

# The Inflation Reduction Act and Europe's response



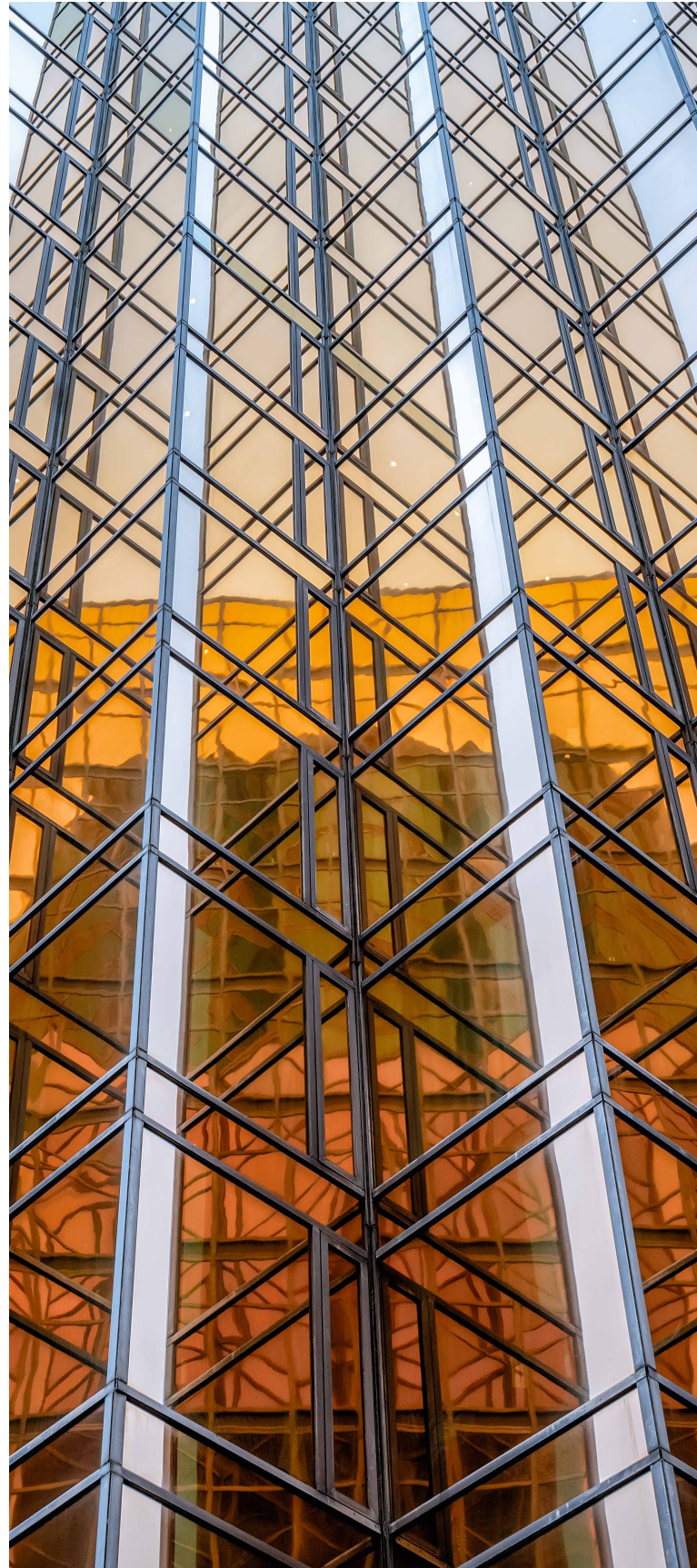
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**The US Inflation Reduction Act (IRA) will unleash billions of dollars of funding for climate and clean energy over the next decade.**

It is expected to significantly reduce the costs of producing clean energy, accelerate the development of emerging technologies and provide new investment opportunities. Europe has been under pressure to come up with a similar package - but how will it respond?



### What is the IRA?

The IRA was signed into US law in August 2022 and will provide an estimated US\$370 billion of funding for energy and climate investment over the next 10 years, although the actual amount could be much higher, given the uncapped nature of the tax credits.

The tax credits span carbon-free energy, transportation, clean tech and manufacturing. The IRA builds on the Build Back Better Act (BBBA) and extends the duration of the tax credits in the BBBA, most of which will now run into the 2030s.

The IRA also aims to spur local economic development and the upskilling of the US workforce in low-carbon technologies. On top of the standard tax credits, the IRA offers 10-20% bonus credits on investments in energy communities<sup>1</sup> and low-income communities, and a 10% bonus for clean electricity projects that meet the domestic content requirement. The additional bonuses, which are accumulative up to as much as 60%, are a strong incentive to increase investments in low-income and fossil fuel dependent regions.

