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Can Australia be a renewable energy superpower?

Thank you, Alex, for the invitation to join you this evening on the lands of the Wurundjeri people of the Eastern Kulin nations.

I acknowledge that Australia's Aboriginal and Torres Strait Islander people have been custodians of these unceded lands for tens of thousands of years, and my own responsibility to respect and care for Country.

This evening I want to convince you that Australia can be a renewable energy superpower.

By 'superpower', I mean that Australia can not only meet its own international commitments to reach net-zero carbon emissions by 2050, but that it can make a significant contribution to the global reduction in emissions, and that it can prosper in the process.

In fact, the global transition to net-zero creates remarkable economic opportunities for Australia – a chance to raise productivity and living standards by capitalising on our comparative advantage in a net-zero world.

It's important that I convince you, because there are competing narratives about which economic and climate change policies are in Australia's interest. My hope is that economists will contribute to the public debate, and advocate for policies that improve the standard of living for this and future generations.

I'll start by providing some political and economic context for our analysis, and then lay out the Superpower thesis. I'll then propose some policies to advance the

Superpower goal, before wrapping up with a quick assessment of the recent Federal budget and whether it moves us in the right direction.

So, taking a step back to provide some context on tonight's discussion:

Part 1. The international political and economic context for the Superpower

The last time Australia considered climate change policies with economy-wide implications was back in 2008, when the first Garnaut Climate Change Review was published.

At that time, the goal was reducing domestic emissions at the lowest possible cost.

This is still an incredibly important policy task, and it remains a policy challenge.

But since 2008, the international political and economic context has changed, revealing new opportunities for Australia in a net-zero world. These new opportunities can provide additional motivation and momentum for the policies that will also serve the goal of reaching net zero.

Two features of the international political context have altered dramatically. The first is that net-zero commitments have been locked in across all major economies.

- Prime Minister Modi has committed India to reach net-zero by 2070, and
- President Xi Jinping committed China to reach net-zero by 2060.

The EU, the US, the UK, and Japan have all committed to reach net zero by 2050, as has Australia.

Scientists' best estimate is that the world needs to reach net zero by 2050 to have a decent chance [at holding temperature increases to 1.5 degrees](#), so some countries' commitments will need to be tightened. But the commitments that were locked in at COP26, in 2021, are none-the-less an important first step.

The second change to the international policy context is that there are the first movements towards a carbon price with international implications, because the European Union has introduced a Carbon Border Adjustment Mechanism (a 'CBAM') to complement its emissions trading scheme.

The EU emissions trading scheme was introduced in 2005, creating a price per tonne of carbon-dioxide equivalent emissions for producers in key sectors. It covers the

electricity sector, energy-intensive manufacturing, aviation within the EU, and – as of this year – maritime transport.

The CBAM extends the EU's carbon price to the carbon embedded in a selection of particularly carbon-intensive imports. It helps level the playing field for EU producers in the energy and manufacturing sectors, so that they are not alone in paying a carbon price.

And of course, any carbon price that has already been applied to imported products will be credited to ensure that there is no double-taxation. The CBAM therefore creates momentum for carbon pricing in countries that export to the EU, because countries that introduce carbon prices will not disadvantage their EU exports, but can retain the revenue generated.

The CBAM was introduced in 2023, with a carbon price applying from 2026 and progressively increasing until it reaches the full EU ETS price in 2034.

To give you an idea of the future price effects of the CBAM, the ETS price is predicted to average between [about 90 and 95 Euros](#) per tonne of carbon dioxide equivalent through to 2030, or about \$100 USD.

The CBAM will initially be applied to six relatively simple product categories, including

- iron and steel
- hydrogen
- cement
- aluminium
- fertilisers, and
- electricity.

The EU is looking to progressively expand coverage to include key downstream products by 2030.

The effect will be to make more carbon-intensive products significantly more expensive, while low and zero-carbon products will be progressively better positioned to compete on price.

Together with major economies' commitments to net zero, Europe's CBAM will have dramatic implications for:

- the way goods are processed and manufactured, and

- where goods are processed and manufactured.

That's because countries will need to navigate two challenges in a world moving to net-zero.

The first will be generating enough zero-carbon electricity to meet people's daily needs – keeping the lights on in homes, schools, businesses, and transport. I will refer to this as a country's domestic, or 'non-tradeable' energy demand.

