

# Overcoming sceptics: the economic case for climate tech is clear, now the industry needs to show it

*Recent political developments will likely impact momentum towards net zero and climate resilience, but it's not over for climate tech. To survive, startups need better operational data, and more of it, to prove commercial viability and to optimise the tech after development.*

Temps de lecture : minute

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European politics' traditional centreground is faced with a new reality - that the populist right has entered mainstream. They've made significant gains in European state elections - and therefore control the EU Commission, and now control both the executive and legislatures of the US following Trump's election.

This is bad news for the climate crisis. As we know far too well, Trump thinks the climate crisis is a "hoax", and is threatening to pull back the Inflation Reduction Act, using the earmarked but unspent cash elsewhere. In the EU, alliances between right-wing and far-right groups continue to water down key Green Deal climate legislation - although they are finding it much harder to do than their friends across the Atlantic.

Bad news, however, is not a death sentence and progress is still very much in reach. One reason is political; progress towards net zero and energy independence is still on the cards for many governments, corporations, and international organisations - particularly in Europe. The

EU aims to be net zero by 2050, and the UK has just announced at COP29 that it will aim to reduce emissions by at least 81% compared to 1990 levels by 2035. In China, now the world's largest emitter, projections suggest that emissions will peak before 2025, more than five years ahead of its 2030 target.

In the US, Trump's win may well delay progress. However, the Inflation Reduction Act, a core part of US climate policy, is unlikely to be repealed. Its use of public money to subsidise the purchase and manufacturing of green technologies has created jobs and boosted industry - largely in Republican states. Hence, industry titans back the Act, and state and federal-level Republicans are expected to push back should Trump look to rescind or defund the IRA.



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# Investors and customers need to see the business case for climate tech

None of this is a given, but it shows that politics aside, climate tech makes economic and business sense. And this is without even mentioning the obvious - that we face existential economic risks by continuing business as usual as our resources and supply chains are mortally threatened by the climate crisis.

Commercial viability, therefore, is now more important than ever for the climate tech industry's survival. This needs huge amounts of operational data to prove to potential customers and investors that it works on the business level, let alone to try and convince sceptical politicians that it is effective and a wise investment.

For renewables and battery makers, this battle has largely been won. Thanks partly to the war in Ukraine, governments have woken up to the geopolitical and economic drawbacks of relying on fossil fuels; renewable energy is simply cheaper.

For more stubborn sources of carbon emissions, such as in some heavy industries, this will be harder to do. Either because the solution isn't being adopted en-masse (such as green concrete, which is cheaper than traditional concrete), or because we just don't have the technology available.

Whether it's for proving value to finance ministers, investors and CFOs; scaling up tech to industry-ready solutions; or developing an idea from the lab to the field - data is still key.

# Unlocking performance and proving resilience through data

Although data shows climate tech startups raised 20% less YoY in 2024 H1 than 2023, last year startups still raised \$315B, a return to a pre-pandemic baseline, and a quarter of all VC in Q2 2024 went to AI. The money is clearly out there, investors just need confidence to channel it into effective climate technologies, and part of that relies on startups proving commercial viability with hard data.

This makes operational data even more essential for startups - for three reasons. Firstly, hard numbers must prove commercial viability to investors to secure the capital needed to scale First-of-a-Kind (FOAK) tech to mainstream, industry-ready solutions. This capital-intensive process is even more important when you have politicians distrusting the fundamentals of the industry, and investors (or policymakers) with less money to spend.

Secondly, from an operational perspective, data is vital for optimising the tech and boosting efficiency - simply just to keep improving but also to reduce risk of redundancy. Due to the pace of innovation, startups need to do all they can to prove to investors and customers that if they invest now, they won't be locked into a piece of technology that rapidly becomes less efficient and more expensive than competitors'. This is one particular advantage of a modular approach to climate tech.

Lastly, you need data to show resilience. If you want a chance of your tech going mainstream as an industry-ready solution, it must be able to prove its value in many environments, industries, climates, and contexts.

The value of these points are evident when considering technologies like direct air capture (DAC). Though it is a nascent industry, DAC has a huge potential role to play in achieving global net-zero. DAC technologies need

to demonstrate they compete on price, can scale adaptably and can remove carbon across geographies for multiple uses.

## Data is an asset too few startups have

Unfortunately, rich operational datasets that can prove that a solution is effective, resilient, and flexible is an asset too few have. Too many solutions are still stuck in the FOAK stage. They're unable to move from a First-of-a-Kind solution, let alone to a point of being operational in multiple industries, by multiple customers, in different commercial settings or use cases, collecting this gold dust data.

This means that solutions have yet to unlock a positive feedback loop where new deployments yield further proof for investors and customers, leading to further deployments and data. Although not an easy issue to fix, and one that political developments and macroeconomic trends are making far harder, the climate tech industry must find pathways to reinforce its competitiveness. At *Mission Zero Technologies*, chasing this positive feedback loop has delivered a 60% product cost reduction within a single year, and established the responsive learning environment needed to establish market relevance.

There are some clear lessons to learn. Namely - real-world problems need real, working solutions, and despite its importance, climate tech doesn't exist outside of a capitalist context.

Climate technologies should try, whenever possible, to aim for deployability, use proven technologies with established supply chains, and to make working solutions for today's problems rather than miracle cures and moonshots. Though not always possible, this will give a startup the best chances of proving to investors, customers, and policymakers that the economic case for climate tech is clear.

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