



Geopolitical Risk Index | Case Study | 2024

Geopolitics of the **INFLATION REDUCTION ACT**



The presentation offers an analysis of the impacts and implications of the Inflation Reduction Act (IRA) in a geopolitical context, focusing on China, the European Union, and Latin American countries

Our research is supported by an interview we conducted with Professor Michael Spence, a Canadian-American economist and Nobel Prize laureate in 2001

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The Inflation Reduction Act



WHAT IS THE IRA?

- August 16, 2022
- Largest US investment: \$370 billion
- Financial incentives (D&S) mainly:
 - tax credits 58%
 - tax cuts 12%
 - grants 22%



WHY THE IRA?

- Context of urgent need to reduce greenhouse gas emission globally
- US intention to be a major actor in the fight against climate change
- US independence and competitiveness in industrial capacity
- Incentivize domestic manufacturing, technology production and innovation



GEOPOLITICAL CONCERNS OF IRA

- Green nationalism, protectionism?
- Shift from "market knows best" approach?
- Impact on World order?
- Slowbalization?

"It is essentially a set of incentives that amount to subsidies to attract investment in various aspects of the climate change agenda, energy efficiency, technology (...)"

Prof. Spence

"Whatever the defects in the IRA are, it's probably better to have the United States with the central government involved in climate change agenda than the alternative, which is being out of it completely (...) if it's compared with doing nothing, then it's better"



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Beyond Climate Change - A Strategic Response to China



The IRA in the context of the economic rivalry with China

- Since its entry in the WTO, China's position in the global trade value chain has been constantly increasing
- China has become the dominant player in the Clean-Tech market (EVs, solar panels, solar cells, batteries, rare earth materials...)
- The US seeks to revive its energy manufacturing sector



IRA's Impact on China's Economic Sectors

- The IRA covers a large panel of sectors mainly in clean energy (solar modules, hydrogen, wind turbines..) and electric vehicles (the whole battery supply chain and the final products)
- Tax credits and other subsidies incentivize domestic production with specific supply chain requirements








A New Trade War on the Horizon?

- Increasing distrust towards Chinese firms operating in the US.
- China may respond with increased tariffs, potentially triggering a trade war
- Short-term disruption are unlikely because of China's significant head start
- Long-term goal: reduce US dependence on Chinese



China's dominance in clean tech

Countries' share of global manufacturing capacities in 2024

Component/Material	Rest of the world					
Solar modules	13%	84%	0%	1%	1%	1%
Battery cell	0%	86%	4%	1%	0%	9%
Lithium	26%	71%	2%	0%	1%	0%
Hydrogen electrolyzer	1%	70%	10%	0%	0%	18%

Source: BloombergNEF

Note: Capacity is for physical facility location, not manufacturer headquarters. Lithium refers to lithium hydroxide and carbonate



China's potential response to the IRA

Take advantage of its leading position

1

Turn to an export-oriented economy

Encourage Chinese firms to export more as domestic demand fades. Exports must become the growth engine of China

2

Comply with the IRA requirements

Chinese firms must revise their stakes in foreign firms to circumvent the anti-dumping and countervailing duties of the IRA

3

Develop partnerships

Develop partnerships with American firms which are dependent on Chinese technologies regardless of the IRA's requirements



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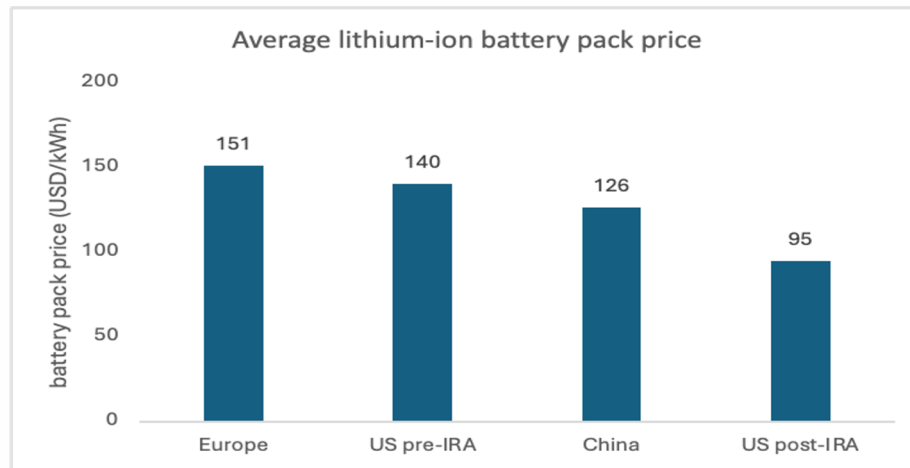


IRA impact on EU economic sectors

1

Batteries

- US incentives pushing down battery prices in US, threatening EU battery competitiveness
- EU strategic interest in the sector given the relevance of the car manufacturing industry
- Risk of investments shift to benefit from IRA incentives



Source: Bloomberg NEF (2023)

3

Clean energy

- US incentives for solar and wind power to lower costs
- EU unlikely to lose market share due to large iceberg costs associated with transportation
- Risk that EU equipment manufacturers may relocate to the US

