The Inflation Reduction Act's impact on clean energy

Insights from BlackRock

Key takeaways

- The U.S. Inflation Reduction Act (IRA) includes approximately $370 billion of energy-related[1] spending; clean energy is a key component of the law and the primary focus of this commentary.
- The clean energy theme could benefit from tax credits, grants, and favourable loans for electrical infrastructure.
- In our view, investors seeking access to companies in the clean energy space may want to consider pure-play ETFs such as the iShares Global Clean Energy Index ETF (XCLN).

Inflation reduction act targets clean energy and other related themes

The U.S. Inflation Reduction Act will deliver approximately $370 billion of new investment in several areas including clean energy and related themes. We see this investment potentially accelerating the structural growth trends behind these technologies, and likely to further power investment in solar, wind and hydrogen.

This law advances an additional prong of the Biden administration's economic agenda, building on last year's Infrastructure Investment and Jobs Act (IIJA), which drove historic spending in U.S. infrastructure and included tens of billions for clean energy and related technologies. We anticipate that this spending has the potential to translate to significant revenues for clean energy companies for years to come.

Investors have long paid attention to the potential for a multifaceted package that could support clean energy. From late 2020 through early 2021, when markets anticipated similarly historic spending in this area, we saw $10.7 billion of ETF flows into clean energy and related themes.[2]

What's in the bill

Amid volatile energy costs, the Inflation Reduction Act of 2022's energy-related provisions have the potential to strengthen U.S. energy security and support electric vehicle production. To achieve this, it plans on investing roughly $370 billion across multiple related themes[3]. See Exhibit 1 for details.

It is also critical to note that the bill includes a range of features in areas with broad bipartisan consensus - specifically nuclear power and natural gas. And, though funding was a primary sticking point leading up to the recent deal, negotiations yielded agreement on provisions that could raise on the order of $700 billion of new revenue and reduce the national deficit by over $300 billion, fighting inflation and addressing several hot button issues across taxation and healthcare.[4]

[1] All amounts are expressed in U.S. dollars unless otherwise noted.
[2] ETF flows between Sept 1, 2020 and Feb 28, 2021. Source: BlackRock. Data as of August 22, 2022
[3] US Senate, "Summary of the Energy Security and Climate Change Investments in the Inflation Reduction Act of 2022," July 2022.
[4] US Senate, "Summary: The Inflation Reduction Act of 2022," July 2022.

Exhibit 1: Inflation Reduction Act of 2022 – investment highlights

Clean energy production

Production tax credits for clean electricity generation and investment tax credits for new clean energy projects across wind, solar, geothermal, bioenergy, hydropower, energy storage, and clean hydrogen, as well as approximately $30 billion in grants and loans to modernize utilities' and states' electric infrastructure.

Clean technology manufacturing

Production and investment tax credits of $30 billion for manufacturing solar panels, wind turbines, heat pumps, EVs, batteries, and critical minerals; $10 billion for facilities to produce them; and $6 billion (including grants) for carbon capture. Direct spending includes $7.5 billion for clean technology products and $29 billion in breakthrough energy research.

Adoption of enabling technologies

Significant tax credits, $9 billion in rebates, and a $1 billion grant program to fund residential electrification and energy efficiency technologies, including heat pumps, rooftop solar, electric HVAC, water heaters, and home appliances.

Electric vehicles

Offers consumers $4,000 - $7,500 tax credits for EV purchases and manufacturer tax credits for producing EVs, EV batteries, and building new EV manufacturing facilities. It also offers up to $20 billion in loans and $2 billion in grants for new and existing EV facilities, as well as $3 billion to procure zero-emission vehicles for public transit and the federal fleet.

