



The US IRA one year on: a quickstart guide to how Australia should respond

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INTRODUCTION

16 August 2023 marks the one year anniversary of the introduction of the landmark Inflation Reduction Act (IRA) in the US (aka the Green New Deal), a cornerstone of the Biden administration's program to reindustrialise the nation and secure cleantech supply chains against a backdrop of increasing geopolitical tensions, particularly with China, which dominates the global shift to clean energy.

The \$US400 billion-plus IRA, the associated \$US400 billion Loan Program Office, and the Infrastructure and Jobs Act – key planks of "Bidenomics" – are an unprecedented, openended stimulus into decarbonisation of the US economy. These all-carrot, no-stick subsidy programs are turbocharging reindustrialisation and cleantech in the US – from battery manufacturing to solar and wind – boosting GDP and driving massive job creation.

The IRA is also of immense importance to the accelerating global investment and technology "race to the top". The EU's Net Zero Industry Act, India's Production Linked Incentives, Japan's GX Roadmap and Canada's landmark clean energy tax credits are all direct responses to China's dominance and the IRA.

In the domestic context, May saw a significant shift in geostrategic energy dynamics, with Prime Minister Albanese and President Biden agreeing on a <u>Climate, Critical Minerals and Clean Energy</u> <u>Transformation Compact</u>. If approved by Congress, Australia will be deemed a domestic supplier under the IRA. This will make Australian companies and projects eligible to benefit from the ~US\$800 billion of decarbonisation capital.

To take advantage of the opportunities afforded by Australia's wealth of renewable energy, energy transition materials and critical minerals, Australia should seek to mobilise its own considerable domestic public and private capital to support national decarbonisation objectives.

Bold policy reform is a matter of urgency as global decarbonisation ramps up. We need an immediate, ambitious domestic response to our trade partners' and competitors' massive strategic national interest public subsidy programs, at a scale commensurate with that of Australia's unique opportunity to leverage its world-leading resources and renewable energy potential to position itself a zero-emissions trade an investment leader, and embody decarbonisation in our exports by powering onshore value-adding and manufacturing with renewables.

In this note, we review the Top 5 impacts of the IRA on its one year anniversary and outline the Top 5 steps Australia should take to secure our position in the new rapidly decarbonising world economy, with the immense benefits this entails for trade, investment, employment – and climate, as the climate crisis deepens.

5 KEY IMPACTS OF THE IRA ONE YEAR IN

1. Boosting & greening the US economy: The IRA is driving an unexpected US economic surge, resulting in a sizable upward revision to US GDP forecasts on the back of a boom in large-scale infrastructure and domestic business investment rebound, led by manufacturing. Bidenomics has crowded-in more than US\$500 billion of new private sector investment in less than a year. The IRA has driven record new US jobs, while embedding fair labour standards in emerging clean industries. The program is a model of the impacts of large-scale strategic national interest cleantech policy and investment.

2. Creating a global race to the top: China is leading the race to dominate the zero emissions industries of the future, having moved strategically over the last decade to seize the employment, investment, market dominance, export and technology opportunities. But the US has moved decisively with the IRA's ~US\$800bn loan and subsidy programs to inject itself back into the race. This is belatedly mobilising global capital to cleantech at a scale the climate science demands.

3. Accelerating global energy transition: The world will see solar installs of 320-350GW in 2023, up 35-40% year on year (y-o-y), wind installs globally of 120GW, up 70% y-o-y, and EV sales of 14 million globally, up 30-35% y-o-y. Global integrated battery and solar manufacturing capacities are set to double over the 2 years to 2023, and then again in the following 2 years, with increasing geographic diversity. We expect sustained ongoing solar and battery cost reductions over the rest of this decade. Deflationary renewables have won the cost argument, and this lead will accelerate. There is nothing slow or orderly now about this global energy transition – and the US IRA is both a response to and driver of this trend.

4. Elevating supply chain independence and security: Putin's illegal war on Ukraine has made crystal clear the critical importance of supply chain security, and the IRA is, in significant part, a US domestic response to securing independence and diversity of supply and decoupling from hyperinflationary, volatile fossil fuels – now a security issue beyond the economics, as nations the world over enact comparable policy and public funding responses. China's growing dominance of global supply chains also gives rise to the need for 'China +1' thinking, undermining outdated WTO and globalisation concepts.

