



AUSTRALIA & CLIMATE CHANGE ACTION



September 2020

Australian Mission to the European Union

#DYK Australia has the world's highest levels of uptake of household solar panels. 1 in 4 Australian households have solar panels on their roof!



IN AUSTRALIA, EMISSIONS PER PERSON ARE AT THEIR LOWEST LEVELS IN 30 YEARS.

AUSTRALIA IS COMMITTED TO THE PARIS AGREEMENT AND AMBITIOUS CLIMATE ACTION.

As chair of the 'Umbrella Group' of countries, Australia played a constructive role in negotiations under the UNFCCC to reach the historic Paris Agreement in 2015, and the package of rules for its implementation at Katowice in 2018.

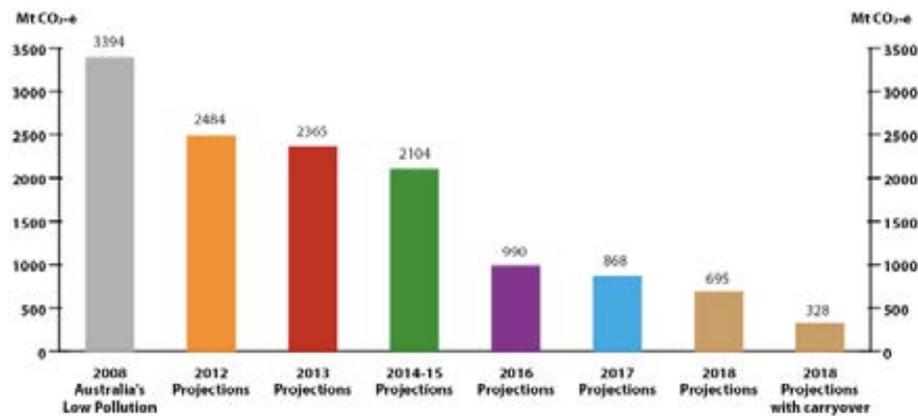
Australia has participated in international climate negotiations since the 1980s and has had a domestic climate change target since 1990.

In 2010, the Australian Government committed to reduce Australia's emissions by 5 per cent below 2000 levels by 2020 under the United Nations Framework Convention on Climate Change (UNFCCC) (the Cancun Agreement).

Australia ratified the UNFCCC's Kyoto Protocol in 2007. Under its first commitment period, from 2008 to 2012, Australia adopted a Quantified Emissions Limitation or Reduction Obligations (QELROs) limiting Australia's emissions growth over the first commitment period to 108 per cent of 1990 levels. Australia's QELRO under the second commitment period, from 2013 to 2020, is 99.5 per cent of 1990 levels.

In 2015, Australia made a commitment to reduce Australia's emissions by 26 to 28 per cent below 2005 levels by 2030 under the Paris Agreement.

Change in Australia's cumulative greenhouse gas reduction task



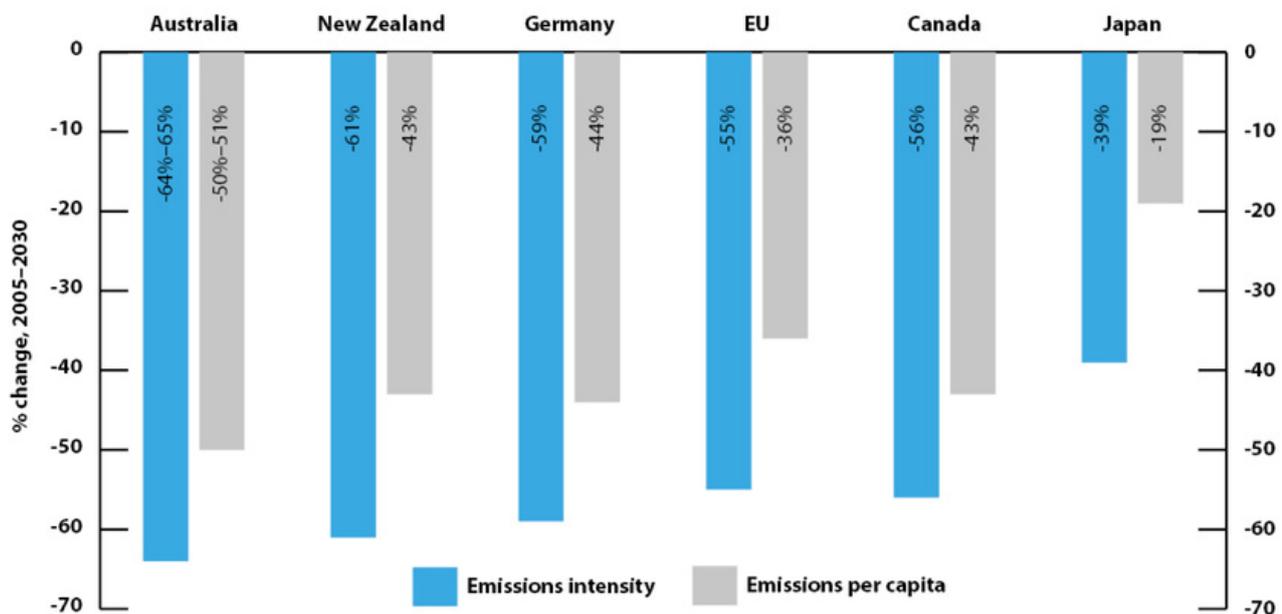
* -26% emissions reduction task (328 Mt CO₂-e) including overachievement (367 Mt CO₂-e) from the first and second commitment period of the Kyoto Protocol

