

A modern building with a vertical garden facade and solar panels. The building is multi-storied with large windows and balconies. The facade is covered in lush green plants, including trees and shrubs. Solar panels are visible on the balconies. The sky is clear and blue.

STIFEL | VENTURE BANKING

Climate Tech Investment Trends

Will Climate Tech achieve its ambitious goals?

H1 2024

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Introduction

Will Climate Tech Achieve Its Ambitious Goals?

Meet Climate Tech. Climate Tech focuses on decarbonizing all sectors of the economy. It unites public and private efforts to achieve the UN’s Paris Agreement goal of limiting global temperature rise to 1.5°C above pre-industrial levels.

Learning from the challenges of CleanTech 1.0. Between 2006-2011, investors put \$25B into clean energy technologies, with over half lost. Despite the challenges of CleanTech 1.0, these investments were crucial for advancing R&D in areas like thin-film solar, biofuels, and battery technology. CleanTech 1.0 enabled the next wave of climate technology innovation, referred to as Climate Tech.

Climate Tech enjoys policy advantages. Climate policy has advanced since CleanTech 1.0, placing private markets in a stronger position: 47% of countries, and nearly 300 U.S. companies, have pledged or codified net zero targets, while carbon trading markets and clean energy tax credits are now widespread and established.

Yet Climate Tech still faces an uphill battle. Following the wave of investment in 2021, shifting sentiment has uniquely challenged the sector, which already has inherently longer development cycles, higher capital requirements, and longer time horizons to exit than other sectors.

Climate Tech must succeed, but will it? Society needs decarbonizing technologies to hit crucial net zero targets. But success for now appears to rely heavily on incentives, such as those in the Inflation Reduction Act (IRA).

Sources: Pitchbook Data, Inc. Introduction to Climate Tech: A Taxonomy Overview. 2021; Net Zero Tracker. Aug 2024. <https://zerotracker.net/>



Climate Tech Investment Trends

Climate Tech is drawing fewer but larger deals, while overall capital remains stable amidst tough competition for funding from AI and other sectors.

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Climate Tech Subsector Trends

Energy remains a strong focus, while Carbon Tech and Food & Agriculture show growth. Investor enthusiasm in other subsectors is milder.

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Early vs. Late-Stage Trends

Early-stage Climate Tech sees strong investor confidence, but growth and late-stage funding face slowdowns and challenges with securing patient capital.

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Fundraising Trends

Despite a dip in 2023, Climate Tech fundraising is rebounding in 2024, reflecting investor confidence despite economic uncertainties.

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The Inflation Reduction Act

The IRA has spurred significant Climate Tech investments, with notable momentum in four key subsectors.

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Risks to the IRA

Future Climate Tech progress within certain subsectors hinges on government policies, but a change of administration could challenge key elements of the IRA.

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Tailwinds

The drive toward net zero by 2050 is boosting Climate Tech, with a maturing financing landscape offering more capital and opportunities for immediate impact.

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Headwinds

Late-stage capital remains hard to secure, with long timelines to exit and regulatory risks adding to the challenges facing Climate Tech.

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The Latest Changes in Climate and Other Tech Sectors

Climate Tech venture capital dips slightly. The amount of venture capital flowing into Climate Tech dipped only 9% from H1 2023 to H1 2024.

2024 brings larger but fewer Climate Tech deals. Deal count fell 27% in the same timeframe, while the median deal size is \$1.4M higher than last year.

Climate Tech deals are larger than most. While the total capital invested in Climate Tech trails behind the totals for AI, Fintech, and overall Technology, this sector consistently sees larger deals—about \$2M larger.

AI buzz is detracting capital from all sectors. Climate Tech is no different. In 2023, 3.7X more venture capital flowed to AI than Climate Tech. In 2024, it’s 6.5X more.

Fintech and Climate Tech follow similar trendlines. Fintech, similarly funded by a specialized subset of investors, consistently sees about 1.4X more total capital invested than Climate Tech.

Sources: PitchBook Data, Inc.; *Data has not been reviewed by PitchBook analysts.