5. Turbocharging convergence of power, transport and industry decarbonisation:

The technology convergence of these sectors is compounding the rate of change, driven by surging global battery capacities, and innovation and scaling up of renewables and manufacturing globally, including in the US, in competition to China's lead. The IRA, in directing unprecedented capital to a reindustrialisation of the US economy focussed around cleantech and energy transition, underpins and exemplifies this convergence.

TOP 5 RESPONSES NEEDED FROM AUSTRALIA

1. Implement a priority national renewable energy & critical minerals superpower strategy: Professors Ross Garnaut and Alan Finkel have long argued Australia will be a new world economy superpower, leveraging our leading wind and solar resources, low population density, massive area, trusted global energy supply profile and strong capital markets, including for onshore value-adding of Australia's abundant critical minerals and energy transition materials. The time to act is now: Australia exported 50% of the world's lithium in 2022, but did no on-shore value-adding. In 2023 we will see that change with renewables-powered lithium refining onshore, and we need to replicate this across all our metal and mineral exports.

2. Invest \$100bn of strategic public capital: To seize the magnitude of its investment, employment and export opportunities, Australia needs another \$100bn of patient public capital and incentives – such as advanced manufacturing tax credits supporting domestic supply chains – to derisk the decarbonisation strategy and crowd-in \$200-300bn of private capital. This should include reforming the Future Fund to enable it to make long term national interest investments, updating YFYS benchmarks to mobilise our \$3.5tn super capital pool into climate-aligned investments and establishing time-limited tax incentives and regulatory frameworks that make climate solutions and innovation accessible and bankable by retail and institutional investors (e.g. via verified Climate Bonds and infrastructure funds).

3. Roll out a national plan to electrify everything: The 2022/23 cost of living crisis stands in stark contrast to the \$150bn gross profit made by mostly multinationals exporting Australia's sovereign fossil fuel resources for their private, largely tax-free gains. Fossil gas price hyperinflation domestically (outstripping export prices) has destroyed the industry's social licence and accelerated initiatives such as Victoria's Gas Substitution Roadmap, led by Energy Minister Lily D'Ambrosio. Underpinned by our world leading rooftop solar installs of over 20GW, the deflationary and decarbonisation merits of "electrifying everything", long demonstrated by the work of energy advocate and entrepreneur, Dr Saul Griffiths, are now clear to all.

4. Price carbon emissions: The safeguard mechanism, in establishing a ratcheting-up price on carbon, is an important step to price-in this key externality, make polluters pay, and unlock capital into decarbonisation solutions. Federal Climate and Energy Minister Chris Bowen's Australian carbon border adjustment mechanism (CBAM) proposal is a second step in building the policy framework to incentivise investment in zero emissions industries of the future, and is a necessary response to increasing activity globally on carbon tariffs by our trade partners and competitors.

5. Collaborate with world leaders in zero-emissions manufacturing: Australia needs to move at speed and scale to rebuild domestic manufacturing capacity, including via the \$15bn National Reconstruction Fund (chaired by Martijn Wilder) – a key Federal initiative to drive the strategic move away from the dig-and-ship mentality of old and into the export of green iron, lithium hydroxide and cleantech supply chain. A key here is collaboration on reindustrialisation with world leaders in zero-emissions technologies like LG and POSCO of Korea, Brookfield of Canada, CATL of China, Komatsu of Japan and Reliance of India, through arrangements such as bi/multilateral trade and investment agreements and partnerships.

ABOUT THE AUTHORS

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Tim has 35 years' experience in financial markets and energy sector analysis. He founded and for a decade led the Australasian arm of the global Institute for Energy Economics and Financial Analysis (IEEFA), and was previously managing director and head of equity research at investment banks Citigroup and Deutsche Bank Singapore.

In 2022, Tim founded Climate Energy Finance (CEF) as an independent think tank that works probono in the public interest to accelerate capital flows to decarbonisation in line with the climate science.

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Blair Palese, founder, Climate Capital Forum

Blair Palese is Director of Philanthropy at Ethinvest, Australia's oldest impact investment advisor, and managing editor at Climate & Capital Media, focused on the trends and investment opportunities of the emerging climate economy. She has worked in climate and environment in Australia, the US and internationally for almost 40 years. In 2009, Blair founded 350.org Australia and was CEO for 10 years.

In 2022, Blair founded the <u>Climate Capital Forum</u> when she saw the impact of the IRA on turbocharging spending and investment into climate solutions and innovation in America, and identified the need for a similar strategic climate plan in Australia.

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