



JOSH FRYDENBERG MP

FEDERAL MEMBER FOR KOOYONG | TREASURER OF AUSTRALIA

RING EMISSIONS THE AUSTRALIAN WAY

A MESSAGE FROM JOSA

Australians want action on climate change.

They also want affordable electricity, secure jobs and opportunities for the next generation.

Our Government is acting to deliver net zero emissions by 2050, in a responsible way that will ensure more Australian jobs.

Australia has a strong record of beating our emissions targets.

Since 2005, Australia's emissions have fallen by more than 20%. This is more than the USA, Canada, Japan and New Zealand.

We are on track to reduce emissions by up to 35% by 2030, beating our commitments.

Our Technology Investment Roadmap will unlock new investment that will further lower emissions - including clean hydrogen, carbon capture and storage, and ultra low-cost solar.

Our Plan will be reviewed every five years, to evaluate progress and adapt to new technology advances.

By supporting technology, not taxes, our plan will lower emissions and ensure a strong economy for Australia's future.

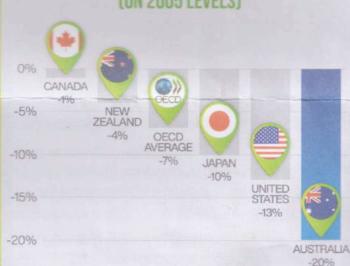
Josh Frydenberg MP

Federal Member for Kooyong | Treasurer of Australia

AUSTRALIA'S RECORD IN LOWERING EMISSIONS:

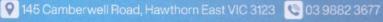
- Australia's emissions have fallen more than New Zealand, Canada, Japan and the USA (since 2005).
- Australia's emissions are down more than 20% since 2005, the average for OECD countries is only 7%.
- We are on track to beat our 2030 emissions target.

EMISSIONS REDUCTION



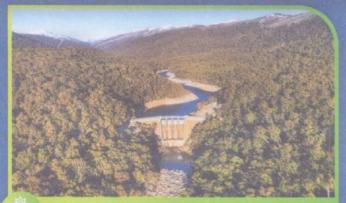
All international data from last available UNFCCC inventory year (2019) except Australia (2020, National Inventory) and OECD (2018, World Resources Institute).







OUR PLAN FOR NET ZERO BY 2050



WHAT IS NET ZERO?

Net zero means making Australia carbon neutral, and any emissions are offset.

It means that we reduce emissions – through technology – and then offset the remaining emissions through, for example, storing carbon in new forests or underground.



GLOBAL MOMENTUM TO NET ZERO

While many countries are moving slower, they are moving in the same direction.

90% of Australia's exports go to countries with a commitment to net zero.

Big decisions taken by countries, investors and companies to reduce emissions pose an opportunity – for Australia.

Our plan manages these impacts – reducing our emissions, while ensuring more jobs.



Scan this QR code to learn more



AUSTRALIA'S PLAN

Our Long-Term Emissions Reduction Plan is Australia's first comprehensive plan to achieve carbon neutrality by 2050, and is geared to our unique economy.

Over the next decade, a \$20 billion investment in our Technology Roadmap will unlock \$80 billion in public and private investment – including in clean hydrogen, carbon capture and storage, and energy storage.

The plan includes five-yearly reviews that will enable us to evaluate progress and adapt to technology advancements.

Our principles:

- 1. Technology, not taxes
- 2. Expand choices, not mandates
- Drive down the cost of a range of new technologies
- Keep energy prices down with affordable and reliable power
- Be accountable for progress



-20%

Australia's emissions are already over 20% lower than in 2005.

-40%

Our Technology Investment Roadmap - will reduce emissions by a further 40%.

Global technology trends - shift in global demand and technology will reduce our emissions by a further 15%.



Offsets - storing carbon in soils and vegetation - and working with Indo-Pacific neighbours - will reduce emissions by a further 10% to 20%*



Future technology breakthroughs - will reduce emissions by a further 15%.

H2





THE TECHNOLOGY ROADMAP

Australia's Technology Investment Roadmap will invest in technologies, including:



Clean hydrogen - will create new industries and help existing industries to make cleaner products.



Energy storage - ranging from batteries to Snowy Hydro 2.0 - will make our grid reliable, improving the reliability of renewables.



Low emissions steel, aluminium and cement will be new opportunities for Australian manufacturing.



Ultra low-cost solar - will provide the cheapest energy in history.



Carbon capture and storage - which returns emissions back underground.



Soil carbon - will give farmers a new source of income and make their land more productive.



Our plan will ensure Australia builds on its existing strengths while taking advantage of new economic opportunities.

- Each Australian will be almost \$2,000 better off by 2050, compared to no action.
- Our plan is estimated to deliver more than 100,000 new jobs for Australians by 2050.
- The real value of Australian exports is expected to more than triple between 2020 and 2050.
- Household electricity bills are expected to be lower than today, with the advancement of technology.



PRIORITY TECHNOLOGIES

SIX 'PRIORITY' TECHNOLOGIES

To get to carbon neutrality the world needs to stop new emissions and return those already in the atmosphere into the ground. New technologies are the only way to do both.