AUSTRALIA HAS A STRONG HISTORY OF SETTING REALISTIC TARGETS THAT WE CAN MEET, AND SO FAR HAVE EXCEEDED.

Australia met and exceeded our first commitment period target under the Kyoto Protocol. By 2020, Australia will have reduced our greenhouse gas emissions by 430 million tonnes more than required to meet our 2020 Kyoto targets.

Australia will achieve our 2030 Paris target. Our Paris target to reduce emissions by 26 to 28 per cent on 2005 levels by 2030 represents our genuine efforts on climate action. This means a halving of emissions per person in Australia, or two-thirds reduction in emissions per unit of GDP, demonstrating a rapid pace of change underway in Australia.

Comparison of 2030 targets per capita and per unit of GDP



Department of Environment and Energy, Australia, 2019

#DYK In 2018, at more than \$530 (€323) per person in Australia, the average Australian invests the most on clean energy technologies, nearly double that of Japan or the US, the countries with the second and third largest per person investment.

TO MEET OUR PARIS TARGETS, THE AUSTRALIAN GOVERNMENT WILL INVEST \$18 BILLION (€11 BILLION) OVER THE NEXT DECADE TO LOWER EMISSIONS.

The Plan includes:

- \$2 billion (€1.2 billion) Climate Solutions Fund, which builds on the success of Australia's \$2.55 billion (€1.6 billion) Emissions Reduction Fund and ensures Australian farmers, businesses and Indigenous communities can continue to undertake emissions reduction projects that provide local benefits.
- Continued support for the transition to reliable renewable energy including by investing in \$1.38 billion (€1.2 billion) in the Snowy Hydro 2.0 project, which will provide an additional 2,000 MW of dispatchable generating capacity and approximately 350,000 MWh of large-scale storage to the National Electricity Market. The construction project led by an Italian-German-Australian consortium will deliver the world's second-largest pumped hydro plant.
- Australian and Tasmanian governments will pursue the Battery of the Nation and Marinus Link to boost Tasmania's energy generation and provide much needed energy storage and dispatchable electricity to the NEM. If proven to be environmentally sustainable, technically feasible and economically viable, the Marinus Link will be the additional interconnector that would enable the transmission of renewable energy from Tasmania to mainland Australia.

Our Climate Solutions Plan OVERVIEW

Australia does what it says. When we make a commitment, we develop practical plans to achieve it and stand by our achievement.

Australia is a world leader on the measurement, verification and reporting of emissions and is helping other countries develop their capacity. Our Clean Energy Regulator administers legislated schemes for measuring, managing, reducing or offsetting Australia's carbon emissions.

#DYK The Snowy Hydro 2.0 construction project led by an Italian-German-Australian consortium will deliver the world's second largest pumped hydro plant.

Australia's Clean Energy Finance Corporation is the world's largest green bank.

AUSTRALIA HAS A COMPREHENSIVE SET OF ONGOING CLIMATE CHANGE POLICIES COVERING ALL SECTORS OF THE ECONOMY.

