



Australian Government

Australian Office of Financial Management

AOFM

Australian Government Climate Change Commitments, Policies and Programs

A guide for AGS investors

July 2023

Government Commitments to Climate Change

Australia has committed to achieving net zero emissions by 2050

Australia will reduce greenhouse gas emissions by 43% below 2005 levels by 2030

Each Australian state has stated or committed to reaching net zero by 2050 or earlier. In addition to Australia's 2030 emissions reduction target of 43 per cent below 2005 levels, each state has also set interim emissions reduction targets (by 2030 unless otherwise stated)

NSW: 70% (by 2035 on 2005 levels); Victoria: 50%; Queensland: 30%; South Australia: at least 50%; Western Australia: 80% below 2020 levels (government emissions only); ACT: 65-75% (on 1990 levels); Tasmania: achieved net zero in 2015.

On 16 June 2022, Australia lodged an updated Nationally Determined Contribution (NDC) with the United Nations Framework Convention on Climate Change (UNFCCC) secretariat. The updated NDC commits Australia to a more ambitious emissions reduction target of 43 per cent below 2005 levels and reaffirms Australia's commitment to net zero emissions by 2050.

Australia's Climate Strategies and Plans

Recent updates

The [Department of Climate Change, Energy, the Environment and Water](#) (DCCEEW) was established on 1 July 2022. It has two senior ministers: Minister for Climate Change and Energy and the Minister for the Environment and Water.

The Government's [Climate Change Bill](#) passed the Senate in September 2022 and is now law. Australia is one of 26* nations to have legislated its net zero targets. The Bill:

- outlines Australia's greenhouse gas emissions reduction targets of a 43% reduction from 2005 levels by 2030 and net zero by 2050
- requires the minister to prepare and table an annual climate change statement
- requires the [Climate Change Authority](#) to give the minister advice concerning the annual statement and future greenhouse gas emissions reduction targets
- provides for periodic reviews of the operation of the Act.

*Source: <https://eciu.net/netzerotracker>. Including EU member states, there are 41 countries with legislated net zero targets

Australia's Climate Strategies and Plans

Recent updates

[Budget 2023-24](#) sets out \$4.6 billion in new climate-related spending commitments for climate action out to 30 June 2030. This is further to the \$24.9 billion of climate-related spending committed in the October 2022–23 Budget.

The Government is developing a climate reporting framework for Commonwealth budgeting purposes. The four categories of climate action are:

- reducing emissions in Australia's energy system and the broader economy through investments in
 - Renewable energy
 - Energy efficiency
 - Pollution prevention and control
 - Clean transportation
- improving climate change adaptability and disaster resilience including
 - Creating climate resilience
 - Sustainable management of living natural resources
 - Sustainable water management
 - Climate change information support systems
- international climate leadership; and
- building the Government's climate capability.

The Government will assess over time, what qualifies as climate-related spending based on ICMA's Green Bond Principles.

Australia's Climate Strategies and Plans

Reducing emissions in Australia's energy system and broader economy

[Powering Australia Plan](#) – The Government has committed \$23 billion to grow and modernise Australia's electricity grid, boosting energy performance and supporting electrification. Powering Australia policies include:

- [Rewiring the Nation](#) (RWN), which provides \$20 billion in concessional loans and equity for investment in transmission infrastructure projects. RWN will upgrade Australia's energy grid to allow and grow the National Electricity Market (NEM) renewables share to 82% by 2030. This includes committing up to:
 - \$1.0 billion of low-cost debt for Tasmania's Battery of the Nation projects
 - \$1.5 billion towards Victorian Renewable Energy Zones and offshore wind, and
 - \$4.7 billion to unlock critical transmission and Renewable Energy Zones in partnership with the New South Wales Government.
- The \$1.3 billion [Household Energy Upgrades Fund](#) will create low-interest loans and fund upgrades to social housing to improve energy performance. This includes:
 - Injecting \$1 billion into the Clean Energy Finance Corporation to unlock more than 110,000 low-interest loans for energy-saving home upgrades in partnership with private lenders.
 - \$300 million to partner with states and territories to make energy performance upgrades to social housing.
- **Powering the Regions Fund**, which provides more than \$1.3 billion to support the decarbonisation of existing industries and the development of new clean energy industries. This includes three streams:
 - \$600 million for Safeguard Transformation
 - \$400 million for Industrial Transformation
 - \$400 million for Critical Inputs to Clean Energy Industries

Australia's Climate Strategies and Plans

Reducing emissions in Australia's energy system and broader economy

[Hydrogen Headstart program](#) - The Government will invest \$2.0 billion in the new Hydrogen Headstart program, providing revenue support for large-scale renewable hydrogen projects through competitive hydrogen production contracts.