Supplying enough electricity to meet domestic demand will be no small task, because:

- Countries' domestic demand for electricity will grow as processes are progressively electrified on the path to net zero – for example, as people shift from internal combustion cars to EVs. There will also be an increased demand driven by computationally intensive processes, including AI-based tools.
- Many countries' domestic demand for electricity will also increase because their population is growing, people's living standards are rising, or both.

A second challenge for countries will be generating enough zero-carbon electricity to support 'green' manufacturing. I refer to these additional demands on a country's grid as tradable electricity demand.

Focussing on the major regional manufacturing-based economies of China, Japan, and South Korea as examples:

Japan and South Korea are going to find it particularly difficult to decarbonise their economies. Both countries import over 90 per cent of their energy. And our estimates suggest that with full decarbonisation of existing industry and transport through electrification, Japan's demand for electricity is expected to grow 2.2 times by 2050, and South Korea's 2.3 times.

Meeting this increased demand will be hard. Japan and South Korea have extremely limited capacity to produce low-cost zero-carbon electricity – even factoring in their use of nuclear.

In some countries, there is expected to be substantial growth in electricity demand with income growth and industrial growth. China's demand for electricity is expected to grow even more strongly than Japan and South Korea -- about 2.5 times by 2050, and more than 3 times by 2060. That's 2.5 and 3 times the demand for electricity enhanced by decarbonisation.

China is rich in renewable resources – sun in the Gobi desert, and wind in the north.

But none-the-less, simply because China's population is so large, and its living standards are rising, our preliminary estimates suggest that high domestic demand for zero-carbon electricity will push green manufacturing right up the cost curve, making it very expensive.

It's natural to wonder if countries with manufacturing-based economies will simply import zero-carbon energy to overcome these challenges, in the same way that they currently import fossil fuels.

But unlike fossil fuels, which are cheap and easy to move around, renewable energy is difficult and extremely expensive to transport. The price of transport adds about 10 per cent to the cost of coal; gas is similar.

To transport renewable energy, sea-bed cables are required to transmit electricity directly, or it can be converted into hydrogen or ammonia and transported. The cost of transport more-or-less doubles the price of importing renewable energy.

As a result, countries' manufacturing costs will be very different in a net zero world.

Unless countries have quantities of renewable or nuclear energy that comfortably exceed domestic, non-tradable demand, it will become extremely expensive to manufacture zero-carbon products. And while every reasonably well-organised country with reasonable credit can invest in nuclear generation, new builds are expensive, and will need to compete with expensive imports of green electricity, hydrogen, or ammonia.

This means that the economically sensible outcome is for countries with constrained, expensive green energy to reduce their own demand, and to import green energy that is already embedded in green manufactured goods, rather than manufacturing those same goods onshore.

It is this economic constraint on the transport of renewable energy, together with net-zero commitments and the EU Carbon Border Adjustment Mechanism, that creates wonderful opportunities for Australia.

Part 2: Australia's comparative advantage and the superpower thesis

As the world decarbonises its production and consumption, a key reason that Australia will enjoy new opportunities is that, relative to nearly all other countries, Australia has remarkably abundant, low-cost renewable energy relative to its non-tradable, domestic needs.

Our preliminary estimates suggest that Australia can support up to 10 thousand TWh per annum of renewable energy, with solar and wind installed across about half a per cent of Australia's land mass. This is a big task, but it could be managed without encroaching on productive farming land.

Renewable energy at this scale would not only make it possible to decarbonise our grid, but to support large volumes of zero-carbon processing and manufacturing.

Australia's cheap, abundant renewable energy is a key component of its comparative advantage in a net-zero world.

Alongside renewable energy, Australia's comparative advantage includes:

- Minerals, such as iron ore and bauxite, for which there will continue to be strong demand
- Critical, or 'transition' minerals that will be important during the global decarbonisation process, such as lithium for batteries and copper for electric machines.
- Large amounts of non-agricultural land that can be used to grow renewable carbon; and
- Human capital, with people who have experience in the mineral and agricultural sectors and in research.

This brings us, finally, to the punchline of the scene I've been setting – that Australia can capitalise on its comparative advantage to become a renewable energy 'superpower.'

We can contribute to the global reduction in emissions while generating export revenue and lifting living standards.

There are many potential superpower opportunities.

I will focus mainly on 'green' minerals, using green iron as an example, but I will also sketch out Australia's potential as a producer of renewable carbon.

Starting, though, with green minerals.

Australia already has an industry built on its mineral resources, but the vast bulk are exported. This is frequently referred to as a 'dig and ship' model. Key mineral exports include:

- metallurgical and thermal coal,
- liquified natural gas,
- iron ore,
- bauxite, and
- silica.