The Climate Solution Plan builds on existing Australian Government initiatives such as:

The **Emissions Reduction Fund (ERF)** is the centrepiece of the Australian Government's climate response. It covers multiple sectors and supports practical projects in agriculture, manufacturing, energy, mining, oil and gas, transport, vegetation management, waste and wastewater. It is a robust scheme which guarantees the integrity of offset projects, through method development, contractual delivery requirements for payment and through strong enforcement powers.

So far, the ERF has secured nearly 200 million tonnes of abatement through over 500 carbon abatement contracts, at an average price of \$12.19 (€7.44) a tonne. Of this 200 million tonnes, more than 58 million tonnes have already been delivered. This is the largest ever greenhouse gas reduction commitment by Australian businesses and landholders. ERF projects also improve biodiversity, agricultural productivity and create employment for Indigenous Australians.

Through the ERF's Safeguard Mechanism, Australia's largest emitters now have legislated obligations to measure, report and manage their greenhouse gas emissions.

Australia's Renewable Energy Target (RET) is driving significant uptake of wind, solar and hydro power in our electricity grid. In 2015, the Australian Government set a nation-wide large-scale RET of 33,000 GWH (i.e. 23 per cent) of Australia's electricity to come from renewable sources by 2020. By September 2019, the large-scale RET was met in Australia. Also in 2019, Australia installed a record estimated 6.3 gigawatts of new renewable capacity, 24 per cent above the previous record set in 2018.

Through the **Australian Renewable Energy Agency (ARENA)**, we have been particularly effective at catalysing cost reductions in large scale solar, and played a transformative role in mainstreaming that technology in Australia. ARENA has provided \$1.58 billion (€964 million) in grant funding to 543 projects including large-scale solar and pumped hydro.

The **Clean Energy Finance Corporation (CEFC)** — the world's largest green bank — has made major investments in low emissions technologies while ensuring reliable and affordable energy. The CEFC has invested over \$8.9 billion (€5.4 billion) in more than 160 projects with a total value of more than \$28 billion (€17.1 billion).

Our **National Energy Productivity Plan** is improving Australia's energy productivity by 40 per cent, by 2030. The NEPP has already delivered stronger energy standards for new and renovated buildings as well as products such as air conditioners, swimming pool pumps and white goods. Our efforts to integrate high penetrations of intermittent renewables into our electricity grid matters to us because as an island nation, we do not have the ability to interconnect with other countries.

We have legislated the **phase-down of hydrofluorocarbons (HFCs)**, the potent greenhouse gas used in refrigeration and air conditioning equipment. Our ambitious phase down — 85 per cent by 2036 — is ahead of the global response agreed under the Montreal Protocol.



#DYK In Australia's National Electricity Market, renewables are projected to contribute 48 per cent of electricity supply in 2030, up from about 12 per cent in 2012.



**AUSTRALIA AIMS TO
OVERACHIEVE ON
OUR PARIS
AGREEMENT
COMMITMENTS,
WITH A PATHWAY
TO DEEPER
EMISSIONS
REDUCTION
BEYOND 2030.**