Climate Tech	H1 2023	All 2023	H1 2024
Median Deal Size	\$6.25M	\$6.23M	\$7.63M
Venture Capital Invested	\$6.75B	\$14.25B	\$6.12B
Deal Count	390	769	286

PitchBook Climate Tech Analyst-curated Workspace; PitchBook Data, Inc.; * Data has not been reviewed by PitchBook analyst

Technology	H1 2023	All 2023	H1 2024
Median Deal Size	\$4.6M	\$4.9M	\$5.1M
Venture Capital Invested	\$28.62B	\$56.9B	\$36.7B
Deal Count	1714	3291	1530

PitchBook technology keyword. PitchBook Data, Inc.; *Data has not been reviewed by PitchBook analysts.

Artificial Intelligence & Machine Learning	H1 2023	All 2023	H1 2024
Median Deal Size	\$4M	\$4.07M	\$5M
Venture Capital Invested	\$32.14B	\$53.21B	\$40.32B
Deal Count	1538	3053	1739

Artificial Intelligence & Machine Learning PitchBook vertical exclusive of Climate Tech vertical. PitchBook Data, Inc.; *Data has not been reviewed by PitchBook analysts.

Fintech	H1 2023	All 2023	H1 2023
Median Deal Size	\$4.41M	\$4.6M	\$5M
Venture Capital Invested	\$13.35B	\$20.36B	\$8.63B
Deal Count	865	1559	815

Fintech PitchBook vertical exclusive of Climate Tech vertical. PitchBook Data, Inc.; *Data has not been reviewed by PitchBook analysts.

Growth and Caution Across Climate Tech Subsectors

Energy remains a cornerstone of Climate Tech. While investments have remained relatively stable between H1 2023 (\$3.83B) and H1 2024 (\$3.81B), the amount is significantly higher than other Climate Tech subsectors, indicating its outsize importance and continued attractiveness to investors. The median deal size has grown from \$7.8M in H1 2023 to \$8.45M in H1 2024, with investors willing to commit more capital per deal.