These exports are often combined overseas when the minerals are processed.

For example, Australian metallurgical coal can be used as the reductant when Australian iron ore is converted into iron, before being smelted into steel. The electricity for the whole process can be powered with Australian thermal coal or gas.

The vast bulk of Australia's iron ore is exported to China, with most of the rest shipped to Japan and South Korea.

Historically it made sense to export both fossil fuels and minerals because the location of mineral processing was, and still is, internationally competitive, underpinned by cheap and easily-transported fossil fuels.

But this will change.

When energy is no longer easy and cheap to move around the world, the economics 'flip'.

Australia will have a comparative advantage in processing Australian minerals, in Australia, with Australian renewable energy.

Picking up the iron example again, to illustrate the change in comparative advantage:

One method for making green iron uses green hydrogen as the reductant for converting iron ore into iron, rather than using metallurgical coal. Instead of producing carbon dioxide as a by-product, this process produces water.

But it is an incredibly energy-intensive process:

- First, zero-carbon energy is used to make green hydrogen, the reductant,
- and then zero-carbon energy is used to power the iron-making process.

So if green iron is produced using green hydrogen, it makes sense to do this as close as possible to renewable sources of energy, or close to electricity grids that are connected to large-scale renewables.

Our argument that Australia's comparative advantage will 'flip' is consistent with other credible assessments.

The International Energy Agency, for example, finds that Japan will be by far the most expensive producer of green steel, with average costs approaching double those of China and 150 per cent of the US. Reflecting on changing cost structures, Japan's Renewable Energy Institute has stated that "the best approach is to produce crude steel in Australia."

The opportunity to produce green minerals, and particularly green iron or steel, is the dimension of the superpower narrative that have drawn the most attention.

We have encouraged this as an important first step in the discussion.

- Making better use of the minerals that we already dig out of the ground is intuitively appealing to many Australians, and
- green processing is readily explained and understood.

But while mineral processing can be decarbonised, there are many manufacturing processes that cannot.

So it's also important to draw attention, albeit briefly, to another superpower opportunity.

Carbon is a key input in the production of chemicals, including plastics and fertilisers like urea, and sustainable shipping and aviation fuel.

Australia has an opportunity to use its vast landmass to grow renewable carbon. Species such as mallee and agave can be grown on marginal lands, harvested to produce carbon, and replanted.

Green chemicals, green fertilisers, and sustainable aviation and shipping fuels are all potential superpower industries, making the most of Australia's potential to grow renewable carbon, and to process this with Australian green energy.

The superpower industries, where Australia has a comparative advantage, will create remarkable economic opportunities.

We estimate that Australia could, over time, secure additional export revenue of \$250 – 300 billion per annum.

Revenues would come online as green industries gain a foothold, and they would grow through time. Crucially, they would help offset the decline in export revenues from fossil fuels which will play out as the world decarbonises, which are currently worth between \$120–220 billion per annum.

We would also see higher levels of productivity as employment and resources migrate to industries where Australia has a comparative advantage, and where there are long-term opportunities for ongoing innovation and learning.

The transition to superpower industries such as green iron is also good for global carbon budgets.

Last year iron and steel processing represented about 8 per cent of global carbon emissions; aluminium about [3 per cent](#), and silicon more than 1 cent.

So eliminating carbon emissions from these processes will make a significant contribution to the global task of holding temperature increases as close to 1.5 degrees as possible.

Investments in superpower-scale renewable energy would mean that, in addition to eliminating Australia's 1 per cent of global emissions, we could remove a further 6–9 per cent of global emissions by exporting, for example, green iron, green aluminium, green transport fuels, green urea and green polysilicon.

Just by exporting green iron instead of iron ore, Australia could reduce world emissions by over 3 per cent.

Australia's eventual contribution to global emission reductions, and the strength of its comparative advantage, will depend on the evolution and relative cost of different zero-carbon technologies.

- Other countries are also potential green processing powerhouses, including Saudi Arabia and Namibia.

But our research concludes that Australia has excellent potential as an exporter of green iron and other green minerals.

Our findings are supported by other research, including recent research by a team from the Oxford School of Engineering Science.

- They assessed the cost of producing iron and steel in different locations in a zero-carbon world, and
- Australia emerged as by far the world's largest producer, making more than twice as much as any other country.

This is why the EU Carbon Border Adjustment Mechanism, and future international carbon prices, are good news for Australia: they open up new markets for Australian green exports.

