

United States of America – Inflation Reduction Act

MARKET INTELLIGENCE REPORT

Summary

- The Inflation Reduction Act (IRA) seen as one of the Biden Administration's signature accomplishments was signed into law over one year ago. It authorised new government spending of approximately USD\$391 billion.
- The IRA is designed to reduce US emissions and spur green industrialisation to increase economic growth, job creation and to put the US at the forefront of the clean energy race.
- The IRA presents a unique set of opportunities for New Zealand cleantech-focused companies and research institutions seeking to expand their export focus and global footprint into the US.
- It should also increase the availability of best-in-class clean energy, transport and emissions-removal technologies that are crucial to New Zealand's transition to a green economy.

- However, New Zealand companies seeking IRA incentives will need to navigate domestic content requirements. In general, companies will need to be registered in the US, or have entered into a joint venture with a US company.
- More than one year on, the impact of the IRA on investment in climate is evident, with approximately USD \$360 billion in new clean energy and clean tech manufacturing projects announced, according to White House estimates.
- Some challenges still exist to the successful implementation of the IRA. One of these is the influence of politics, especially heading into an election year. However, a series of well-received investments have been made in traditionally Republican leaning regions that could help increase bipartisan support.



The IRA, signed into law over one year ago, is the backbone of the Biden Administration's economic growth and climate agenda. John Podesta, the Senior Adviser to the President on Clean Energy Innovation and Implementation, characterises the IRA as a government-enabled, private sector-led initiative aimed at addressing the climate investment gap. Alongside other economic and climate-focused spending packages[1], the IRA can be seen as part of the Biden Administration's "industrial strategy" and "friend-shoring"[2] approach to policy.

IRA funding available

The IRA is accelerating the deployment of both relatively mature clean technologies (i.e. wind, solar, and EVs) as well as earlier stage emerging technologies (i.e. hydrogen, sustainable aviation fuel, and direct air capture) through the provision of subsidies (in the form of tax credits and grants) to encourage research, infrastructure development, manufacturing and sales.

Spending of USD\$391 billion has been authorised under the IRA over 10 years. However, depending on projections of future demand, IRA spending could reach up to <u>USD\$1.2</u> <u>trillion</u> by 2032.

Further details on the IRA grants and tax credits can be found on the White House website <u>here</u>. The think tank Rocky Mountain Institute also has an easy to navigate list here.

How is IRA funding administered?

The Department of Energy's <u>Loan Programs Office</u> (LPO) is responsible for administering a significant portion of the IRA grants, approximately USD \$111.7 billion, in the form of loans focused on supporting innovations to move from the demonstration to commercialisation stage. The LPO has bankrolled some of the country's first large wind and solar farms, and seeded Tesla.

The <u>Treasury Department</u> is responsible for the majority of other funding. This includes approximately USD \$265 billion in the form of tax credits to incentivise activities that support the development of a clean energy economy and bonus credits that align with the Administration's "Bidenomics" vision. Bonus credits are available for meeting wage and apprenticeship requirements, domestic content requirements, and for situating

projects in low income communities.

The IRA appropriation for agriculture is around USD\$20 billion, which is being provided through existing Department of Agriculture conservation programmes, but with specific guardrails requiring the funds to subsidise practices that explicitly support climate change mitigation. This funding is now a high profile issue in Congress' efforts to pass the Farm Bill, a USD\$1 trillion+ legislative package.

There are specific eligibility criteria for each of the grant programmes and tax credits. Much of the funding is also available to States and US research institutions who can establish their own criteria for utilisation of the funds. Work by the US Treasury Department is ongoing to release <u>guidance on the implementation of some of the credits</u> and if needed, there is an opportunity for New Zealand to advocate for our interests in the development of this guidance.

How New Zealand companies and research institutions could potentially leverage opportunities under the IRA

New Zealand, with its small but growing cleantech ecosystem, emphasis on innovation, and sustainability, can benefit from the IRA and, in turn, foster stronger economic ties between New Zealand and the US.

New Zealand companies and research institutions could strategically position themselves to leverage the opportunities offered by the US' focus on green industrialisation and friendshoring under the IRA.

Export boost, and technology and innovation collaboration

Cleantech is a sector in New Zealand with export growth potential. New Zealand businesses are well-aligned with IRA focus sectors, for example, those working in critical mineral recovery and recycling, hydrogen, sustainable aviation fuel, energy storage, and carbon capture. New Zealand cleantech companies looking to expand operations to or invest in the US could potentially benefit from tax breaks and subsidies provided under the IRA.

Grant funding directed to support research in areas such as alternative fuels, climate and weather, and air quality could also be an opportunity for greater collaboration between researchers and innovative companies in New Zealand and the US. The IRA is also projected to drive significant private sector funding in the clean technology space and this will generate further opportunities.

However, New Zealand companies seeking IRA incentives will need to navigate domestic

content requirements, reminiscent of the Buy American Act. In general, to be eligible for IRA funding, companies need to be registered in the US, or have entered into a joint venture with a US company – likely the main entry point for New Zealand companies interested in accessing the incentives.