The [National Reconstruction Fund \(NRF\)](#) is the Government's plan to build Australia's industrial base. Up to \$3 billion from the \$15 billion NRF will be directed toward clean energy investments such as:

- Wind Turbine Manufacturing
- Battery and Solar panel supply chain and manufacturing
- Modernising steel and aluminium manufacturing
- Hydrogen Electrolysers
- Bioenergy and bio mass
- Innovative packaging solutions for waste reduction

[National Electric Vehicle Strategy](#) – aims to increase the uptake of electric vehicles (EVs) to reduce emissions. The Strategy sets out three key objectives:

- increase the supply of affordable and accessible EVs
- establish the resources, systems and infrastructure to enable rapid EV uptake
- encourage increased EV demand.

Australia's Climate Strategies and Plans

Improving climate change adaptability and disaster resilience

Resilience and adaption strategy

The [National Climate Resilience and Adaptation Strategy 2021 – 2025](#) includes three objectives to better anticipate, manage and adapt to our changing climate.

- Driving investment and action through collaboration
- Improving climate information and services
- Assessing progress and improvement over time.

Since July 2022, the Government has provided \$1.5 billion to individuals through the Australian Government Disaster Recovery Payment and Disaster Recovery Allowance. From 2023–24, the Government is providing up to \$200 million a year over the next five years through the [Disaster Ready Fund](#) to support communities to strengthen their resilience against natural disasters.

The 2022-23 Budget allocated \$15.9 million over four years to engage with First Nations people on climate adaptation and mitigation, including establishing the Torres Strait Climate Centre of Excellence.

Biodiversity and climate change

Australia is a Party to the [UN Convention on Biological Diversity](#) (CBD)

[Australia's Strategy for Nature 2019-2030](#) outlines Australia's approach to biodiversity conservation.

The [Nature Positive Plan](#) will invest \$121 million to establish Environment Protection Australia and \$51.5 million to establish Environment Information Australia.

Australia's Climate Strategies and Plans

Improving climate change adaptability and disaster resilience

The new [Net Zero Authority](#) will promote the orderly and positive economic transformation associated with achieving net zero emissions.

The [Net Zero Economy Agency](#) commenced in the Department of the Prime Minister and Cabinet on 1 July 2023 as a precursor to establishing a legislated Net Zero Authority. The agency is chaired by Greg Combet AM and is supported by an [advisory board](#) to design and develop the Net Zero Authority and will ensure its effective operation.

The new Net Zero Authority will:

- Support workers in emissions-intensive sectors to access new employment, skills and support as the net zero transformation continues.
- Coordinate programs and policies across government to support regions and communities to attract and take advantage of new clean energy industries and set those industries up for success.
- Help investors and companies to engage with net zero transformation opportunities.

Australia is pursuing the majority of its climate, emissions, energy and technology policies and initiatives through the following government departments

Key Government Agencies

- [Department of Climate Change, Energy, the Environment and Water \(DCCEEW\)](#)

The following agencies report to DCCEEW

- [Australian Energy Market Operator \(AEMO\)](#)
- [Clean Energy Regulator \(CER\)](#)
- [Clean Energy Finance Corporation \(CEFC\)](#) world's biggest 'green bank'
[Clean Energy Innovation Fund](#)
- [Australian Renewable Energy Agency \(ARENA\)](#)
- [The Climate Change Authority](#)
- [Bureau Of Meteorology](#)
- [Department of Industry, Science and Resources \(DISR\)](#)
 - [CSIRO Climate Science Centre](#)
- [Department of Agriculture, Fisheries and Forestry \(DAFF\)](#)
- [Department of Foreign Affairs and Trade \(DFAT\)](#)
- [Department of Prime Minister and Cabinet – Net Zero Agency](#)

Progress Reporting

- [Emissions Reporting](#)
 - [Quarterly Update of Australia's National Greenhouse Gas Inventory](#)
 - [National Greenhouse Gas Inventory – Paris Agreement Inventory](#)
 - [State and Territory Greenhouse Gas Inventories](#)
 - [National Inventory by Economic Sector](#)
 - [Australia's National Inventory Report](#)
- [National Greenhouse and Energy Reporting Scheme \(NGERS\) \(CER\)](#)
- [Quarterly Carbon Market Report \(CER\)](#)

Progress Towards Climate Change Commitments

Australia's climate change commitments include:

The Paris Agreement.