For example, Australia hardly exports any iron ore directly to Europe. But the CBAM price on carbon will make Australian green iron much more price-competitive in Europe, opening up a new potential export market.

Part 3: But to be a renewable energy superpower, Australia needs economically sound policies

I've spent a fair bit of time explaining why I think that the net-zero transition creates remarkable opportunities for Australia. But the title of tonight's talk is not "Is Australia a potential Superpower," but "can Australia be a renewable energy superpower?"

And the answer, of course, depends on policy settings, both here and overseas.

Some things are out of our hands.

Demand for Australia's superpower exports will be dictated by other countries' governments – in particular, the strength of their commitment to their net-zero pledges, and how soon countries reduce their emissions.

It is reasonable to ask whether countries' net-zero commitments are credible, and if not, whether the basis of the superpower narrative is shaky.

We cannot predict the future, but these pledges are the best indication we have of countries' policy priorities.

Moreover, if countries have made their commitments in bad faith, then Australia and other countries will need to grapple with the extreme and unpredictable challenges of global warming above 1.5 degrees:

- devastating crop losses,
- water shortages,
- extreme weather events, and
- displaced populations seeking refuge on a staggering scale.

The best way to reinforce countries' commitment to net zero is not only to take our own pledge seriously, but to facilitate global efforts where we have a comparative advantage.

That brings us to the topic of domestic policy.

The question is: what policies would a pragmatic economist recommend in 2024, to meet our net-zero commitments and advance Australia's economic interests?

At The Superpower Institute we start with the principle that government policies need to be underpinned by sound economics.

Our priorities are:

- i. a strong budget, and
- ii. open international trade in imports, and as much international trade in exports as we can secure through diplomacy and domestic policies.

A strong budget and low trade barriers are important for securing a third priority, which is

- iii. a competitive real exchange rate.

Together these policy goals create the economic building blocks for our fourth priority:

- iv. the production and export of goods that reflect our comparative advantage.

Our recommended policies support the superpower industries not for their own sake, or because of a simple desire to promote local industries.

We therefore recommend a mix of policies that are guided by the classic economic principles of

- unlocking private capital by correcting market failures,
- promoting productivity, and
- maintaining a strong budget.

The government needs to address two key market failures.

The first is that people are not paying the social cost of carbon.

In the absence of a carbon price, we are producing and consuming in the context of a huge market failure, and in the process contributing to dangerous levels of global warming.

Economics tells us that we need a global carbon price equal to the social cost of carbon.

Such a carbon price would guide the allocation of resources so that we collectively produce and consume within the envelope of carbon emissions that gives us a cost-effective chance of keeping global warming to 1.5 degrees

A comprehensive Australian emissions trading scheme, with a carbon border adjustment mechanism, would meet our global commitments efficiently.

We favoured the ETS introduced a dozen years ago, which was removed in 2014.

But the task is even more urgent now, as is the need for efficient public revenue.

The Superpower Institute, or 'TSI', recommends a policy that is administratively much simpler than the ETS: a 'carbon solution levy' (CSL). This would be applied to fossil fuels produced in and imported into Australia. It should be introduced as soon as possible, and by 2030-31 at the latest.

The carbon solution levy recognises that fossil fuels impose a huge cost on society, and that producers and consumers of fossil fuels should pay for this damage.

The levy would cover about 105 sites across Australia, including coal and gas mines. We propose that the price could be increased progressively, but that it should reach the equivalent EU ETS price for carbon by 2030.

The CSL should be applied to overseas emissions from our exports, unless destination countries also have policies that apply the cost of carbon to fossil fuels. The EU, with its emissions trading scheme and CBAM, would be exempted.

We hope this would encourage destination markets for Australian coal and gas to also introduce policies that apply the social cost of carbon. To give countries time to introduce these policies, there is a case for rebating the CSL on exports until, say, 2030.

While it would be introduced to correct a market failure, the levy would have additional economic benefits.

Revenues from the levy would reach tens of billion of dollars per annum, and up to \$100 billion, depending on:

- the rate at which the carbon price is ramped up and
- the rate at which it is expanded to cover exports.

This revenue could be used to compensate Australian consumers – for example, by introducing rebates on electricity bills or reducing fuel levies.

Revenues could also be used

- to support the priority of a strong budget,
- to provide support for superpower industries,
- and to make careful investments in infrastructure that the superpower industries will need.

In short, the carbon solution levy would make it possible to improve economic outcomes... without creating additional pressure on the budget.

It's worth dwelling on this point, in the context of Australia's fraught history of tax reform.