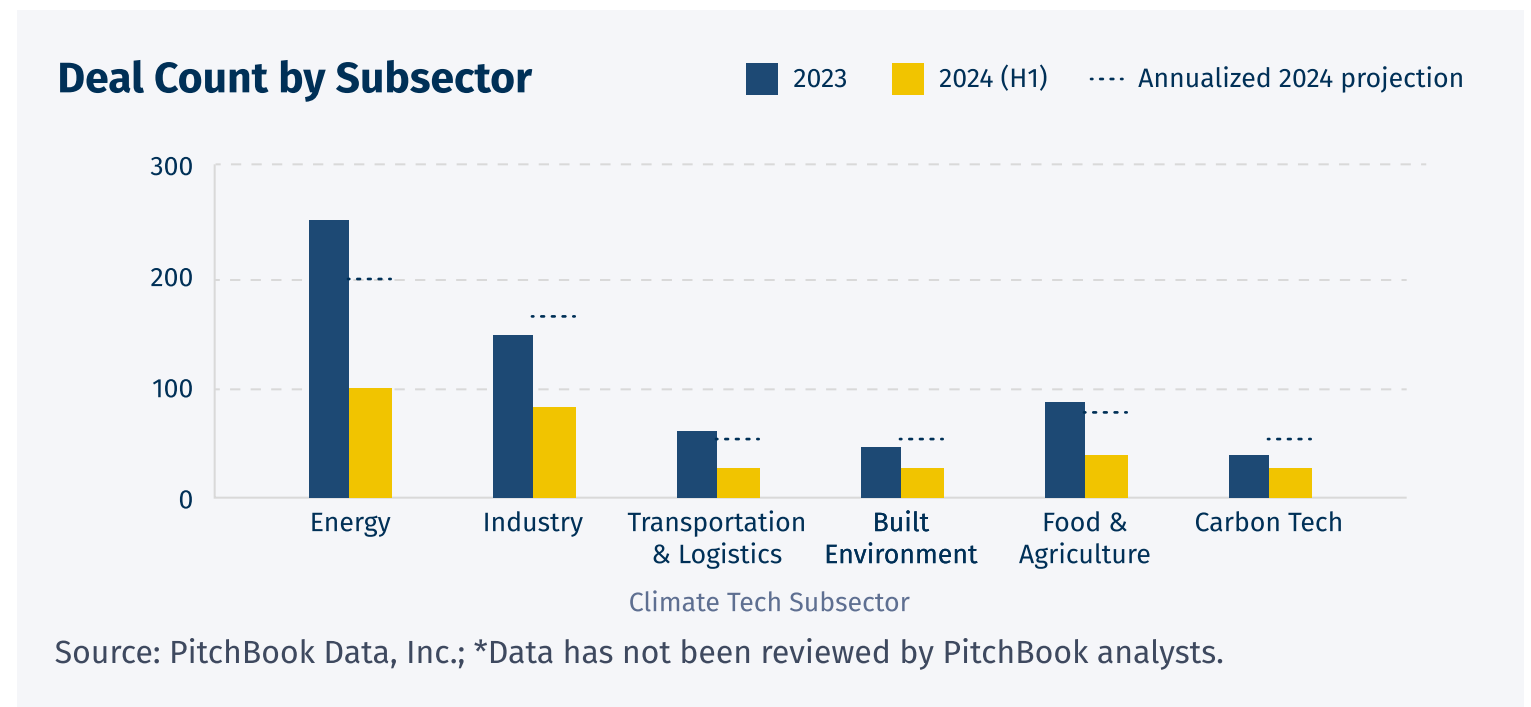
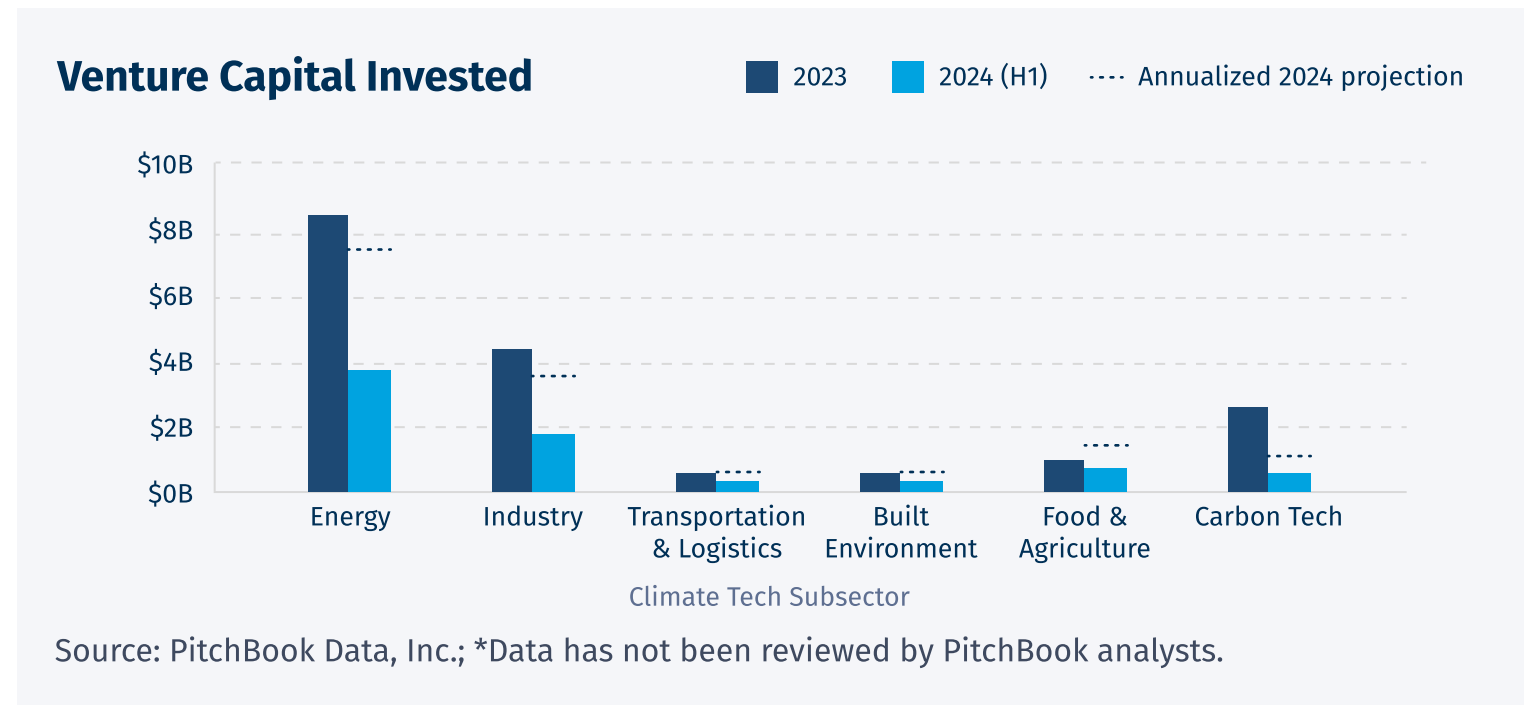
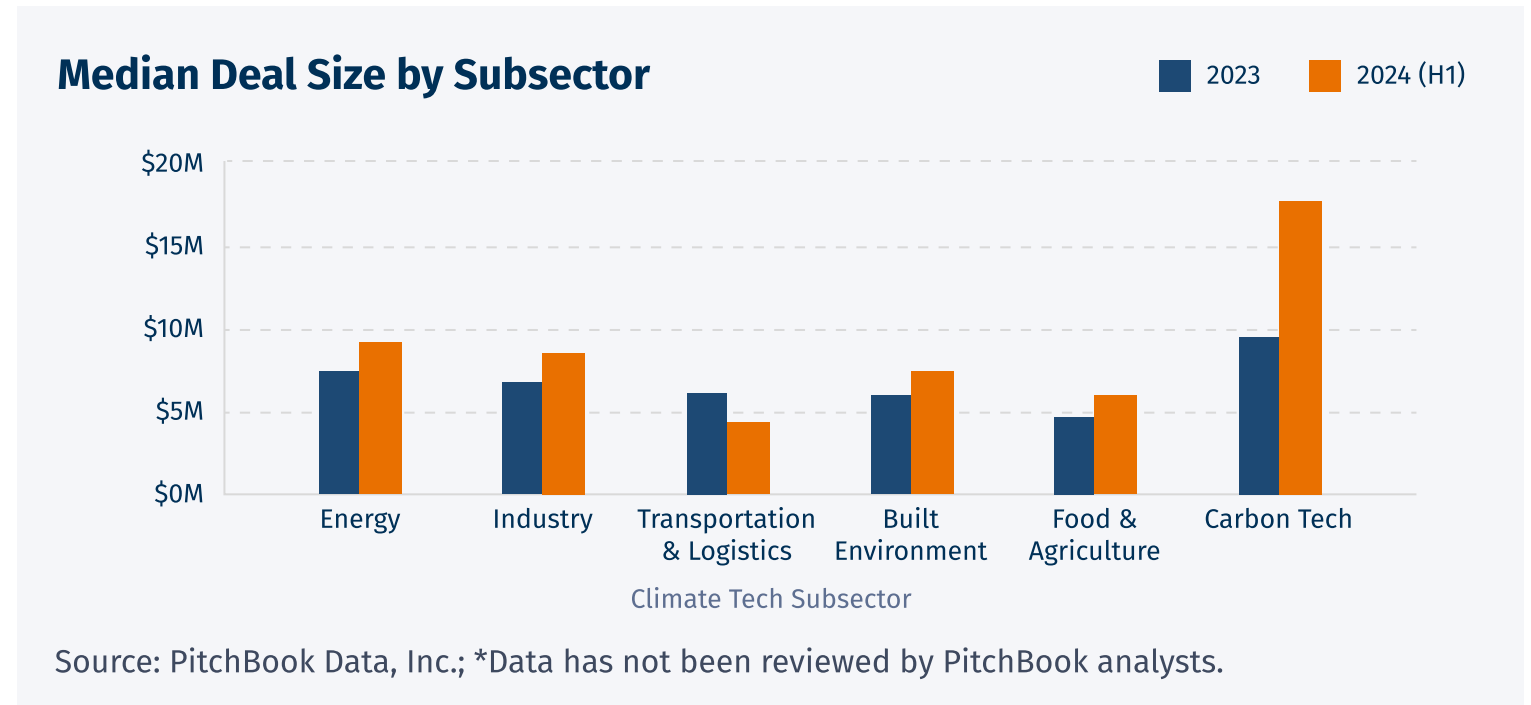
Carbon Tech deal size is up. Although the total venture capital invested in Carbon Tech is down since last year, the sharp increase in median deal size from \$11.19M in H1 2023 to \$17.19M in H1 2024 indicates that investors may be making larger, more concentrated bets in this subsector.