Australia submitted its revised [National Determined Contribution](#) (NDC) to the UNFCCC in June 2022.

This included:

- Reaffirming a target of net zero emissions by 2050.
- Committing to reduce Greenhouse gas emissions by 43% from 2005 levels.
- Committing to providing an annual statement to parliament on progress towards these targets.

Paris Agreement Emissions Reduction Target:

- To reduce emissions by the above levels, Australia will need to reduce emissions to around 350mt CO₂-e.
- Australia will not use over-achievement (otherwise known as carryover) from its 2020 and Kyoto Protocol targets to meet its Paris Agreement targets.

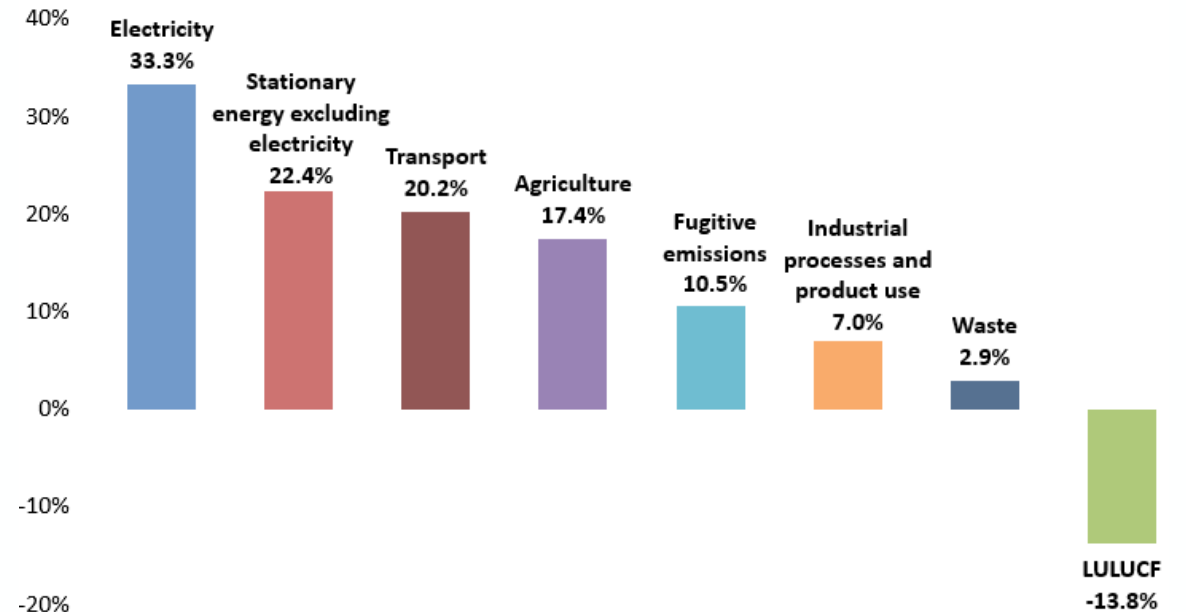
Source: [Department of Climate Change, Energy, the Environment and Water](#)

Progress to date

Emissions Reduction Target:

- The [National Greenhouse Gas Inventory](#) Quarterly Update December 2022 shows Australia's annual emissions at **464 Mt CO₂-e**, **24.7% lower than 2005 levels**.
- The 0.4% or 2.0 Mt CO₂-e decrease in emissions over the year to December 2022 reflects annual decreases in electricity, fugitive and stationary emissions; offset by an increase in transport and agriculture emissions

Share of total emissions by sector for the year to December 2022



Progress Towards Climate Change Commitments

Domestic programs

The [Clean Energy Finance Corporation \(CEFC\)](#) is the world's largest government-owned 'green bank' and has mobilised over \$11.7 billion for clean energy projects with a total value of around \$42.8 billion.

The [Australian Renewable Energy Agency \(ARENA\)](#) has contributed \$1.96 billion in funding to 632 renewable energy projects with a total value of around \$8.8 billion since 2012.