A few weeks ago I was here at the Kelvin Club when Paul Tilly discussed his book, 'Mixed Fortunes: A history of tax reform in Australia.' He talked about the struggle to reform inefficient taxes, and called for reforms including the introduction of taxes on environmental bads.

Taxing environmental 'bads', such as carbon emissions, either

- strengthens the budget with an additional source of revenue, or
- allows Australian governments to reduce other taxes that hurt productivity, such as income tax and company tax.

Economists should be unequivocally supportive of taxes that correct externalities.

Indeed, the only entities that would be disadvantaged by the carbon solution levy would be the fossil fuel companies that do not otherwise pay for the damage they inflict on others.

This message has been somewhat sacrificed to the politicisation of climate change policies, so it bears repeating: taxes on carbon emissions are extraordinarily economically efficient.

An economy-wide emissions trading scheme is essentially off the table, so it is important to support the narrower Carbon Solution Levy.

An additional benefit of a CSL would be that new fossil-fuel projects would pay for the costs created by their carbon emissions. Governments would no longer need to scrutinise new coal and gas projects to assess their implications for net zero commitments, and could simply apply conventional environmental approval processes. New investments would stand or fall based on assessments by private capital markets.

The carbon solution levy is not politically easy, but we hope that its simplicity and the prospect of substantial revenues might make it politically feasible.

That brings me to the second market failure that needs to be corrected: namely, that first-movers generate positive externalities in the form of collective knowledge and expertise, but private markets don't compensate them for these services.

First movers generate knowledge about which net-zero technologies work well, and which technologies don't.

- This includes knowledge about whether theoretically promising technologies are practically feasible, or whether technologies that have worked overseas can also work well in Australia.

First movers also train people in new skills; and identify the regulations and practices that are barriers to scaling up new technologies.

There are already policies in place to compensate first-movers in Australia, including the R&D tax incentive.

But superpower industries face particularly steep learning curves and untested technologies.

The Superpower Institute believes there is a case for time-limited support that is specific to industries where Australia will have a comparative advantage.

This doesn't mean we want cash pinatas for any industry that is developing or manufacturing the products that will be needed in a zero-carbon world.

Australian policy-makers need to take an informed, critical position on the ways global consumption and production are expected to evolve – to anticipate what the efficient allocation of resources will look like in a world moving to net-zero carbon.

This support should be conditional on the sharing of new knowledge and expertise, and support should be proportionate to the expected value of knowledge and expertise that is generated. Support should be limited to the first 2-3 projects in each domain, when the most valuable knowledge is created.

Without government support, there will be less innovation in these industries than there should be, despite their potential to underpin Australian productivity growth, exports, and employment for decades into the future.

The danger, though, is that where there is money, there is rent-seeking.

Rent-seeking is wasteful. It distorts resource allocation and undermines the goal of economic prosperity.

So government support needs to be allocated transparently, with guardrails designed by technocrats rather than industry, and there needs to be a credible commitment to wrap up funding on an agreed schedule.

Based on the principles I've outlined, The Superpower Institute has proposed a Superpower Industry Innovation Scheme, to be administered by ARENA or the Australian Tax Office (which administers the Research and Development tax incentive scheme).

The Superpower Industry Innovation Scheme would support first movers in industries where Australia is very likely to have a comparative advantage.

The innovation scheme should target projects that use a large amount of renewable energy or biomass, so carbon-emission savings would need to represent a certain per cent of overall project costs.

The Carbon Solution Levy, which I described earlier, would complement a Superpower Industry Innovation Scheme:

- alongside support for consumers it could be used to support first-mover innovation in industries that will help reduce global emissions

The carbon solution level could also be used to help cover the cost of infrastructure required by the superpower industries, which could be provided by government.

If Australia is to be a renewable energy superpower, new investments will be required in electricity transmission, and in hydrogen storage and transport. These types of infrastructure are natural monopolies, and they need to be built ahead of demand to support crucial private investments in the superpower industries.

The Superpower Institute therefore supports a role for government investment in the natural monopolies that will be essential if we want to capitalise on our comparative advantage.

The government also needs to make sure it doesn't stand in the way of private investments in the Superpower industries.

Planning and approval processes can be extraordinarily cumbersome, and there are two good reasons to support thorough but timely procedures:

1. The first is the urgency of the climate change challenge.
2. The second is the goal of establishing early expertise in the superpower industries.

The government needs to fix regulatory barriers to investment. It should work to streamline approval processes without compromising vital First Nation consultation and broader environmental goals.