**#DYK The Australian
Government is investing
\$570 million (€348 million)
to support the National
Hydrogen Strategy.**

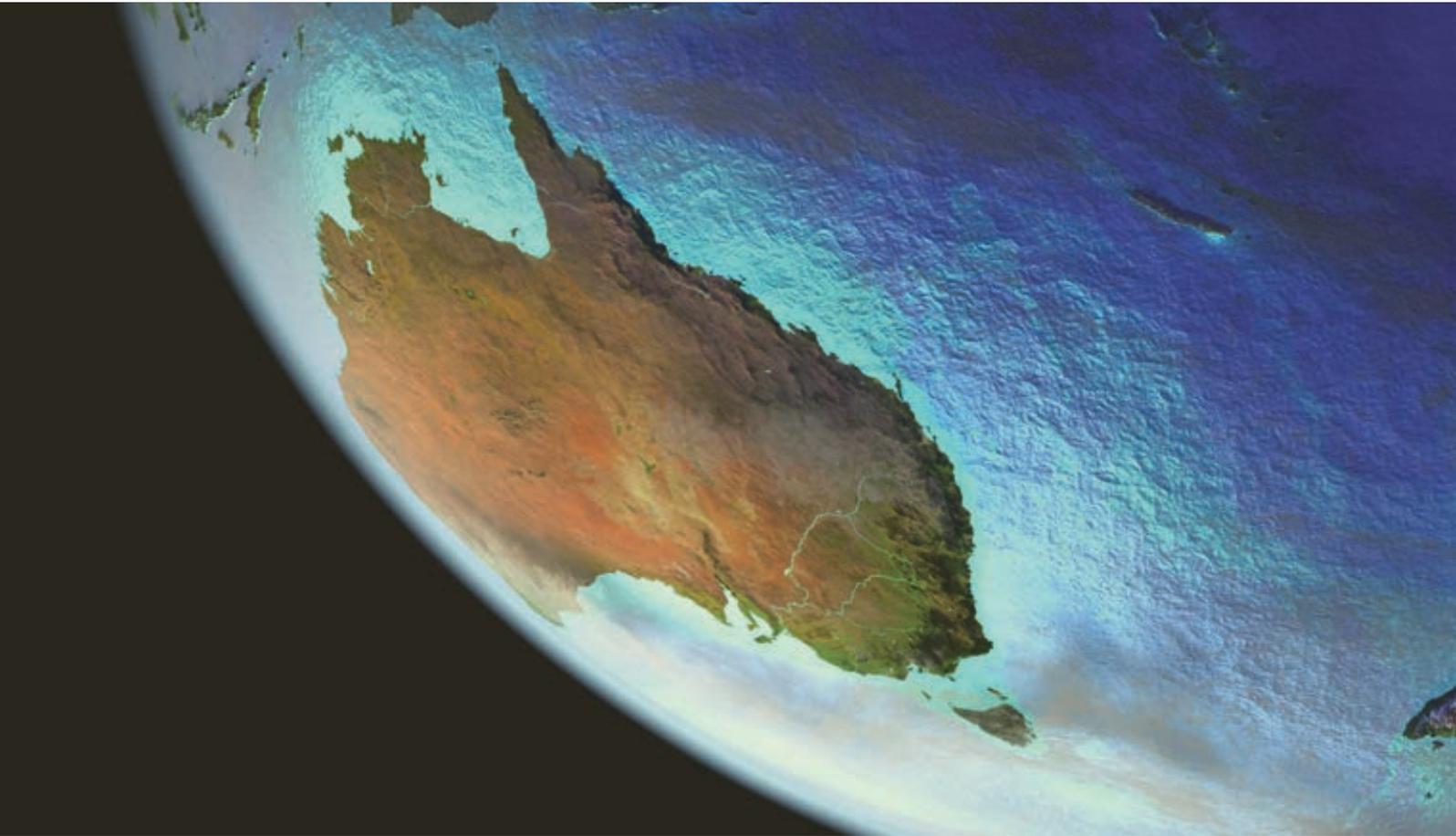
**WE ARE SETTING UP A
\$70.2 MILLION
(€ 42.8 MILLION)
HYDROGEN EXPORT HUB
TO SCALE UP DEMAND
AND TAKE ADVANTAGE
OF THIS LOW EMISSIONS,
HIGH-POWERED ENERGY.**

IN SEPTEMBER 2020, THE AUSTRALIAN GOVERNMENT ANNOUNCED A NEW \$1.9 BILLION (€1.2 BILLION) INVESTMENT PACKAGE TO ENABLE THE RAPID DEVELOPMENT OF NEW AND EMERGING LOW EMISSIONS TECHNOLOGIES THAT SUPPORT ECONOMIC GROWTH AND A SUSTAINABLE ECONOMIC RECOVERY FROM COVID-19.

Our Technology Investment Roadmap's first annual Low Emissions Technology Statement articulates five priority technologies and accompanying stretch goals:

1. Clean hydrogen under \$2 (€1.2) per kilogram.
2. Long duration energy storage dispatched at under \$100 (€61) per MWh. This would enable farmed wind and solar to be delivered at prices around or below today's average.
3. Carbon dioxide compression, transport and storage under \$20 (€12) per tonne.
4. Low emissions steel production under \$900 (€549)/t and aluminum under \$2,700 (€1,647)/t.
5. Soil carbon measurement for less than \$3 (€1.83)/ha/year.