The [Clean Energy Regulator](#) manages several programs to accelerate carbon abatement. These include the following:

[The large scale Renewable Energy Target \(LRET\)](#):

- encourages investment in large scale renewable power stations through a Renewable Energy Certificate Market for the creation and sale of certificates called large-scale generation certificates (LGCs).
- The accreditation of power stations and creation of LGCs continues under the LRET until 2030.

[The small scale renewable energy scheme \(SRES\)](#):

- encourages adopting small scale renewables such as household PV and solar water heaters. **Australia has the highest uptake in the world of rooftop solar, with over 3 million solar systems (1 in 3 households) installed across Australia.**

Progress Towards Climate Change Commitments

Domestic programs

[The Emissions Reduction Fund](#) (ERF):

- Invests in projects reducing emissions by incentivising organisations and individuals to adopt practices/technologies that reduce emissions through the issue of [Australian Carbon Credit Units](#) (ACCUs). Entities buy ACCUs eligible carbon abatement schemes, which can be traded in the market or sold back to the Government.
- [A review of the ACCU scheme](#) in July 2022 found the scheme is essentially sound and recommended several changes to enhance the integrity and effectiveness of the system. The Government accepted all [16 recommendations](#) in principle, and implementation is underway.

[Safeguard Mechanism](#)

The [Safeguard Mechanism](#) (SM) requires Australia's largest greenhouse gas emitters to keep their net emissions below an emissions baseline.

The SM applies to all facilities emitting more than 100k tonnes of CO₂e a year, including in:

- mining
- oil and gas production
- manufacturing
- transport
- waste facilities.

About 215 large industrial facilities are covered by the SM. These facilities contribute 28% of national emissions.

Under recent changes to the SM, these emitters will be required to cut emissions by an average of 4.9 per cent each year to 2030 to help meet the 43 per cent reduction target and aim to reach net zero by 2050.

International Climate Framework

Australia is a member of many international working parties on climate change, partnerships and related agreements:

Australia will be participating in COP 28 in the UAE in Nov/Dec 2023

- **Paris Agreement (joined in 2016)**, Kyoto Protocol (signed 1998, ratified in 2007) & Cancun Pledge (2010)
 - United Nations Framework Convention on Climate Change (UNFCCC)
 - [Latest submission to UNFCCC NDC Registry](#) June 2022
 - [Intergovernmental Panel on Climate Change](#) (IPCC)
- [Asia-Pacific Rainforest Partnership](#)
- [International Partnership for Blue Carbon](#)
- [International Coral Reef Initiative](#)
- [Global Oceans Alliance](#)
- [Mission Innovation](#) (global clean energy initiative)
- [Leadership Group for Industry Transition](#) (committed to achieving the Paris Agreement)
- [International Solar Alliance](#)
- At the G7 Summit in June 2021, Australia joined the High Ambition Coalition for Nature and People.

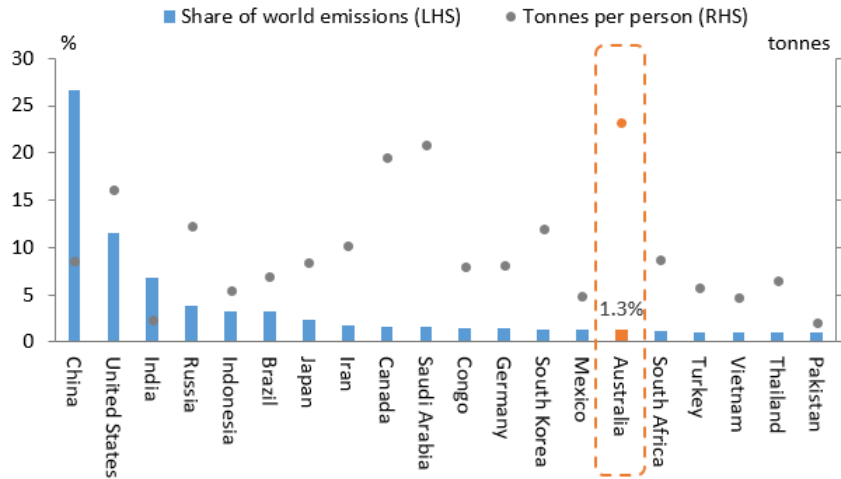
Australia's Bilateral Technology Agreements