### Selected tax credits in the Inflation Reduction Act



US\$2,000

per year consumer tax credit for the purchase of heat pumps



US\$30

per MWh for zero-carbon electricity generation



US\$1.75

per gallon for production of sustainable aviation fuels



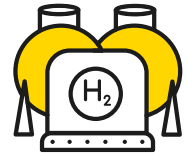
US\$7,500

per vehicle consumer tax credit for new electric vehicles



US\$15

per MWh for power produced at a qualifying nuclear facility



US\$3

per kg for the production of qualified clean hydrogen

Source: The Inflation Reduction Act 2022, August 2022. The new electric vehicles credits are subject to meeting the critical minerals and battery component requirements.



**“The tax credits span carbon-free energy, transportation, clean tech and manufacturing.”**

1. Source: The IRA sets out guidelines that define three areas qualified to receive the energy community bonus: coal communities, brownfields, and areas that have either 0.17% or greater direct employment, or 25% or greater local tax revenues related to the fossil fuel industry, with unemployment at or above the national average.  
2. Source: The Green Deal Industrial Plan for the Net Zero Age

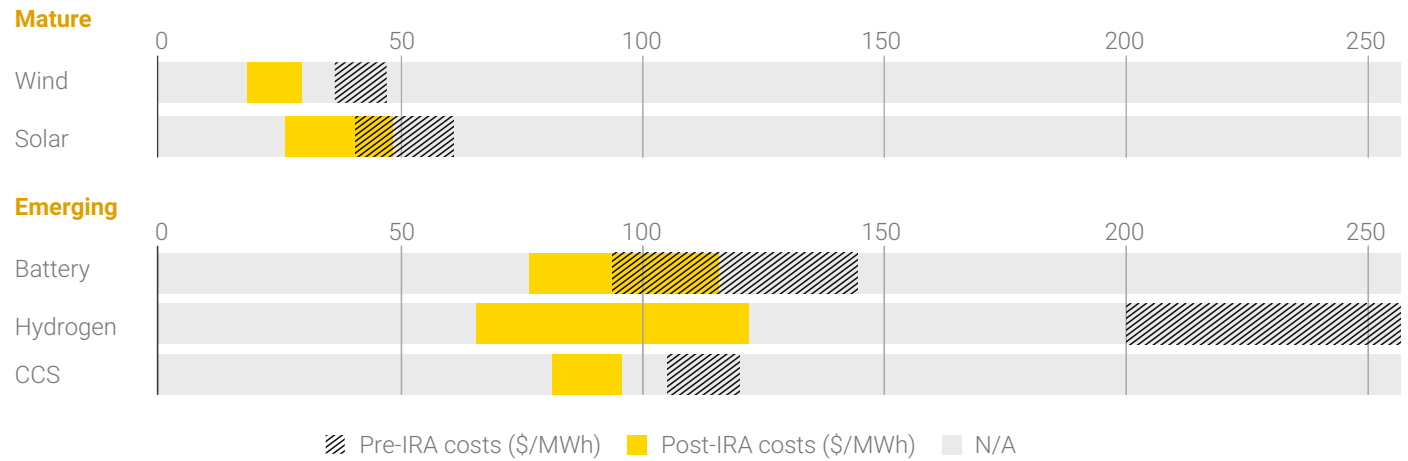
**Cheaper, faster, cleaner**

The IRA is expected to dramatically improve the economics of carbon-free energy, clean tech and electric vehicles in the US, and to provide a powerful catalyst to accelerate investment in emerging technologies.

The cost reduction is expected to be most transformational for carbon capture and storage (CCS) and green and blue hydrogen. This should accelerate the maturation of these technologies, as well as the decarbonisation of heavy transport and industrial processes. Over time, we believe these sectors will become increasingly investable.



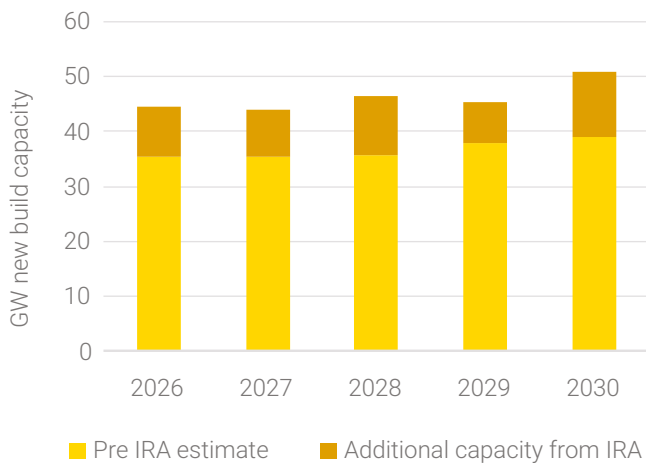
**Impact of the IRA on energy costs in 2030**



