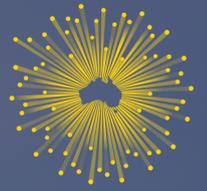


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EMISSIONS TRADING AT THE STATE LEVEL

EFFECTIVE CLIMATE ACTION IN THE ABSENCE OF FEDERAL
LEADERSHIP

POLICY BRIEF - LOUIS DEVINE

EXECUTIVE SUMMARY

Australia's recent bushfire crisis underscores the need for immediate action on climate change. Global temperature rises will increase bushfires and other natural disasters in frequency and intensity; only by holding warming below two degrees can the severity be mitigated. [1] To do this, the world must achieve net-zero carbon emissions by 2050. [2] Australia's Federal Government lacks an effective policy framework to reduce carbon emissions. The Coalition Government's policy target, taken to the 2019 Federal Election, is a 26-28 per cent emissions reduction below 2000 levels. This is insufficient to halt warming below two degrees. [3]

Internationally, Australia is increasingly regarded as a climate change 'denialist' [4]. Climate change will affect every dimension of Australian foreign policy. However, given the entrenchment of policy inaction at the federal level, it is proposed that the states and territories take up the mantle of climate leadership. Australia's state and territory governments can achieve this by introducing emissions trading schemes (ETS). This mechanism will generate funds that can be invested in renewable energy, electricity grid modernisation, public transport, and carbon sequestration, and can be linked with existing international carbon markets in California and the EU.

BACKGROUND

As the second-driest continent on Earth, Australia will be severely impacted by the consequences of climate change. [5] The increased frequency of bushfires creates a pernicious negative feedback loop, whereby the fires release more carbon into the atmosphere. Disruptions in rainfall patterns will increase the severity of droughts, harming not only the environment, but also agricultural production. [6] Prolonged heatwaves threaten the health of many Australians, particularly the elderly and those in rural and remote communities. [7]

Climate change will lead to a more precarious international security environment. Seven out of ten of the most vulnerable countries to climate-related disasters are located within Australia's own region: the Indo-Pacific. [8] Global population growth is concentrated in areas exposed to sea-level rise[iii]. As a result, human displacement and climate refugees will be an increasing feature of global politics. Australia's reputation on the world stage as a climate laggard is already damaging diplomatic relations with the South Pacific. [10]

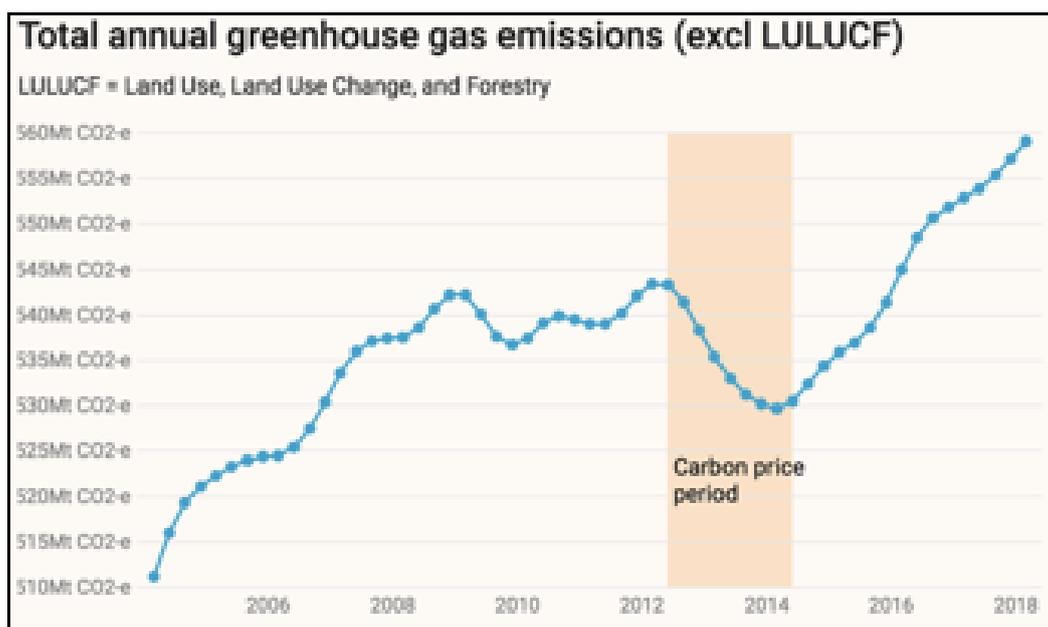


Figure 1: Greg Jericho; data sourced from the Department of Environment.

Despite these dangers, Australia's political system has proven largely incapable of responding. The Gillard Government did however successfully pass the Clean Energy Future package, establishing an emissions trading scheme. As Professor Ross Garnaut notes, Gillard's ETS reduced emissions raised \$7 billion each year from 2012 to 2013. [11] Australia's emissions declined by 1.4 per cent during the scheme's second year of operation, the single biggest decline in a decade. [12] This proves that an ETS is effective at reducing emissions.

