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<https://www.latitudemedia.com/news/clean-techs-very-weird-year>

Clean tech's very weird year

Startups were particularly hard hit by a slow rollout of federal guidelines.

2023 was a year full of market contradictions.

In early November, BloombergNEF projected that the third quarter of this year was [climate technology's best fundraising period](#) since 2021, with the sector raking in \$16.6 billion. During that same quarter, BNEF said, 34 new climatetech-focused venture capital and private equity funds closed, representing an estimated \$8.2 billion in additional capital.

However, the report said, the impressive funding totals (boosted by a handful of high-value deals) obscured some less rosy realities. For instance, the quarter's record-low number of completed deals, and the year's [clean energy stock market selloff](#) are both evidence of an increasingly cautious

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"People ask me frequently, 'What the heck happened in 2023?'" said Rob Wilder, who manages the WilderHill Clean Energy Index.

"Our index went up over 200% in 2020 — I mean, that's remarkable," he added. "And then in 2021 it dropped, and in 2022 it dropped hard again. We're now in very end of 2023 and I feel confident saying we'll drop for a third year."

But the current climatetech market is a more realistic one than the "gold and unicorns" outlook of 2019 and 2020, Wilder said. 2023 was representative of the market's "growing pains" rather than an indication of long-term outcomes.

Clean tech investments faced a number of compounding headwinds this year, but the first and most obvious is high interest rates.

"Traditional fossil fuels do a little better in a high interest rate environment, which kills wind and solar, and kills EVs too," Wilder said, pointing to long lead times and payback cycles in many clean energy sectors. "When interest rates are high, the relative value of renewables gets dinged."

But high interest rates aren't the only villain behind climatetech's problems in 2023; lingering supply chain challenges also posed problems.

Take the battery industry. Because batteries are generally decreasing in price, Wilder said, you'd expect to see margin expansion in battery companies, and an increase in share prices. But [critical mineral supply problems](#) — from nickel and cobalt extraction to lithium refinement — continue to plague the industry, and aren't likely to be resolved anytime soon.

Policy slowdowns also took their toll. ... , founder of investment advisory ..., said California's [net metering changes](#) contributed greatly to the "beating" [residential solar stocks](#) suffered this year.

At the federal level, billions in funding for cleantech sectors have bolstered the industry. But prolonged uncertainty about the details of certain benefits dampened the market, Wilder said, pointing to recent [updates to IRA tax credit requirements](#) impacting EV and battery makers.

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Rob Wilder, manager of the WilderHill Clean Energy Index

Startups, he added, were particularly hard hit.

“The rollout was a bit lugubrious,” Wilder said. “These small startups — in EVs, solar, wind, batteries, for example — they need capital yesterday, and when the federal government is slow to roll out the new rules, they get killed.”

Investors in those sectors were wary of investing without additional clarity on whether companies would qualify for tax benefits, he added. A [December report from](#) ... had a similar take, attributing clean energy's “compressed” valuations in part to “slow implementation of policy support measures.”

Battery startups, some of which have faced [recent stock crashes](#), are an example of the vicious cycle smaller companies are facing. Wilder cited the example of the recycling subsector, which by definition requires huge up-front capital that wasn't on offer 2023. Had companies been able to access capital, projects would likely be much further along than they are today, he said.

The structure of many clean energy projects— high up-front capital expenses, and lower long-term operating expenses — has been made more challenging by high interest rates, ... said. When the cost of financing rises dramatically, projects that “penciled out” a few years ago start to be less financially viable.

That’s a dynamic that has been exacerbated by the extremely long development timelines and backlog of projects in the U.S., he added: “A project might get all shovel ready but then have to sit for a few years before it can actually begin to get interconnected.”

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There’s another upside to lower stock prices. Wilder said pricing in renewable equities is lower, making for a more “desirable” (though still risky) entrypoint.

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Moving into 2024, however, both ... and Wilder are watching price-to-earnings ratios as signs that the market is leveling out. Over just a few years, the market has evolved from solar companies “looking like tech stocks” to the inverse in 2023, ... said.

“I take some solace in the notion that things have dropped,” Wilder added. Current P/E ratios for clean energy are “much less daunting” than during the 2020 peak, when interest rates were near zero, he added.

“This is more normal. If rates are four percent and five percent, and PEs are more normal, it may be less weird in 2024.”