US Inflation Reduction Act: a strong force to accelerate energy transition technologies

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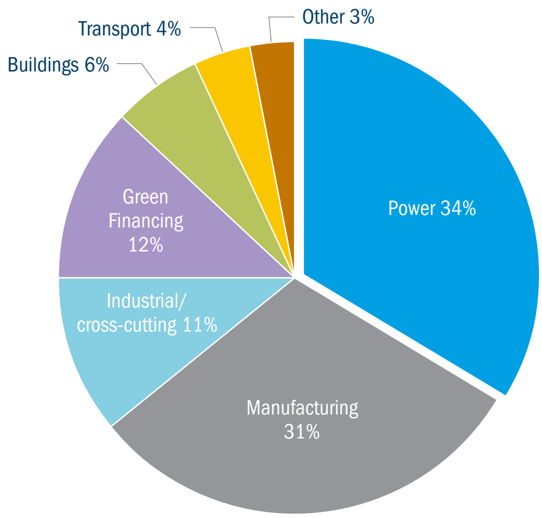
In August, the US passed a major milestone in climate policy with the introduction of the Inflation Reduction Act (IRA).[1] As the largest piece of federal legislation ever to address climate change, we believe it will have a profound effect across industries for decades to come.

The act deploys sizeable tax credits for every major economic sector key to achieving wholesale decarbonisation: energy, transport, buildings and agriculture. Within each transition sector, the legislation aims to offer support across the whole value chain, from end consumers up to suppliers, with a clear intent to subsidise domestic manufacturing of these technologies.

The act primarily aims to support US manufacturers and will subsidise US-made components of renewables, batteries and electric vehicles (EVs) to reduce reliance on China. It proposes allocating more than $60 billion to onshore manufacturing across the supply chain of clean energy and transportation technologies. We think this push for supply chain localisation and the re-shoring of US manufacturing will have substantial macro and strategic implications over the next decade. Tax support to develop domestic industries, alongside an increased focus on carbon emissions and the need for more transparent/less complex supply chains, could incentivise sectors to re-shore more rapidly as a strategy to reach net zero. We view this as potentially transformative across industries, particularly for renewables and EVs.

The IRA will provide at least $369 billion to support clean technologies across multiple sectors (Figure 1) such as renewable energy, hydrogen, nuclear, carbon capture and storage (CCS) and EVs. The vast majority of the tax credits are available for around 10 years, therefore companies will have visibility

Figure 1: IRA allocation across industries



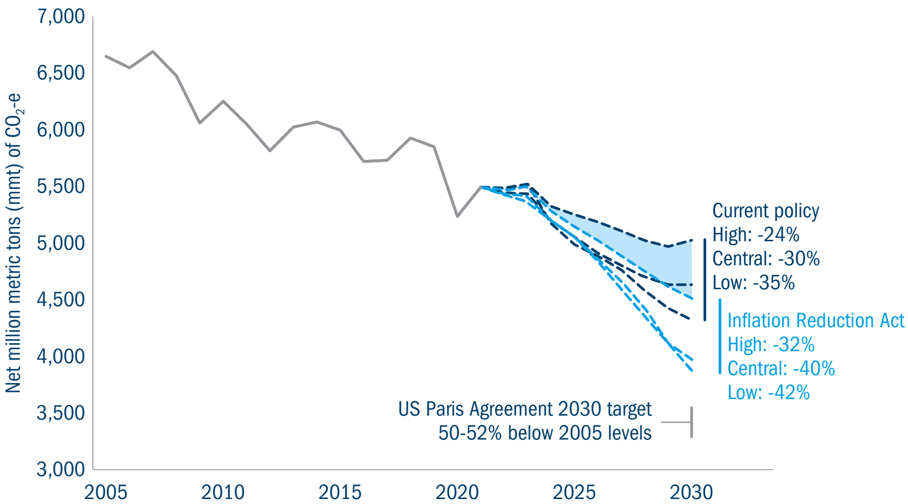
Source: Credit Suisse, September 2022.

over the next decade of the tax credits, which will favor the deployment of investments and projects. Credit Suisse estimates that with subsidised green financing and the multiplier effect on federal grants/loans, the total public plus private financing in that period could even reach around $1.7 trillion.[2]

This large stimulus package represents a major milestone in strengthening the climate goals and policies of the US. The package is also expected to contribute to accelerating decarbonisation in the US and reduce emissions by around 40% by 2030[3] – close to the 50% target set by President Biden (Figure 2). We see most of the upside coming from solar, clean hydrogen, CCS and EVs.

The meaningful extension of tax credits for renewables will provide a major boost to solar energy adoption particularly. IRA support coupled with continuing better economics could double the expansion of solar energy in the US in the next decade. However, a dependence on Asia for components, and human rights issues associated with Chinese labor, are hurdles to overcome. The growth of renewables will also contribute to the development of green hydrogen as a key power source.

Figure 2: US greenhouse gas emissions and projections



Source: Rhodium Group. The range reflects uncertainty around future fossil fuel prices, economic growth and clean technology costs. It corresponds with high, central and low emissions scenarios detailed in Taking Stock 2022: https://rhg.com/research/taking-stock-2022/

In fact, we believe the IRA will be a game-changer for hydrogen (see the article "Tailwinds hasten hydrogen's cost-competitiveness, but demand is lagging" elsewhere in this report), and for the development of CCS. We also view the sizeable extension of the 45Q tax credits for CCS projects as an important catalyst in accelerating investments in this space. These investments and incentives will benefit energy majors as key enablers of this technology given their expertise, skills and access to the required infrastructure.

Finally, the significant expansion within the IRA of EV tax credits for consumers will further support the already rapid adoption in the US. The extension of the $7,500 credit for new EV purchases and the introduction of a $4,000 credit for used EV purchases are vital in accelerating the supply and demand over the next couple of years. In addition, narrowing the subsidy to vehicles that met certain domestic requirements will be very beneficial for US automakers.

Climate transition engagement:[4]
Climate policies

Company

NextEra Energy

Sector and country

Utilities, US

Why we engaged

We wanted more insight regarding the impact of the US Inflation Reduction Act (IRA), as well as the implementation of forced labour rules on the solar supply chain in the US.

How we engaged

Our utilities industry equity analyst organised a series of calls with US solar companies on this topic. The call with NextEra was joined by the RI analyst as well as portfolio managers.

What we learnt

The company sees the potential for a US supply chain to form in next two to four years given manufacturing incentives from the IRA. In particular, community solar is likely to play a more significant role than rooftop solar in the evolution of the electric grid given its scale advantages and increasing popularity.

The company also sees bright prospects for the adoption of renewables in the US with tax incentives facilitating the addition of significant extra renewable capacity. NextEra expects that as a result of IRA the energy transition could happen twice as fast over the next decade.

Outcome

The call provided valuable insight on the broader developments impacting the US solar industry and NextEra's position within this. We concluded that the company is relatively insulated from the forced labour rules and very well positioned to seize the expansion and growth within solar energy in the US.

1 https://www.energy.gov/lpo/inflation-reduction-act-2022.
2 Credit Suisse, US Inflation Act, a tipping point in climate action, 2022.
3 Summary of the Energy Security and Climate Change Investments in the Inflation Reduction Act of 2022.
4 Although not all stewardship activities are successful in driving change, engagement helps us learn more about – and in some cases influence – issuer practices. The case studies in this document describe select company engagements over the past quarter.

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