Gillard's scheme was repealed by the Abbott Government in 2014. The "carbon tax" mantra set the framing for action on climate change is presented as negative for economic growth, particularly in mining states such as Queensland. In reality, the renewable energy transition presents huge economic benefits. By moving ahead of the Federal Government, States can reap the economic rewards of addressing climate change. A key example is an investment in renewable energy technology. Currently, Australia's policy uncertainty has caused investors to shy away from funding renewable projects. [13] By adopting an ETS, State Governments can create the framework for increasing private investment, creating jobs in the process.

THE PROBLEM

Despite warnings from the United Nations Intergovernmental Panel on Climate Change (UNIPCC), Australia's emissions continue to rise. [14] This is largely a political problem. The shift towards renewable energy would provide cheaper energy and economic benefits to Australians. For instance, the cost of electricity generation for every megawatt-hour (MWh) for coal ranges between \$33 - \$111 USD, whereas solar ranges from \$28 - \$52, and wind varies from \$13 - \$88. [15] 61 per cent of Australians agree "global warming is a serious and pressing problem", and 47 per cent agree "reducing carbon emissions" should be the primary goal of energy policy. [16]

As a result of the Federal Coalition's climate policy paralysis, private investment in renewables has decreased, creating uncertainty, and contributing to higher power prices. [17] Examples exist internationally of sub-national jurisdictions taking the lead on climate action. [18] California and Quebec have implemented emissions trading schemes. Without the same emphasis on budgetary policy and international trade, Australian State Governments have a freer hand politically to implement climate change policies.

POLICY RECOMMENDATIONS

1 Establish an ETS at the State level

Australian State Governments should establish their own emissions trading schemes. Under an ETS, a jurisdiction sets a 'cap' on its annual carbon emissions. Polluters covered by the scheme are then issued with emissions permits, with each permit being equal to one metric ton of emitted carbon. Polluters can sell excess permits, which provides an economic incentive to reduce emissions. If not, the polluter must pay for each ton of excess carbon they release. The sale of permits is regulated and generates revenue for the State government. Trading permits creates a market-driven price on carbon.

Since the introduction of an ETS in both the EU and California, emissions have declined as the cost of carbon increases. California's ETS has also created lower unemployment, driven by an expansion in green energy manufacturing jobs. [19] An ETS is the most efficient way to reduce emissions. [20] Private companies will invest in renewable energy projects to avoid paying fines. Without private investment, achieving net zero will be far more expensive.

2

Reinvest revenue from the ETS to further reduce carbon emissions

Revenue generated from an ETS can be reinvested in renewable energy. The Gillard Government's ETS raised \$7 billion annually. ETS revenue can help governments modernise the electricity grid, supporting the transition towards renewables. State Governments also have a role in underwriting investments in renewable energy technologies, particularly battery storage. Subsidies to establish electric power stations and reduce the cost of electric vehicles is also necessary. Government investment in critical technologies can help them penetrate the market, increasing the speed of their uptake and thus reduce emissions faster.

3 Link the ETS with existing carbon markets overseas

A State level ETS in Australia could be linked with carbon markets overseas, especially California and the EU, who have already integrated their respective markets. Integrating carbon markets reduces the cost of abatement, leading to more efficient and cheaper emissions reduction. [21] For example, it may theoretically be the case that Germany is able to retire its existing coal-fired power stations faster than Victoria. If both jurisdictions' carbon markets are linked, Australian firms can purchase permits created by Germany's closure of coal-fired power stations.

Not only does this create an even greater economic incentive for Germany to accelerate closing coal plants, but it allows the quickest and cheapest emissions reductions to occur more rapidly. Analysis suggests that linking carbon markets achieves price harmonisation and removes volatility from emissions trading schemes. [22] Australia is also well placed to sell carbon permits internationally. [23] Economic incentives exist for large scale carbon sequestration on farmland and the reduction of forestry and reforestation.

CONCLUSION

Climate change is an existential threat. Its effects will significantly disrupt Australia's strategic environment. Rising sea levels and resource scarcity will catalyse conflict. To mitigate the worst effects, Australia must transition towards net zero emissions by 2050. In the absence of Federal leadership, State Governments must help drive this transition. The most effective way to do so is to establish an emissions trading scheme at the state level, linked with international markets. Australia can prosper by selling renewable technology and carbon permits internationally. Australia can have a clean energy future. However, it is increasingly clear that this course of policy action must be driven by the States.

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Louis holds an Honours degree from the University of Melbourne in International Relations and Philosophy. His academic interests include: climate change and energy policy, the future of Asia's security architecture, and political theory. He currently sits on the national committee of the Australian Republic Movement.

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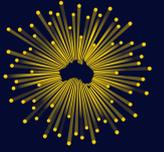
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