Accelerating clean energy production

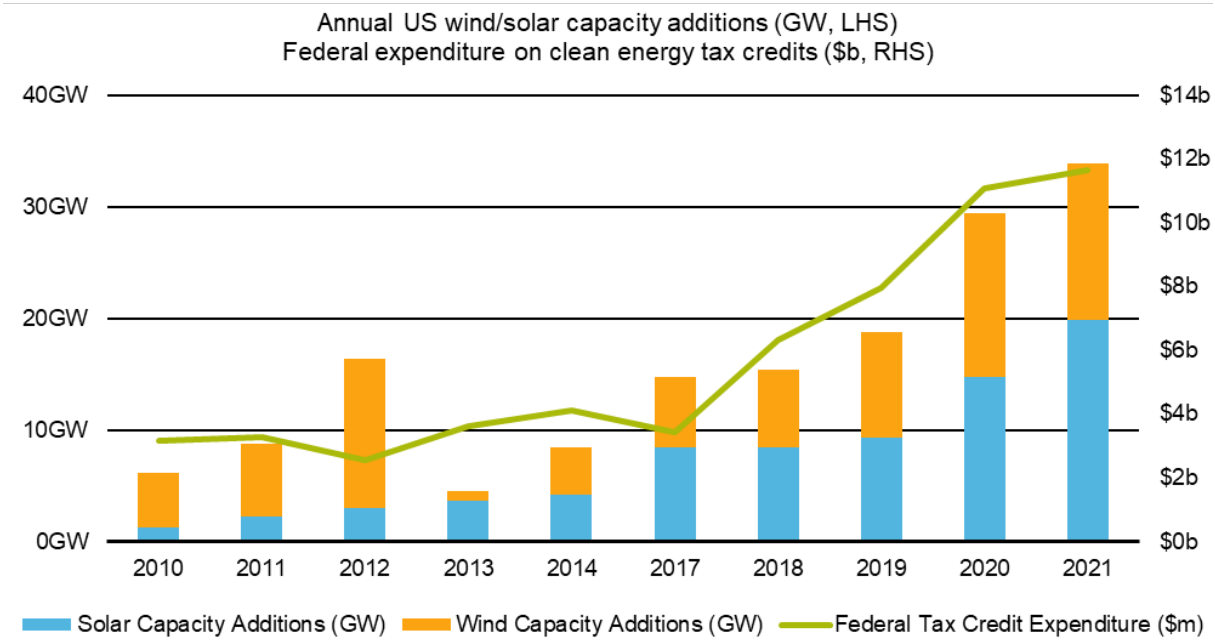
Tax credits from the 2000s and 2010s helped accelerate the scaling of wind and solar power in the U.S. (Exhibit 2), bringing down costs, and ultimately making clean power more affordable than fossil fuels.[5]

This new round of potential tax incentives could further accelerate the growth of clean energy production through subsidizing additional projects to achieve greater scale and increasing the profitability of producers. Projections in Exhibit 3 show the importance of extending federal clean energy tax credits for growing U.S. clean power generation.

Manufacturers of clean energy technologies could realize similar benefits. Production and investment tax credits for manufacturing could make producing key clean energy components, like solar panels and wind turbines, more profitable. They could also make building new manufacturing facilities less costly. This could accelerate the production of these technologies and drive further gains in manufacturing capacity in the United States.