Food & Agriculture shows promise. While a smaller subsector, it has seen a minor increase in median deal size, from \$4.77M in 2023 to \$7.23M in H1 2024. It has also seen growth in overall venture capital investment, by \$74.59M from H1 2023 to H1 2024.

Investors are cautious about Transportation & Logistics. After a large wave of investment for EVs several years ago, this sector is slowing down. Median deal size dropped significantly from \$7.55M in H1 2023 to \$4.36M in H1 2024, mirroring a drop in venture capital and deals.

Built Environment investments are down. The Built Environment subsector shows significant volatility, with a sharp drop in median deal size from \$18.33M in H1 2023 to \$8.29M in H1 2024, and less venture capital invested overall.

Sources: PitchBook Data, Inc.; *Data has not been reviewed by PitchBook analysts; See subsector charts in the Appendix for more information.



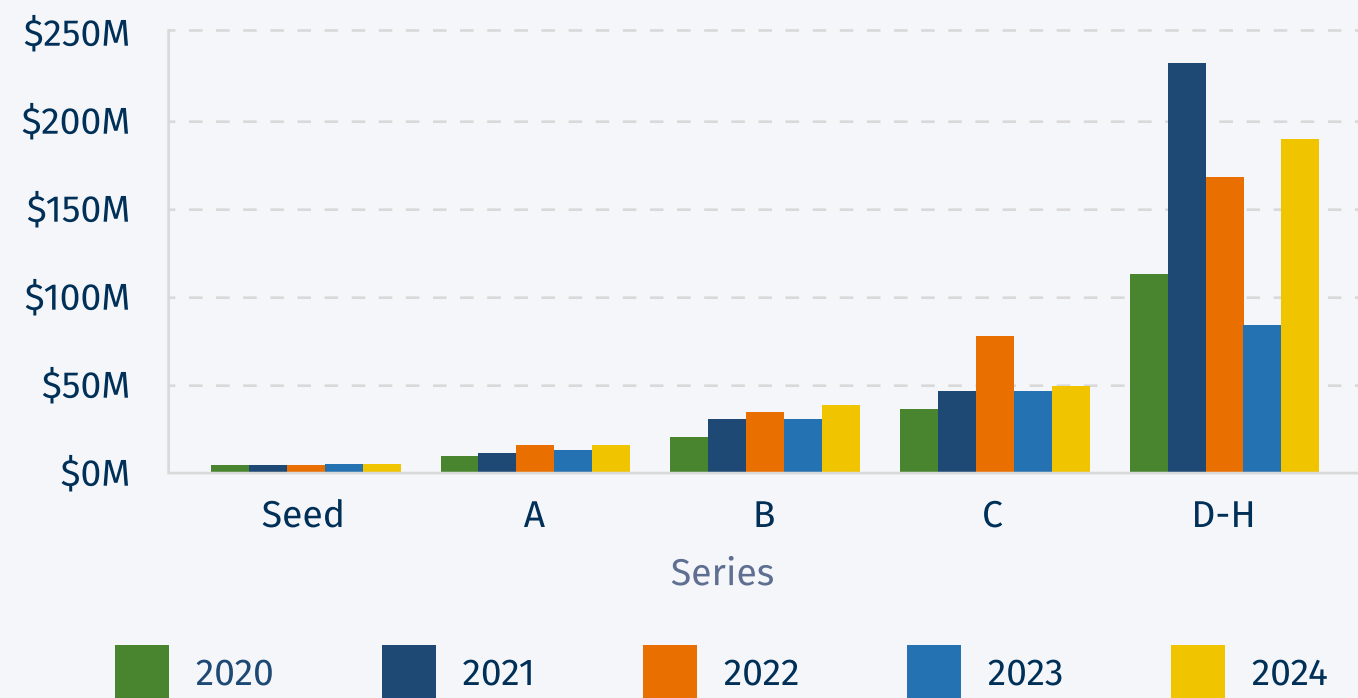
Deal Activity Across Early and Late Stages