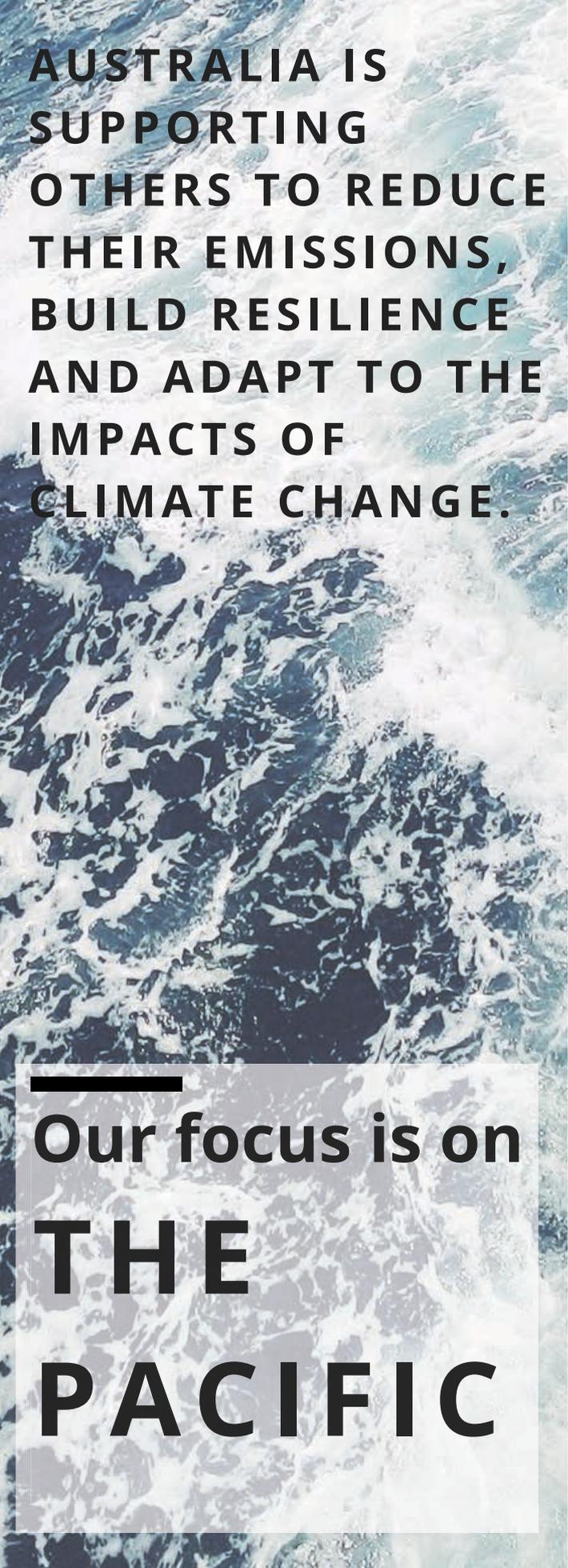
The Roadmap, along with other key strategies such as our National Hydrogen Strategy, will reduce our emissions and help our global partners to also transition to low emission economies.



AUSTRALIA IS RESOLUTELY COMMITTED TO THE PARIS AGREEMENT GOALS, INCLUDING TO ACHIEVE NET ZERO EMISSIONS GLOBALLY IN THE SECOND HALF OF THE CENTURY.

The Australian Government is working hard to deliver our Long Term Emissions Reduction Strategy, and we will release it well ahead of COP26. Our work on the strategy is well underway, including detailed analysis and consultation with business and other experts.

We are also working on Australia's recommunication of our nationally Determined Contribution. Our NDC will outline the real and meaningful action Australia is taking to reduce emissions. We will submitted it ahead of COP26.



AUSTRALIA IS SUPPORTING OTHERS TO REDUCE THEIR EMISSIONS, BUILD RESILIENCE AND ADAPT TO THE IMPACTS OF CLIMATE CHANGE.

**Our focus is on
THE
PACIFIC**

THE AUSTRALIAN GOVERNMENT WILL EXCEED OUR \$1 BILLION (€0.61 BILLION) COMMITMENT IN CLIMATE DEVELOPMENT ASSISTANCE FOR DEVELOPING COUNTRIES FROM 2015–2020.

Australia is a founding member of the International Partnership for Blue Carbon and the Asia-Pacific Rainforest Partnership.

Australia will provide \$500 million (€305 million) over five years to strengthen climate and disaster resilience in the Pacific from 2020. This includes continuing dedicated aid initiatives targeting climate and disaster resilience, like the support we provide to 14 Pacific meteorological services to monitor, analyse and communicate information about climate and oceans.