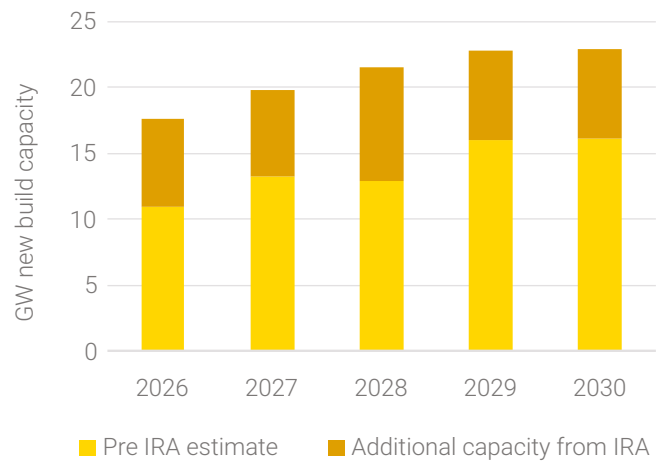
Source: ICF, May 2023

Greater clarity on longevity of the tax credits offers valuable certainty and predictability to developers and investors, making it easier to deploy capital at a greater pace and scale. For instance, Bloomberg New Energy Finance estimates that, by 2030, the IRA is expected to increase US solar capacity by 30% and wind capacity by 42%.

**Solar new build capacity**



**Wind new build capacity**



Source: Bloomberg New Energy Finance, as at March 2023.

### How is Europe responding?

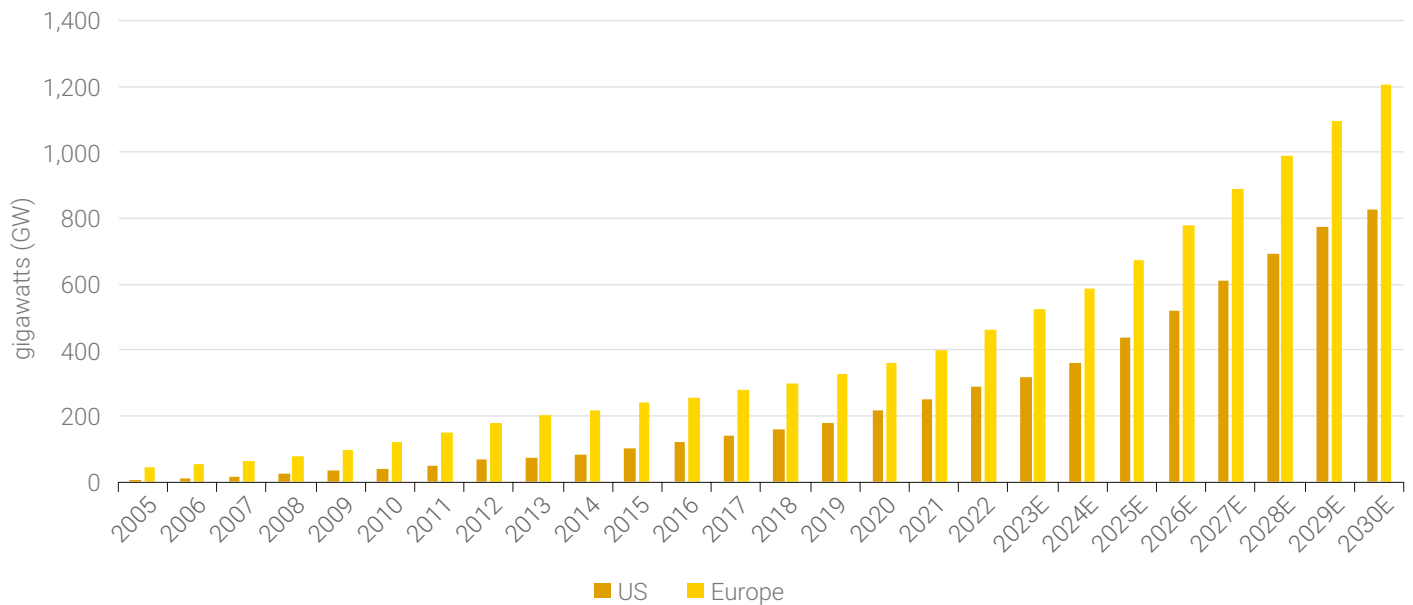
Earlier this year, the European Commission published a legislative proposal for an EU response to the US IRA: the Net Zero Industry Act (NZIA). The act focuses on supporting domestic clean technology manufacturing capacity, reducing bottlenecks to renewable energy deployment and increasing access to financing. The NZIA is targeting a 40% domestic share in the manufacturing of equipment for solar, wind, batteries, heat pumps, geothermal energy, electrolysers and fuel cells, bio-methane, CCUS and grid technologies.