Hydrogen production

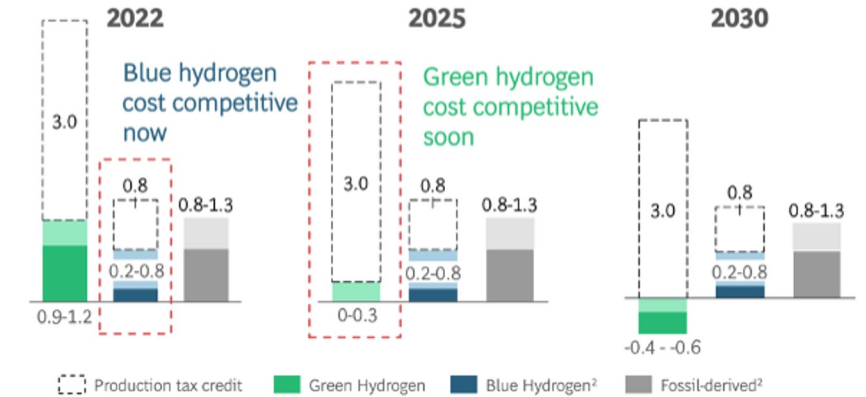
2

- US subsidies drastically lower hydrogen production costs, with the EU potentially losing out on a booming future market
- Indirect economic benefit in industrial production
- EU heavily investing in R&D, with companies filing more patents than other regions in the world (29% world share)

United States Levelized Cost of Hydrogen

(\$/kg hydrogen, production cost)^{1,2}

Lighter shades reflects range of cost uncertainty²



Source: BCG (2022)

4

Electric vehicles

- US incentives unlikely to significantly impact EU car manufacturers due to small subsidies and the luxury nature of EU car exports
- Future competitiveness at risk due to potential US battery advancements and consequent car development



EU response and future relation with the US



EU response so far

The EU is responding to the geopolitical competition with increased assertiveness, but maintaining openness and international trade

- **Green Deal Industrial Plan:** technological advancements, manufacturing and production of net-zero products
- **RePowerEU:** reducing reliance on Russian fossil fuels
- **Critical Raw Materials Act:** secure and sustainable access to critical raw materials
- **Net-Zero Industry Act:** enhancing the regulatory framework



What's next?

- *"The increase in market size due to the IRA will be large enough to offset the negative impact of the local content requirements" (Gros et al., 2023)*
- Positive opportunities may arise through a partnership with the US: *"The best outcome for this would be if the United States and Europe sort of work together" (Spence, 2024)*
- EU could see advantages from increased demand as the US and other countries lessen their dependence on China



Securing Europe's Industrial Future:

A Multi-Dimensional Approach

1

Focus on Key Sectors

Target promising industries like hydrogen and batteries, where the EU has a realistic chance of gaining international competitiveness

2

EU-Level Funding

Establish a common budget to provide financial support and avoid economic disparity among member states: *"if you want to have a big impact, then you need to centralize the investments"* (Spence, 2024). Incentives should address both initial (CAPEX) and ongoing (OPEX) costs

3

Diversification Strategies

Secure new trade partnerships (e.g., Mercosur) to reduce dependence on China and access critical raw materials

4

Import Limits

Consider imposing quotas on critical materials imports from any single country to diversify supply chains and limit concentration risk



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The US IRA: Impact on Latin America

Mexico

The IRA and the geopolitical tensions led Tesla to develop its new facility in Mexico, from places such as Germany and China. This action traces how the IRA can benefit places across the LATAM region



Chile

Chile's renewable energy potential faces hurdles due to IRA's focus on domestic manufacturing, potentially limiting global competitiveness



- **Depending on the country in the LATAM region, the IRA could potentially benefit or detriment investments in clean energy**
- **Those actions could lead foreign investors or entrepreneurs to drive or shift technological advancements into specific countries**



Strategies for Latin America



Embrace Clean Energy Transition

Enhance competitiveness and climate resilience by:

- Reducing dependence on fossil fuels
- Standardizing energy policies across the region to facilitate bi-regional cooperation with the US



Long-Term Vision

Explore a new trade model where the US and EU fund Latin America's clean energy transition in exchange for critical materials



Capitalize on Resources

Develop critical materials industries (e.g., lithium, copper) to meet US demand for electric vehicle batteries. (Mexico's Example: Attracting Tesla's electric vehicle production)



Action Required

Overcome fragmentation in energy policies across Latin America to achieve effective collaboration



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The IRA and a Shifting Global Economic Landscape

A move away from the Washington consensus?



The Inflation Reduction Act raises questions about the future of the Washington Consensus, which emphasized free trade and limited government intervention. The US focus on domestic production and national security suggests a shift towards economic policies prioritizing national interests. This aligns with America's need to counter China's dominance in green energy

A new era of strategic trade?



The IRA's potential protectionist measures are prompting the EU and others to reconsider their approach to government involvement. Subsidies and strategic trade policies may become more common as countries navigate this new economic landscape

A world of Interdependence remains



Despite the shift, a complete retreat from globalization is unlikely. The interconnectedness of supply chains for the green transition, requiring resources from all regions, necessitates continued global cooperation. While economic sovereignty is a growing concern, complete isolation is not a viable option



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