



Australian Government

Australia's Nationally Determined Contribution

COMMUNICATION 2020



Australia's First Nationally Determined Contribution under the Paris Agreement, in accordance with UNFCCC decision 1/CP.21, December 2020

I. Australia's commitment

Australia first communicated its Nationally Determined Contribution (NDC) under the Paris Agreement in 2015, committing to an ambitious economy-wide target to reduce greenhouse gas emissions by 26 to 28 per cent below 2005 levels by 2030.

This target is a floor on Australia's ambition. Australia is aiming to overachieve on this target, and newly-released emissions projections show Australia is on track to meet and beat its 2030 target without relying on past overachievement.

This communication provides an update on newly announced policies and measures, and a snapshot of progress on policies and measures outlined in the 2015 NDC communication. These actions will drive significant emission reductions in Australia and globally by driving down the cost of low emissions technologies.¹ They position Australia to overachieve on its 2030 target, and advance Australia's ambition to achieve net zero emissions as soon as possible, in support of the goals of the Paris Agreement.

Australia is resolutely committed to the Paris Agreement, and to taking practical and ambitious action to reduce emissions.

The details of Australia's 2030 target are set out in table 1 to aid clarity, transparency and understanding.

Australia's Long Term Greenhouse Gas Emissions Reduction Strategy is under development, and will be submitted to the UNFCCC ahead of the 26th Conference of the Parties (COP26).

II. Policies and measures

Australia's policies and measures, including those newly released in 2020, will enable the deployment of new and emerging low-emissions technologies to drive emission reductions and support economic growth.

These new measures build on Australia's existing, comprehensive suite of emission reduction policies, which are working to reduce emissions in all sectors of the economy and are summarised below.

Australia's Technology Investment Roadmap brings a strategic and system-wide view to public investment in new and emerging low emission technologies. The Roadmap will guide the deployment of an estimated \$18 billion of Australian Government investments over the

¹ In this document, low, clean, zero and negative emissions technologies are referred to as 'low emissions technologies' for simplicity. Australia's policies and measures adopt an inclusive, technology-neutral approach. Investments are prioritised through a transparent and system-wide process that does not exclude any technologies at the outset. All available technologies need to be on the table for the goals of the Paris Agreement to be achieved.

period to 2030 and leverage a further \$50 billion of investment from the private sector, research institutions and the States and Territories.

The Roadmap aims to drive down the cost of deploying new and emerging technologies to achieve economic competitiveness with existing business methods. The ultimate goal is the substitution of existing higher emission technologies and practices with cleaner, more efficient and lower cost technologies.

Low Emissions Technology Statements will be released annually to support the goals of the Technology Investment Roadmap.

The first Low Emissions Technology Statement was released on 22 September 2020, and articulates Australia's low emissions technology investment priorities and accompanying stretch goals (ambitious but realistic goals to bring priority low emissions technologies to economic parity with existing mature technologies). It names five priority technologies: clean hydrogen, energy storage, low carbon materials (steel and aluminium), carbon capture and storage, and soil carbon. These technologies address emissions in sectors that account for 90 per cent of global emissions, or around 45 billion tonnes CO₂-e annually.

Future Low Emissions Technology Statements are a mechanism for annual review of the impact of public investments and progress towards our economic stretch goals. They will also allow priorities to be updated as required – including by adding or altering priority technologies – ensuring Australia is responsive to local and global technology developments.

A Technology Investment Advisory Council comprising experts from business, investment and the research community will advise the development of annual Statements, which will be tabled in Australia's Federal Parliament. Council membership also includes the Chairs of Australia's key agencies supporting low emissions technologies, to better support coordination in implementing the Roadmap and accelerating the deployment of priority technologies.

Additional measures announced in September 2020 are aimed at supporting low-emissions technologies and emission reductions, particularly in hard-to-abate sectors. These include:



establishment of Australia's **first regional hydrogen export hub** to boost Australia's hydrogen industry and fund research collaborations and supply chain studies to enable demonstration and deployment.



a new **Future Fuels Package** will enable businesses to start integrating new vehicle technologies into their fleets, and address blackspots in public charging and refuelling infrastructure.



a **Carbon Capture, Use and Storage Development Fund** to support investment in pilot carbon capture projects.



a new **Technology Co-Investment Fund** to support businesses in the agriculture, manufacturing, industrial and transport sectors to adopt technologies that increase productivity and reduce emissions.

In addition, the Australian Renewable Energy Agency (ARENA) and the Clean Energy Finance Corporation (CEFC) will continue to support investments in renewable energies while also expanding their focus to support emission reductions from hard-to-abate sectors. To date, ARENA has contributed to 566 renewable energy projects with a total value of \$6.69 billion, and the CEFC has invested in more than 170 direct clean energy transactions and 13 co-finance arrangements leading to investment in projects worth over \$29.7 billion.

Australia will continue to support reliable integration of renewable energy into the electricity grid. The CEFC will administer a \$1 billion Grid Reliability Fund to ensure sufficient reliable energy capacity is available to meet periods of high demand in the National Electricity Market. This will include supporting the Underwriting New Generation Investments program, catalysing investment in energy storage, and new funding for pilot studies for microgrids in regional and remote communities.

These new measures build on Australia's existing achievements, including:



the **Emissions Reduction Fund** that has been driving low-cost emissions reductions in all sectors of the economy and has already delivered 60 million tonnes of abatement.



the \$3.5 billion **Climate Solutions Package** to expand investments in clean energy generation projects, energy efficiency and other economy wide emissions reductions measures. The package also includes an additional \$2 billion for a Climate Solutions Fund to continue investment in low-cost abatement through the Emissions Reduction Fund and to support the adoption of new and emerging low emissions technologies in relatively hard-to-reach sectors.



the **Safeguard Mechanism** establishes a legislated obligation for Australia's largest emitters to keep emissions below their baseline emissions limit. This extends to facilities across a broad range of sectors, accounting for about half of Australia's emissions.