The sector is seeing a flight to quality. In 2023 and 2024, the overall number of Climate Tech deals has decreased, but the deals that are occurring are highly competitive, indicating a notable flight to quality among investors.

Climate Tech needs “patient” capital. Climate Tech companies require substantial pools of patient capital throughout their lifecycle. While early-stage firms often have continuity funds to support their portfolios, these funds alone do not sufficiently sustain the broader ecosystem, particularly in the underdeveloped late-stage market.

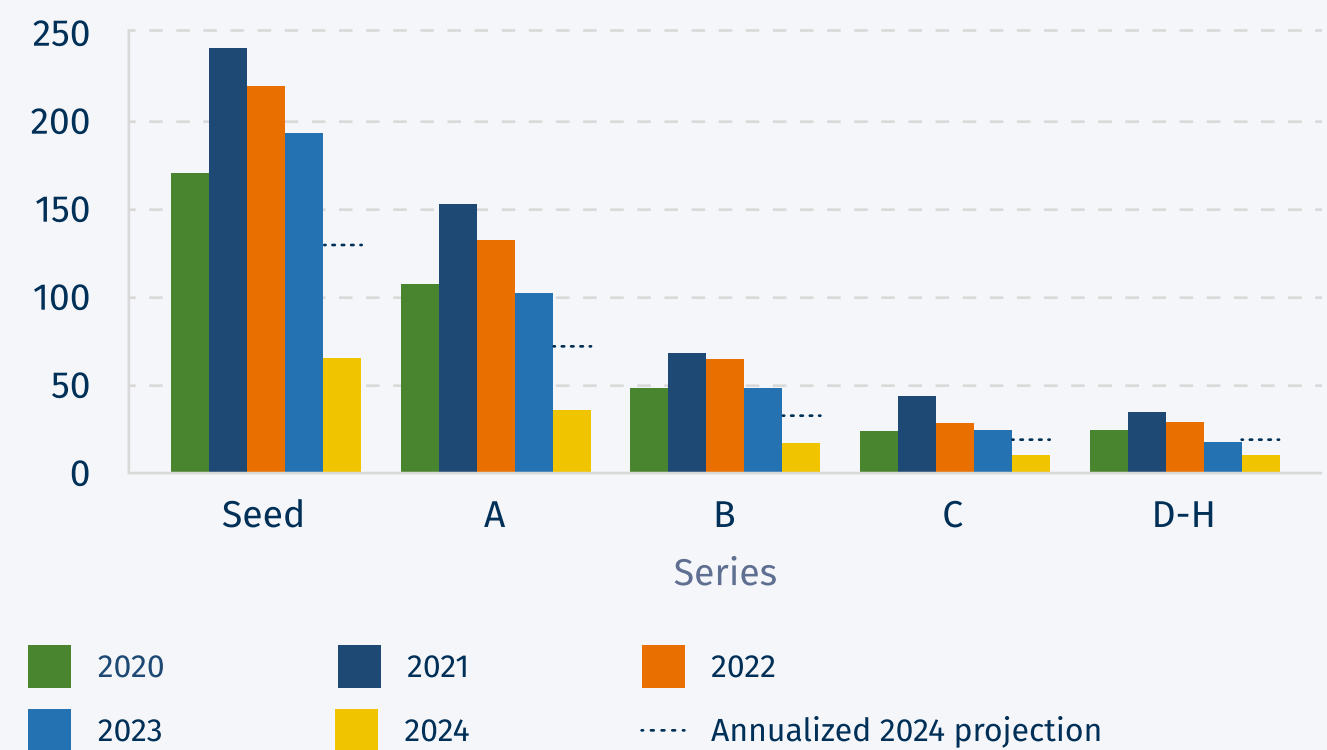
Climate shows signs of healthy early-stage activity. Series A investments in 2024 highlight a flight to quality, with fewer but larger and higher-valued deals. Median valuations for Seed A have risen by 33%, and Series A deal sizes are up 23% in the first half of 2024. Despite 32% fewer deals, total capital deployed in Series A is projected to be 7% higher than in 2023.