Taking a moment to summarise The Superpower Institute's key policies, then:

- we want policies to correct market failures,
- we want careful investment where natural monopoly infrastructure is required to attract private investment in superpower industries, and
- we want sensible measures that reduce regulatory barriers to these investments.

This is also the right moment to clarify what The Superpower Institute's policies are not.

In particular, our proposed policies are not an antipodean Inflation Reduction Act. The US IRA spends money across a swathe of industries, including, for example, the manufacture of solar panels. It is protectionist. And it contributes to budget deficits that, as a share of the economy, would be destabilising in Australia.

The Superpower Institute's policies would target expenditure tightly on industries where Australia is expected to have a comparative advantage – indeed, this is one reason that we want to see economic fundamentals prevail in the political narrative.

The term 'superpower' needs to be tightly defended.

The Superpower Institute also strongly supports free trade, which underpins productivity and growth, and which will be essential if the world wants to minimise the collective cost of meeting net-zero targets.

Part 4: Progress so far on the superpower vision

Having laid out The Superpower's preferred policies, Alex has asked me to comment on the most recent Federal Budget.

I will focus on the Net Zero Transformation Stream in the government's Future Made in Australia program. This needs to be assessed alongside the National Interest Framework, which was put out as a supporting paper by the Commonwealth Treasury.

The Superpower Institute has publicly applauded the Budget, because the National Interest Framework is underpinned by sound economics, with policies that seek to correct the double market failure of

- a missing carbon price, and the
- positive externalities created by first movers.

Treasury is using second-best policies to back industries in which Australia has a comparative advantage, and these should be supported.

Manufacturing more goods in Australia will be an outcome of Future Made In Australia, but except for the \$1 billion put aside for the Sunshot solar manufacturing program, domestic manufacturing is not – rightly – a goal for its own sake.

A quick summary, then, of key budget inclusions and key principles.

Most of the Budget's \$22.7 billion for the Future Made in Australia program will be spent on production credits for hydrogen and critical minerals, and early-stage innovation.

The Hydrogen Production Tax Incentive is \$2 per kilogram for green hydrogen through to 2040, for projects that reach final investment decision by 2030. This helps compensate for the lack of a carbon price, and mimics the incentives that would exist for green hydrogen producers if one was in place.

It also recognises that hydrogen will be a vital feedstock for other industries that are held back by the absence of a carbon price, including green iron, green transport fuels, and green chemicals like urea.

The Budget committed to consultations that are now underway, on policies to support green industries beyond hydrogen, including green metals, and green aviation and shipping transport fuels. There will also be more money.

The Budget also recognises the need to remove regulatory barriers to superpower projects, with \$134 million allocated to facilitate faster approval decisions.

Finally, the Budget is also noteworthy for what it doesn't include – namely, and fortunately, any funding to support new fossil-fuel extraction.

So, while I have the floor and a room full of economists:

The Superpower proposal I have put to you tonight is ambitious.

But decarbonising the global economy is a huge undertaking, akin to another industrial revolution, and it creates huge opportunities for Australia.

Ambitious goals need to be backed by conservative and careful analysis. This is the task of the Superpower Institute, which is still very new and is just making a start on its research and advocacy.

But ambitious goals are also more likely to be achieved when multiple voices repeat the same principles and the same message, in different ways.

Australia's history of tariff reform is a good example of what can be achieved.

Initially tariff reduction was strongly opposed, but gradually and eventually the debate shifted and tariff reductions were implemented. That was because the Tariff Board, then the Industry Commission, provided the facts and the logic that eventually gained support for policy that has benefitted Australia enormously.

I know that many people in this room already have a history of prosecuting policies to lift productivity, raise Australians' living standards, and reduce global carbon emissions. Thank you for the work that has already been done.

But there is a lot more to do, and The Superpower Institute hopes that economists can further coalesce around these principles and be key allies in advocating for the policies I've outlined today.

Thank you.

Ingrid Burfurd

Carbon Pricing and Policy Lead, The Superpower Institute

About the Superpower Institute

The Superpower Institute's purpose is to help Australia seize the immense economic opportunities of the post-carbon world. With unparalleled renewable energy resources and our 'clever country' scientific and engineering capabilities, Australia is perfectly positioned to be a green export superpower in the world of net zero emissions.

The Institute specialises in the policy settings and market incentives needed to make Australia an economic superpower and provides practical knowledge to governments and industry to realise this opportunity.

www.superpowerinstitute.com.au