Recently finalised:

- Australia has joined the 'Climate Club', joining the G7 and other high ambition countries.
- Australia - US Critical Minerals and Clean Energy Transformation Compact
- Australia - Japan Partnership on Decarbonisation
- Australia - Germany Hydrogen Accord
- Australia - Singapore establishment of a \$30 million partnership to accelerate the deployment of low emissions technology fuels and technologies
- Australia-UK partnership to drive low emissions solutions
- Australia-Republic of Korea Low and Zero Emissions Technology Partnership
- Australia - Fiji partnership on high integrity carbon offsets to reduce emissions
- Australia - Indonesia Joint Statement on Cooperation on the Green Economy and Energy Transition
- Australia - Papua New Guinea work together on carbon offsets
- Australia - Vietnam Joint Statement on Commitment to Practical Climate Action and Enhanced Economic Engagement Strategy.

Australia's Progress Towards Climate Change Commitments

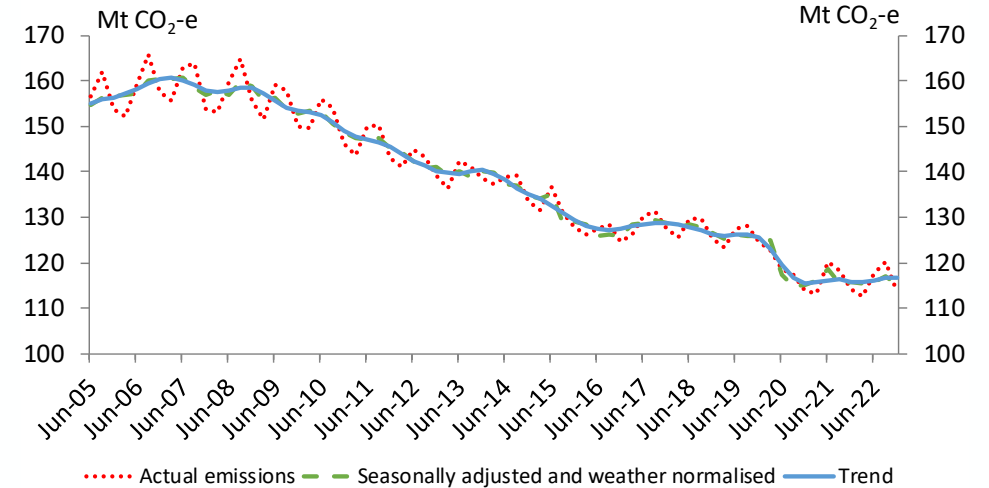
20 largest greenhouse gas emitting countries (inc LULUC)



- Australia produces around 1.3% of global greenhouse gas emissions annually.
- Australia has a revised target of reducing emissions by 43 per cent below 2005 levels by 2030.
- Australia's quarterly emissions have fallen by around 24% since 2005. Australia has reduced its emissions faster than many similar developed countries.

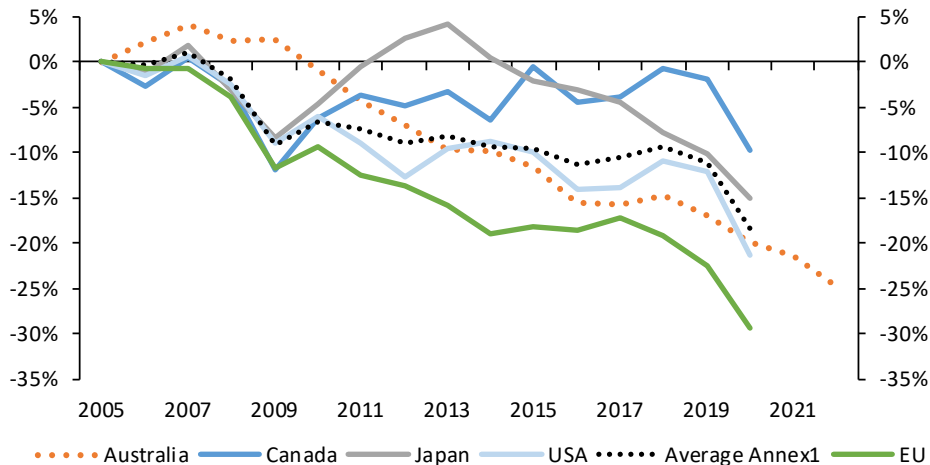
Source: www.climatewatchdata.org; World Bank population (2020)

Australia's decline in quarterly GHG emissions



Source: Department of Climate Change, Energy, the Environment and Water

Australia's decline in GHG emissions since 2005



Source: UNFCCC Annex1 parties. Last inventory year 2020.