•Elements of the recently concluded Indo Pacific Economic Framework (IPEF) could help to provide clearer pathways to access funding and bring New Zealand companies closer to the significant amount of US capital that will be on offer. For example, the annual IPEF Clean Economy Investor Forum[3] will bring together the region's largest investors, start-up entrepreneurs, and government agencies for matchmaking and investment facilitation.

Impact so far – emissions reductions and investments

Domestic

- The US Department of Energy estimate that the IRA (and its "cousin", the Bipartisan Infrastructure Law) will deliver significant emissions reductions and bring the US closer to its goal of reducing its total GHG emissions by at least 50-52 percent below 2005 levels by 2030.
- Because most of the investments supported by the IRA will be implemented in slower time it is hard to assess if the emissions reductions are happening as planned.
 However, it is undeniable that the IRA has catalysed US market forces into a speedier transition towards a low carbon economy.
- According to the White House, nearly USD \$360 billion in private sector investment
 has been announced for utility-scale clean energy projects and clean tech
 manufacturing since the IRA was signed into law. According to <u>American Clean</u>
 Power, this is around eight years' worth of American clean energy investment.

International

- Foreign companies are already directing investment to the US as a result of the lucrative IRA funding on offer. Examples include:
 - British hydrogen firm Johnson Matthey's co-investment with a US company in what is projected to be the largest catalyst coated membrane (a key component in hydrogen production) manufacturing facility in the world;
 - Australian mining company loneer securing a USD \$700 million loan from the US
 Department of Energy to develop a lithium-boron project in Nevada; and
 - Norwegian battery manufacturer FREYR's announcement of a USD\$1.7 billion investment to develop a clean battery manufacturing facility in Georgia.

- Some countries have voiced concerns about companies being enticed to relocate to the US, and have subsequently questioned whether the IRA aligns with WTO rules.
 The sheer size of the IRA arguably makes the US the most attractive market in the world for investment in clean energy.
- Some countries are pursuing bilateral agreements to facilitate access to IRA benefits. For example, the US-Japan Agreement on <u>Strengthening Critical Minerals</u> <u>Supply Chains</u> and the Australia-US <u>Climate</u>, <u>Critical Minerals</u> & <u>Clean Energy</u> <u>Transformation Compact</u> - described as the "third pillar" of the Australia-US Alliance.
- The IRA also appears to have prodded other economies to continue to reassess their own strategy for dealing with climate change and attracting new climate-related investment. For example, the <u>EU's Green Deal Industrial Plan</u>, and Australia's <u>Powering Australia Plan</u>.

Challenges to Implementation

Some challenges to the successful implementation of the IRA remain. These include:

- Tax credit uptake: Despite observed changes in investment, uncertainty lingers over how individuals and companies will respond to predominantly incentive-based climate legislation. While the IRA is projected to bring the US much closer to their emissions targets, regulatory mechanisms at both Federal and State levels, such as Environmental Protection Agency regulations and market-based cap-and-trade systems (e.g. in California, Washington, and the Regional Greenhouse Gas Initiative), can play a role.
- Permitting reform: John Podesta, Senior Adviser to the President for clean energy innovation and implementation, says the US' 1970s-era permitting regime "is plagued by delays and bottlenecks" and is "one big hurdle—and a big opportunity". However, permitting reform has become a contentious issue in Congress, reflecting a divide between Republicans who favour reform that promotes oil and gas drilling and Democrats focused on expediting clean energy project approvals.
- Resource challenges: Despite substantial funding, implementation of the IRA will need to overcome obstacles like supply chain challenges, rising project costs, transmission constraints, and a shortage of qualified workers.

Political durability

The IRA does not command universal support, with House Republicans having already attempted to roll back funding appropriated under the IRA. Several candidates for the Republican presidential nomination, including former President Trump and Florida Governor Ron DeSantis, have been vocal in their criticism of the initiative.

However, Republican-leaning regions also appear to be benefitting the most from the

influx of new investment. According to Politico <u>analysis</u>, of the roughly 200 project locations that have been announced in the year since the IRA was signed into law, more than 60 percent are in Republican-held Districts.

Further information:

- One year later: The Inflation Reduction Act and climate progress | Brookings
- The effect of US climate policy on financial markets an event study of the inflation reduction act
- Inflation reduction act part: What's the big deal?
- Energy and climate extraordinary battery scale-up-required
- GSAM market insights US inflation reduction act is driving clean energy investment

[1] For example, the Infrastructure Investment and Jobs Act (also known as the Bipartisan Infrastructure Law) and the CHIPS and Science Act.

[2] Secretary of the Treasury Janet Yellen describes "friendshoring" as follows: "we're seeking to strengthen our economic resilience by diversifying our supply chains across a wide range of trusted allies and partners."

[3] The proposed Sustainable Investor Forum would would bring together IPEF Ministers, senior private and public sector representatives, to mobilise investment to develop, demonstrate, and deploy early-stage clean technologies in the region through a matchmaking process.

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