All infrastructure supported through the \$2 billion (€1.2 billion) Australian Infrastructure Financing Facility for the Pacific (AIFFP) will be climate smart and disaster resilient. In addition, we are establishing a Climate Infrastructure window in the AIFFP to advance the region's energy transition and climate ambitions. The aim of this window will be to fund projects, which specifically support renewable and lower emission energy generation and transmission. Projects that could be financed through this window include investments in hydro power, solar PV and battery storage, biomass and LNG transmission.

Australia is also committed to mobilising stronger private sector investment in the region, including by using our aid program more creatively to this end.

The Australian Government has set aside \$140 million (€85.4 million) from the aid budget for the Australian Private Sector Mobilisation Climate Fund to mobilise significant private sector investments in low emissions, climate-resilient solutions for the Pacific and Southeast Asia. The Fund will ultimately develop a significant portfolio of projects with contributions from the private sector and other agencies.

Partner in Climate and Clean Air Coalition

Funded the Climate Innovation Centre in Vietnam
Member of International Maritime Organisation

Involved in Global Forest Observations Initiative
Member of Major Economies Forum on Energy and Climate

Involved in Asia-Pacific Rainforest Recovery Plan

Member of International Civil Aviation Organisation

Helping build climate change resilience in Pacific Island countries

Involved in Low Emissions Capacity Building Program

Involved in International Savanna Fire Management Initiative

Signatory to Kyoto Protocol

\$28.3 million for Global Green Growth Institute

\$1 billion for developing countries

\$200 million for Green Climate Fund

Sharing carbon accounting expertise with China, South Africa and Kenya

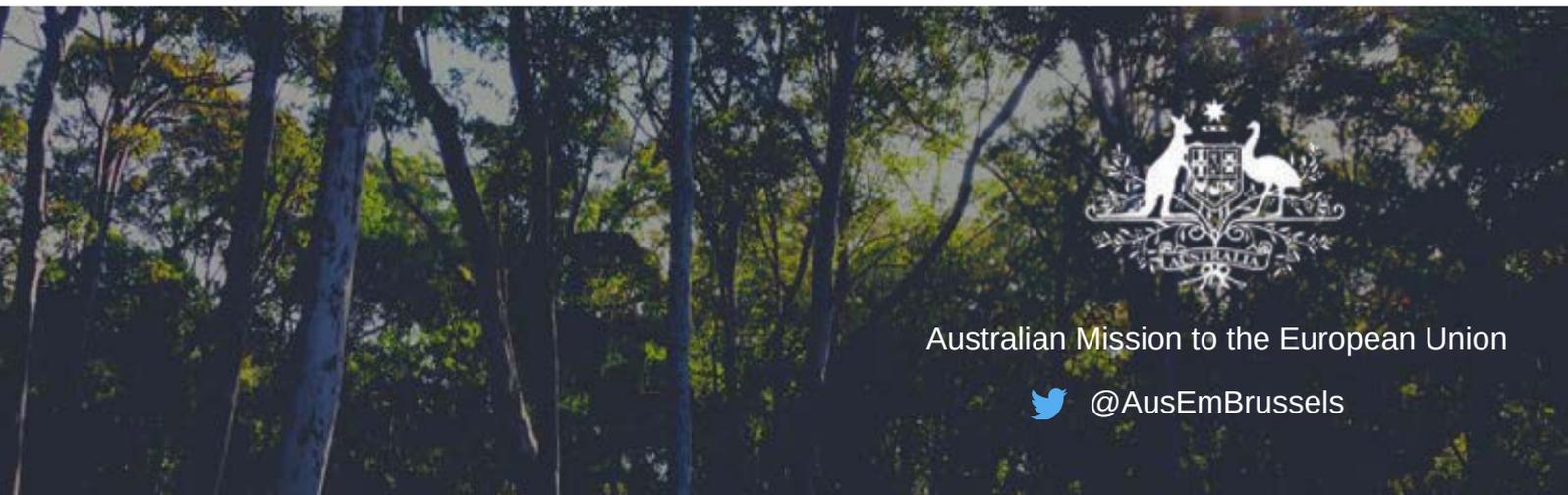
Signatory to Cancun Agreements

\$5 million for Climate Early Warning System

Member of Climate Change Experts Group

Signatory to Paris Agreement

\$13 million for Coral Triangle Initiative



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