THE RISKS

caused by climate change already locked in and from the potential for more severe changes in the future.



The *Strategy* looks at current adaptation and resilience initiatives across key sectors



Coasts

Our coastline and beaches are shaped by the climate and etched in our national identity

Initiatives include: Reef 2050 Plan building resilience of the Great Barrier Reef; NSW's coastal management reforms; managing climate risks to the extensive Defence land and property holding.

The National Climate Change Adaptation Research Facility is working with stakeholders around Australia to create an online coastal risk management framework, CoastAdapt, to help understand and manage the risks associated with sea-level rise, storm surges and other hazards.



Cities and the built environment

Our cities drive the national economy but they face challenges including climate change

Initiatives include: Increasing focus through the first national Minister for Cities and the Built Environment; climate change guidance for public, road and rail transport through the *Australian Transport Assessment and Planning Guidelines*; the *Critical Infrastructure Resilience Strategy*; CSIRO's research on wind design standards reducing the risk of damage to all new housing.

The Australian Government provides comprehensive and nationally consistent exposure information relating to residential, commercial and industrial buildings, public institutions and infrastructure assets through the National Exposure Information System.



Agriculture, forestry and fisheries

Our primary industries are in a strong position to manage climate risks

Initiatives include: Agricultural Competitiveness White Paper's measures to support farmers' resilience; Intergovernmental Agreement on National Drought Program Reform; Bureau of Meteorology's work developing accurate multi-week and seasonal forecasts; CSIRO's research into climate resilient crop management.

The Tasmanian Government is helping inform farmers and investors by identifying how five crops could be grown under different climate futures, specifically poppies, wheat, potatoes, wine grapes (sparkling and table wine) and barley.



Water resources

Our experience managing scarce water resources has positioned us for climate change

Initiatives include: World-leading institutional, market and regulatory architecture to share water resources across jurisdictions and between economic and environmental outcomes.

The goal for the Water Corporation in WA is to reduce water use by 15 per cent through water saving programmes, smart metering of water use and promoting water efficiency. At the same time, the Water Corporation is investing in climate-independent water sources, including groundwater replenishment, and water recycling for non-drinking uses.



Natural ecosystems

There are limits to the capacity of our unique natural systems to adapt to climate change

Initiatives include: \$2 billion in Australian Government funding for managing natural resources through the Green Army, National Landcare, 20 Million Trees, and Working On Country Programmes; *Threatened Species Strategy; Australia's Biodiversity Conservation Strategy 2010–30.*

The National Reserve System—a network of protected areas that covers 10,000 properties across 17 per cent of Australia's landmass—is Australia's primary landscape-scale solution to help biodiversity adapt to a changing climate while protecting healthy ecosystems.



Health and wellbeing

We are a healthy nation but climate change is influencing health outcomes

Initiatives include: The National Climate Change Adaptation Research Facility's Vulnerable Communities Network focuses on how disadvantaged communities cope with climate change; states' work on managing heat waves, including Melbourne's Urban Forest Strategy.

The Victorian Government's 'Heatwave Plan for Victoria' informs Victorians about risks to human health posed by heat waves, and outlines the actions and systems in place to support them.



Disaster risk management

We have built systems, science, and institutions to help us prepare, respond and recover

Initiatives include: The *National Strategy for Disaster Resilience*; the Bureau of Meteorology is continuing to improve forecasting and understanding of weather extremes and the development of early warning capabilities, including through its purchase of a new supercomputer that allows for analysis of more complex global weather prediction models; consultation on national disaster funding arrangement reforms to deliver more investment in disaster mitigation and insurance.

Insurer Suncorp has partnered with James Cook University to analyse insurance claim data to better understand cyclone vulnerabilities in homes in northern Australia, and to show what can be done to address them.



A resilient and secure region

Australia is working with less developed countries to create a resilient and secure region

Initiatives include: Stronger focus of Australia's aid policy, Australian aid: *Promoting prosperity, reducing poverty, enhancing stability*, on the Pacific region; the Climate and Oceans Support Program in the Pacific (COSPPac); the Pacific Risk Resilience Program; support for regional governance and climate change coordination; \$200 million commitment to Green Climate Fund.

Australia is helping to restore access to more resilient infrastructure and services in Vanuatu after Tropical Cyclone Pam through a 'build back better' approach. Our Vanuatu Aid Investment Plan addresses the economic and social challenges of climate change and natural disasters.

National Climate Resilience and Adaptation Strategy Summary

SCOPE AND PURPOSE

Highlight resilience-building by governments, businesses and communities in Australia and our region; guide effective climate change adaptation with a set of principles; and establish priority areas for future consultation and action.

VISION

We act together to support prosperity and wellbeing in Australia and beyond by building the resilience of communities, the economy and the environment to a variable and changing climate.

GUIDING PRINCIPLES

Shared responsibility

Governments at all levels, businesses, communities and individuals all have important roles to play

Factor climate risk into decisions

Consider the current climate and future change in all our decisions

Assist the vulnerable

Support those who are vulnerable to disaster risk and climate change

Evidence-based, risk management approach

Apply the best available science

Collaborative, values-based choices

Respect the knowledge and experience of those affected, and involve them in decision-making

Revisit decisions and outcomes over time

Review actions regularly, look for flexible choices and opportunities

PRIORITIES FOR NATIONAL ENGAGEMENT

Priority 1

Understand and communicate

Improve our understanding and communication of the risks from a changing climate.

Priority 2

Plan and act

Develop and implement coordinated responses to climate risk, where needed.

Priority 3

Check and reassess

Evaluate progress towards building resilience and adaptation to climate change and review our plans and actions.

Priority 4

Collaborate and learn

Work together to identify emerging risks and interdependencies and share learning and successes.