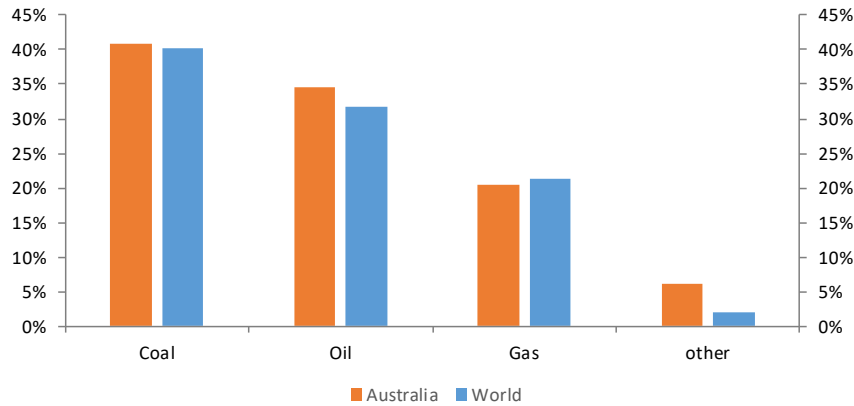
Australia's emissions targets compared to G7

Country	Target
Australia	43% below 2005 levels by 2030
Canada	40-45% below 2005 levels by 2030
France	55% below 1990 levels by 2030
Germany	55% below 1990 levels by 2030
Italy	55% below 1990 levels by 2030
Japan	46% below 2013 levels by 2030
UK	68% below 1990 levels by 2030
USA	50-52% below 2005 levels by 2030