The key tool for achieving these goals is the relaxation of state aid regulations. Member states can adopt manufacturing subsidy programmes, directly supporting projects in the target industries, subject to pre-defined caps. In principle, total EU subsidies are comparable to those in the US. While estimates of total subsidy spend can vary significantly, the EU and US packages each offer support to low-carbon investment to the tune of hundreds of billions of dollars, with yet more investment to be mobilised from the private sector.

The key difference between them is the way in which funds are being disbursed. In the US, this is done mainly via tax credits – an established mechanism with clear rules with which market participants are familiar. By contrast, the EU plans to repurpose various existing funds to support the GDIP<sup>2</sup> ambitions. While the total amount available within existing funding looks impressive, the complexity of the schemes will make it harder for clean energy companies to access the subsidies they need. Applications for funding can take years, with uncertain outcomes. Meanwhile, in the US, firms eligible for non-repayable tax credits can deploy capital much faster and have more visibility and control over project timelines and costs.

Historically, the EU has led in the deployment of clean power capacity. Installations of wind and solar capacity in the EU have outpaced those in the US, despite the US being the larger energy market as measured by final electricity consumption.

### Cumulative wind and solar capacity installed



Source: Bloomberg New Energy Finance, as at 11 July 2023.

3. Source: Eurelectric, 2021

Going forward, installations in Europe are set to remain higher, according to BNEF data, even as the IRA looks to significantly drive up development in the US. This is due partly to the supportive policy framework, but also because energy prices in Europe are forecast to remain structurally higher compared to those in the US, which are supportive to wind and solar power project revenues. In our modelling, European renewable projects remain economically sound, largely due to increases in power-price forecasts post-2022, offsetting the recent increase in equipment costs.

Policy framework has been key to deployment, as the rollout of wind, solar and battery storage projects has been supported by member states across the EU. For the better part of a decade, clean energy capacity has been procured through a system of auctions effectively underwritten by member states. The auctions give developers long-term visibility on future demand and long-term offtake agreements guaranteeing a fixed price for power produced, in some cases indexed to inflation. This significantly de-risks projects, lowers the cost of capital and allows for relatively fast capital deployment into renewables. If applied to new sectors such as green hydrogen at scale, the auction system may offer long-term fixed-price offtake contracts underwritten by member-state governments, or possibly even Brussels – a powerful draw in a nascent sector.

### Potential implications for real asset investors

Hitherto, the preferred approach at the US federal level to support renewables has been tax credits. To monetise these credits, developers partner with large financial institutions, such as banks, through a complicated structure called a 'tax equity partnership'. This effectively allows the tax credits to be offset against the financial institutions' tax liability. Developers can raise additional third-party capital (such as private credit) against their equity interests in the tax equity partnership, but it tends to be relatively small compared with capital from the banks.

Under the tax equity partnership framework, while the increase in tax credits could benefit large banks with big tax liabilities, they have the unintended consequence of crowding out other investors. A new feature of the IRA is that developers can sell their tax credits for cash to any business with a tax liability. This circumvents the need for a tax equity partnership. Direct pay is also available, subject to several criteria. Guidance on implementation is expected to be released later this year. In our view this has the potential to substantially widen the universe of eligible investors and enable the developers to tap into a much bigger pool of capital, with the potential benefit of a further reduction in the cost of capital.

In Europe, policy emphasis on achieving energy security and decarbonisation goals will likely continue supporting the build-out of wind and solar capacity. The policy preference for long-term offtake agreements will help developers and investors to structure projects to maximise cash flow resilience over the long term, while boosting returns by selling a smaller proportion of output in the wholesale market.

Furthermore, the rapid buildout of renewable capacity will require a commensurate buildout of power grid infrastructure - a sector which is a staple of many infrastructure investment portfolios. Decarbonisation and modernisation will require €375 billion to €425 billion of investment in distribution networks alone during 2021-30, according to a study by Eurelectric, the trade association of the European electricity industry<sup>3</sup>.

New policies that have already been announced will also support capacity buildout in nascent industries, such as green hydrogen, heat pumps and carbon capture and storage. The extent of their impact is more difficult to forecast, as support mechanisms are in the process of being implemented by various member states. In the long term, policy support will likely translate into lower technology costs and higher deployment rates. At present, further clarity on business models and subsidy levels will be required to unlock larger-scale flows of capital to those industries.



### Conclusion

We believe the magnitude and duration of the funding within the IRA will have a profound impact across US and global energy systems, industries and supply chains for years to come. Europe has historically been ahead in the clean energy race and will seek to maintain its position through the NZIA.

We expect the impact of the IRA to be manifested faster than the NZIA, given the straightforward nature of the tax credit provisions. Nevertheless, both will accelerate the deployment of clean energy and clean tech, which in turn will increase demand for private capital and provide more investable opportunities across Europe and the US, in our view.

## Contact us

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