The government has identified six 'priority' technologies for Australia's conditions:



CLEAN HYDROGEN

We need to replace fuels like petrol – and that's what clean hydrogen does.

We can become one of the world's largest hydrogen exporters. That's why we are investing \$1.2 billion to build an industry that will be a boost for regional Australia.



ULTRA-LOW COST SOLAR

1 in 4 Australian homes already have solar – the highest uptake in the world. The next generation solar cells will generate electricity more efficiently and be lighter and cheaper to install, slashing household bills.

It can also be used to create hydrogen, energy for industry and ensure Australian exports stay competitive. Ultra-low cost solar could help turn the Australian desert into a power station.



ENERGY STORAGE

All energy has limits and for renewables it is natural forces like access to wind and sun – so storage fills its reliability gap. Storage is often a fancy word for batteries which can be used at a community level, along transmission lines and through using smart technology.

Australia's biggest energy storage facility will be the Snowy Hydro 2.0 scheme that recycles water so it can be turned 'on' and 'off' like a battery.



LOW EMISSIONS MATERIALS

We still need new buildings, but constructing and using them will need to use less energy in the future. That's what low emissions materials do.

We make them using renewables and being more efficient. In some cases, materials such as bricks can become forms of storing carbon.



CARBON CAPTURE AND STORAGE

To build solar we need to extract metals that cause emissions.

These will have to be captured and put back underground.

The oil and gas industry has been using this technology for years, and Australia has significant storage sites.



SOCIAL CARBON SEQUESTRATION

Soil carbon returns emissions from the atmosphere into the ground.

Because Australia has a large land mass, we have a natural advantage and is one of the best ways to reduce emissions. This will also provide a source of income for farmers.



(3) DELIVERING ON RECYCLING

THE MORRISON GOVERNMENT'S NATIONAL RECYCLING PLAN

- Stop Australian waste being shipped overseas
- \$1 billion for new Aussie recycling plants
- Phasing out cheap, single-use, unnecessary plastics
- Make companies collect their hard-to-recycle products
- (5) National recycling of food scraps into compost
- Clear, trustworthy recycling labels on packaging
- Government buying more recycled products



Recycling Modernisation Fund

\$600 million of combined new investment across every state and territory so that Australia can recycle the waste we create. So far over 80 new recycling infrastructure projects have been funded! New hi-tech equipment will guarantee more items in your yellow wheelie bin always get recycled and less waste goes to landfill.

Product Stewardship Investment Fund

\$20 million to start national collection schemes for old items that can't readily go in vellow bins (like shoes, textiles, batteries and coffee capsules), as well as many difficult-to-recycle items (like mattresses, child car seats, agriplastics and mining tyres).

Food Waste for Healthy Soils Fund

\$67 million to kickstart a national compost industry using food scraps from communities and food businesses. This will support healthy soils for farmers and reduce landfill-related emissions from organic waste.



MAKING RECYCLING BETTER IN AUSTRALIA

Our Waste, Our Responsibility

We've made it law that the waste Australia makes must be managed here and can't be shipped overseas any more. A bigger on-shore recycling industry will also create 10,000 extra Aussie jobs over the next decade.

War on Plastic and Packaging

In line with our National Plastics Plan, microbeads, plastic bags, straws, plastic cutlery, polystyrene containers and other wasteful plastic are being phased out right across the country. We've set industry targets and we are on track to make all packaging in Australia reusable, recyclable or compostable by 2025.





EASIER HOUSEHOLD RECYCLING

Australasian Recycling Label

The ARL is a single, clear, trustworthy recycling label which is being rolled out to make recycling packaging easier and stop companies from making false recycling claims. Every month the ARL is appearing on more and more products on supermarket shelves!

Expanded e-waste recycling options

E-waste is the fastest growing category of waste. In the last 10 years, the rate of e-waste generated each year by Australians has more than doubled! So we're working to have recycling schemes for every device with a plug or battery so they can be recovered rather than becoming landfill waste.



Many wonderful groups and organisations work hard to preserve, protect and enhance our natural environment in Kooyong - from our beautiful parklands to Melbourne's iconic Yarra River. I am pleased to support this

important work, and thank our local environment organisations and their dedicated members who tend to our natural habitat.

These are just some of the projects that I helped secure as part of the Morrison Government:



More than \$245,000 for energy efficient lighting upgrades for local sporting clubs.



\$500,000 to the Yarra Riverkeeper Association for revegetation and rewilding, protecting threatened and migratory species, clean-up, recovery and recycling of waste along the Yarra River.



Over \$900,000 for revegetation and biodiversity projects and protection of threatened species habitats at Yarra Bend Park, Chandler Park, Willsmere Reserve and

Yarra Flats in Kew, Fairview Park in Hawthorn, throughout the Koonung Creek Corridor in Balwyn North and South Surrey Park in Surrey Hills.



Over \$100,000 for projects that conserve, protect and manage our environment.



More than \$200,000 for small-scale renewable energy and energy storage projects that improve energy efficiency and keep costs down.



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