Source: www.climatewatchdata.org

Australia's Progress Towards Climate Change Commitments

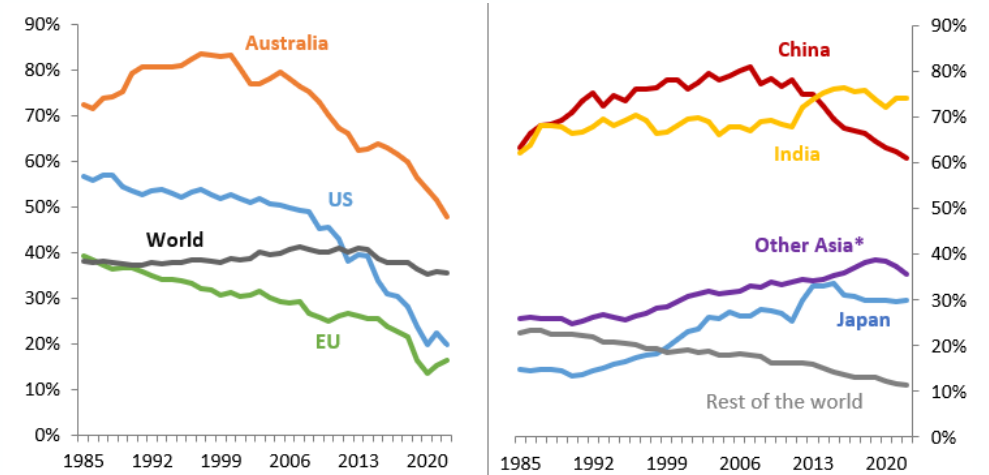
Carbon emissions by fuel source



Source: CAIT Climate Data Explorer via. Climate Watch

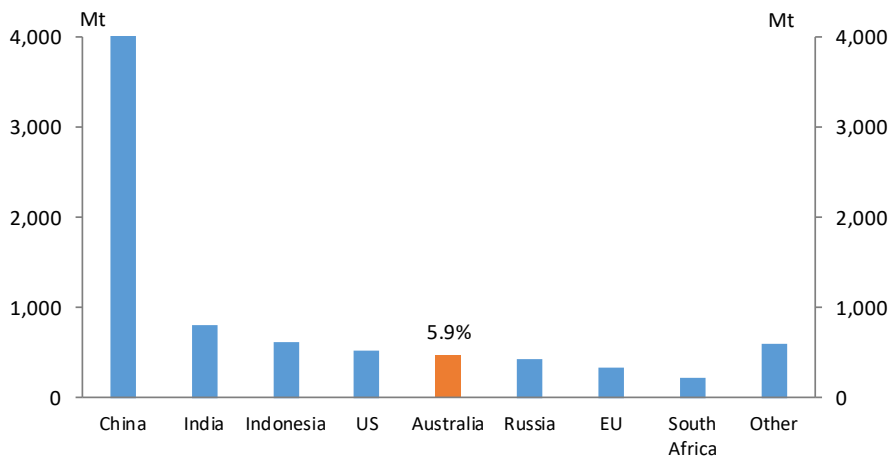
- Australia's overall emissions by fuel source profile is similar to the world average.
- Australia currently generates around 48% of its electricity from coal; however, this proportion decreases as the share of renewables increases.

Coal-fired electricity generation as a share of region's total electricity generation



Source: Energy Institute statistical review of world energy, June 2023

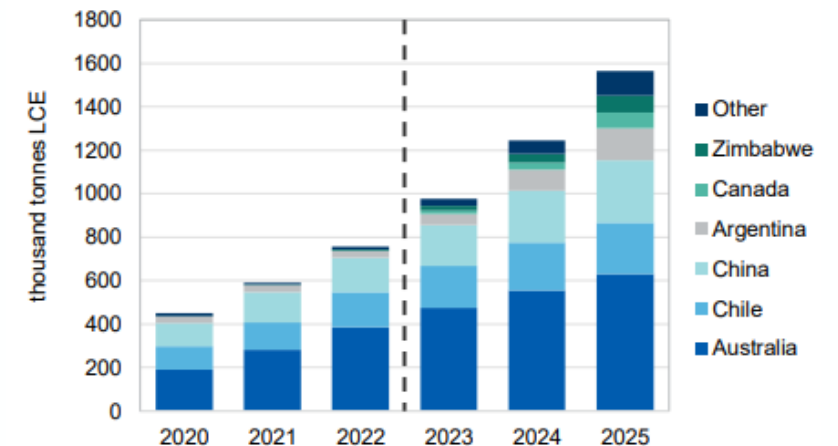
Global coal production (2021)



Source: BP statistical review of world energy, June 2022

- Australia accounts for around 6% of global coal production and around 1% of coal consumption.
- Australia leads global lithium extraction – a key component of electric vehicle batteries
- By 2028, lithium and base metals (and their raw material inputs) are forecast to equal the export value of all coal types combined.[^]