Australia's **world-leading investment in renewable energy**, installing new renewable capacity at ten times the global per capita average and faster than any other G20 economy. In 2020, Australia is forecast to match or exceed the record 6.3 gigawatts of new renewable capacity installed in 2019.



the **National Energy Productivity Plan** is on track to ensure energy productivity improves by 40 per cent over the period 2015 to 2030.



Climate Active works with Australian businesses to encourage voluntary climate action, by certifying businesses that have credibly reached a state of carbon neutrality.

III. Australia's commitment to transparency

Australia's system of National Greenhouse Accounts has been designed to be among the most comprehensive, transparent and timely emissions reporting systems in the world.

Each year, Australia's national emissions are published disaggregated to the sub-national level (state and territory) and by industry². National emissions estimates are updated every quarter in the *Quarterly Update of the Australian national greenhouse gas inventory*. This is in addition to submitting its national greenhouse gas inventory to the UNFCCC. These data are made publicly available via an interactive database known as the Australian Greenhouse Emissions Information System to promote transparency and encourage public scrutiny.

Since 2015, significant methodological improvements have been made across the inventory and particularly in the estimation of synthetic greenhouse gas and fugitive emissions, and emissions from agriculture, land use land use change and forestry and wetlands categories.

Inventory methods will continue to be refined as new information emerges, as international practice evolves and in response to feedback from the UNFCCC review process.

IV. Australia's action to advance adaptation and resilience

Australia is committed to reducing and managing the risks of climate change. The Australian Government is investing in climate adaptation to build resilience and adapt to the challenges of a changing climate, both domestically and in our region. At time of submission, our domestic investments include over \$15 billion in natural resource management, water infrastructure, drought and disaster resilience and recovery, including \$369 million in climate science and adaptation research and services.

Australia is committed to developing an adaptation communication ahead of COP26 on our ongoing action and progress to the UNFCCC.

² Australia and New Zealand Standard Industrial Classifications.

Attachment: Australia's Nationally Determined Contribution

Target: 26 to 28 per cent below 2005 levels by 2030, to be implemented as an emissions budget covering the period 2021-2030.

Quantifiable information on reference point	
Base year	2005
Reference indicator	Emissions budget for the period 2021-2030
Value of reference indicator, target relative to the reference indicator, data source, and update of indicators	<p>The value of the reference indicator will be reported in Australia's <u>domestic emissions projections reports and Biennial Transparency Reports under the Paris Agreement</u>.</p> <p>The value may be updated to reflect <u>inventory recalculations</u> resulting from continuous methodological improvements.</p> <p>The current indicative value of the emissions budget is 4832 – 4764 mt CO_{2-e}, corresponding to the 26 – 28 per cent target range, as published in Australia's emissions projections 2020.</p>
Time frames	
Period of implementation	2021-2030, implemented as a multi-year budget
Scope and coverage	
Target type	Absolute economy-wide emissions reduction expressed as an emissions budget covering the period 2021-2030
Gases covered	Carbon dioxide (CO ₂); Methane (CH ₄); Nitrous oxide (N ₂ O); Hydrofluorocarbons (HFCs); Perfluorocarbons (PFCs); Sulphur hexafluoride (SF ₆); Nitrogen trifluoride (NF ₃)
Sectors covered	Energy; Industrial processes and product use; Agriculture; Land-use, Land-use change and forestry (UNFCCC classifications); Waste
% of base year emissions covered	100 per cent of greenhouse gas emissions and removals in Australia's national greenhouse gas inventory
Assumptions and methodological approaches for emissions estimates and accounting	
Metrics	Australia intends to apply 100 year Global Warming Potentials (GWPs) as contained in inventory reporting guidelines, <u>currently IPCC Fifth Assessment Report 100 year GWPs</u> , or as otherwise agreed.
Emissions estimation methodology	Australia will apply the <u>IPCC 2006 Guidelines</u> , or subsequent version or refinement as agreed by the CMA, and <u>nationally appropriate methods consistent with that guidance and informed inter alia by the IPCC 2019 Refinement and IPCC 2013 Wetlands Supplement</u> .

Accounting approach

Australia's 2030 target will take the form of an emissions budget for the period 2021 to 2030.

The emissions budget is calculated by taking a linear decline from 2020 to 2030, beginning from Australia's 2020 target of 5 per cent below 2000 levels and finishing at 26 per cent and 28 per cent below 2005 levels in 2030.

Australia will account based on UNFCCC inventory reporting sectors using a net-net approach across all sectors. Australia will apply the natural disturbance provision in reporting net emissions from infrequent, extreme wildfires in temperate forests, which are beyond control despite the extensive efforts of emergency management organisations. Australia will report total national net emissions with and without the natural disturbance provision. Australia will apply the stock-change approach to reporting and accounting emissions from harvested wood products.

A fair and ambitious contribution

Australia's Nationally Determined Contribution is an ambitious, fair and responsible contribution to global efforts toward meeting the objective of the UNFCCC with the goal of limiting global average temperature rise to below two degrees Celsius.

The target is a floor on Australia's ambition. We are aiming to overachieve on this target and newly released emissions projections show Australia is on track to meet and beat our 2030 target without relying on past overachievement.

The target represents a halving of emissions per person in Australia, or a two-thirds reduction in emissions per unit of GDP. The target represents serious and ambitious effort for Australia and takes account of Australia's unique national circumstances, including a growing population and our role as a leading global resources provider.