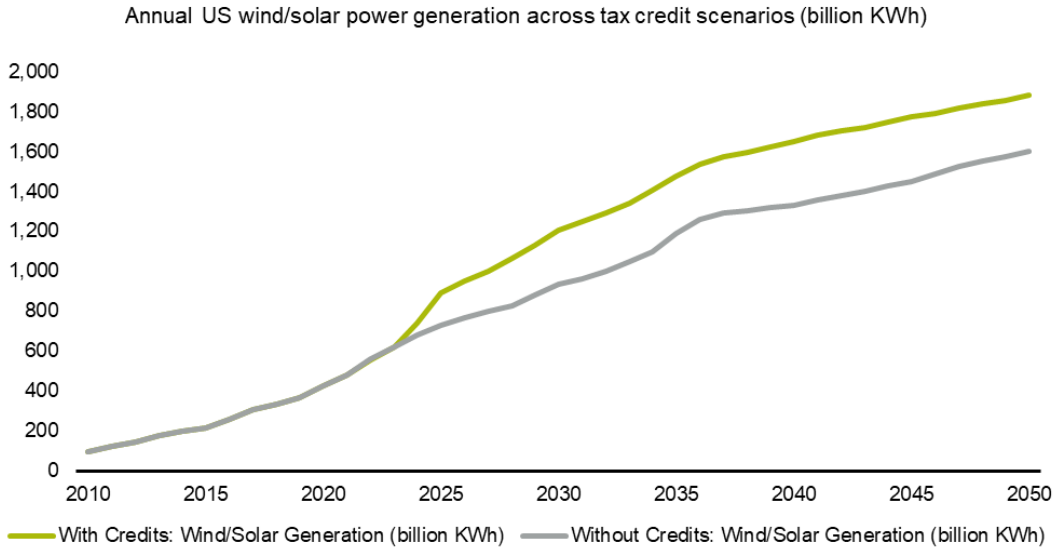
[5] Utility Drive, "US wind, solar finance alternatives rise as sector rushes against looming tax credit expiration," October 2019.

Exhibit 2: Clean energy production and investment tax credits have historically driven significant clean energy capacity additions in the U.S.



Note: Tax credit expenditure reflects budget estimate from nearest fiscal year total tax expenditure release (FY2011 – 2021). Represents sum of production and investment tax credits for clean energy sources. Source: U.S. Department of the Treasury Annual Tax Expenditure Releases, 2011 – 2021; BP, Statistical Review of World Energy, 2022/2021 Editions. Chart description: Combined stacked column and line chart with columns showing the annual wind and solar power generation capacity gains and with the line showing the annual total federal expenditure on production and investment tax credits. The chart shows how increased federal spending on tax credits historically contributed to new clean energy generation capacity.

Exhibit 3: Projections show the importance of extending federal clean energy tax credits for growing U.S. clean power generation



Note: Case with credits assumes extension of tax credits through 2050; without assumes 2023 expiration. Source: US Energy Information Administration, July 2022.Chart description: Line chart showing combined annual wind and solar power generation in the US across two scenarios: with investment/production tax credits and without. The chart shows how tax credits can contribute to increased power generation over time.

How to get clean energy exposure with RBC iShares

We believe the U.S. Inflation Reduction Act of 2022 could have profound implications for the global clean energy industry, potentially offering additional near- and long-term boosts. In fact, we have long seen clean energy as one of the megatrend themes that may be poised for long-term structural growth (see our recent insight article: Three reasons why clean energy is at a tipping point).

Investors seeking to capture the clean energy theme may want to consider an ETF that offers exposure not to any one clean power source, such as solar or wind, but the full range of producer types and the many enablers of these technologies, including solar panels, wind and tidal turbines as well as energy transmission tech. Our Clean Energy ETF (**XCLN**) invests holistically across these exposures, allowing investors to capitalize on a potential period of acceleration in the clean energy space.

Ticker	Name	Mgmt Fee[6]	Index
XCLN	iShares Global Clean Energy Index ETF	0.35%	S&P Global Clean Energy Index

XCLN provides exposure to global companies involved in **clean energy-related businesses**, using S&P Trucost power generation and FactSet revenue data to identify companies involved in clean energy opportunities. Target themes include: ethanol & fuel alcohol, geothermal energy, solar energy, biomass & bio-fuel, hydro-electricity, photovoltaic cells, fuel cells and wind energy. The ETF also applies business involvement screens and excludes companies with elevated carbon intensity. XCLN's top geographic exposure includes 46% U.S, 12% China, 10% Denmark, 5% Portugal and 4% Canada.[7]

[6] Data as of August 22, 2022
[7] Source: BlackRock; Data as of August 23, 2022

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