Global lithium extraction, by country

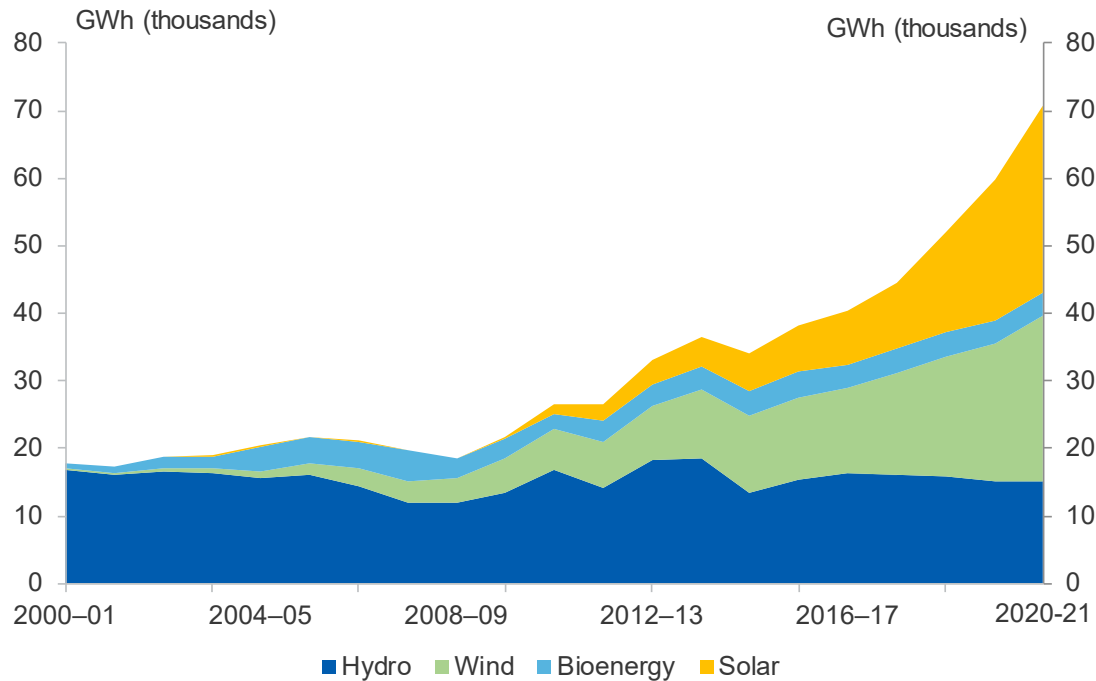


[^] Source: Department of Industry, Resources and Energy Quarterly Report June 2023

Australia's technology focus on renewable energy

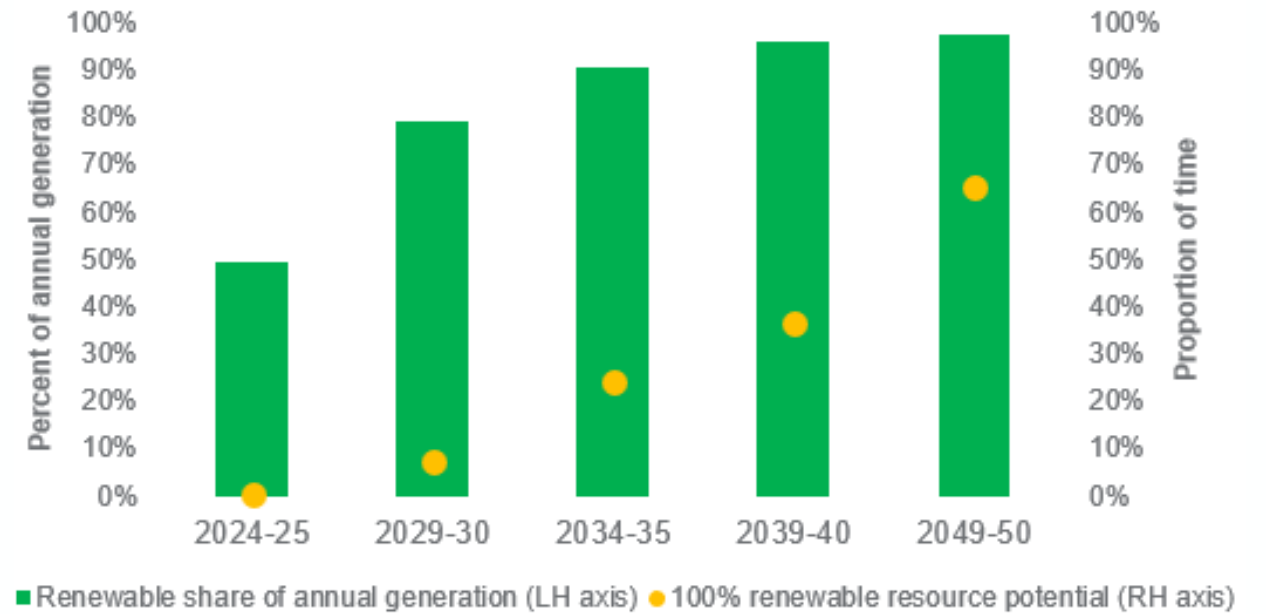
- Australia plans to grow the renewable share of the National Electricity Market to 82 per cent by 2030.
- Australia has the highest uptake of rooftop solar globally, with one in three homes having rooftop solar PV.

Historical electricity generation from renewable sources



Source: Department of Climate Change, Energy, the Environment and Water

NEM annual share of renewable generation and 100% resource potential, 2025-2050 Step Change scenario



Source: AEMO 2022 Integrated System Plan

A Sustainable Finance Strategy

AOFM Sovereign Green Bonds

The AOFM plans to issue green bonds from around mid-2024. Australian Government green bonds will finance government programs with positive climate change and environmental outcomes.

A Green Bond Framework will be published before we issue green bonds. The framework will detail:

- the categories of projects that green bonds will fund
- arrangements for selecting projects
- how issuance proceeds will be managed
- ongoing reporting on projects.

Over the next 12 months, the AOFM will work and engage closely with investors to gather their thoughts around these issues as well as specifics of the bond program.