Median Deal Size by Series, 2020-2024



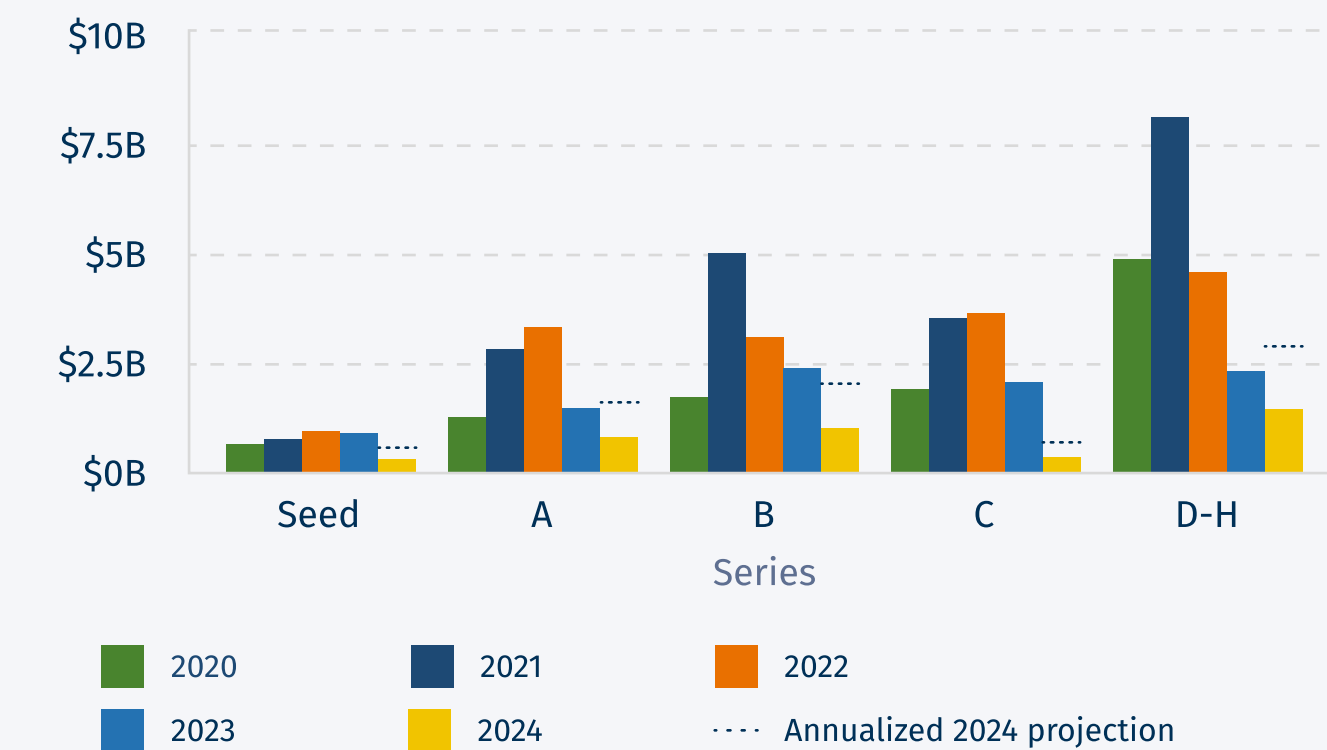
Source: PitchBook Data, Inc.; *Data has not been reviewed by PitchBook analysts.

Deal Count by Series, 2020-2024



Source: PitchBook Data, Inc.; *Data has not been reviewed by PitchBook analysts.

Capital Invested by Series, 2020-2024



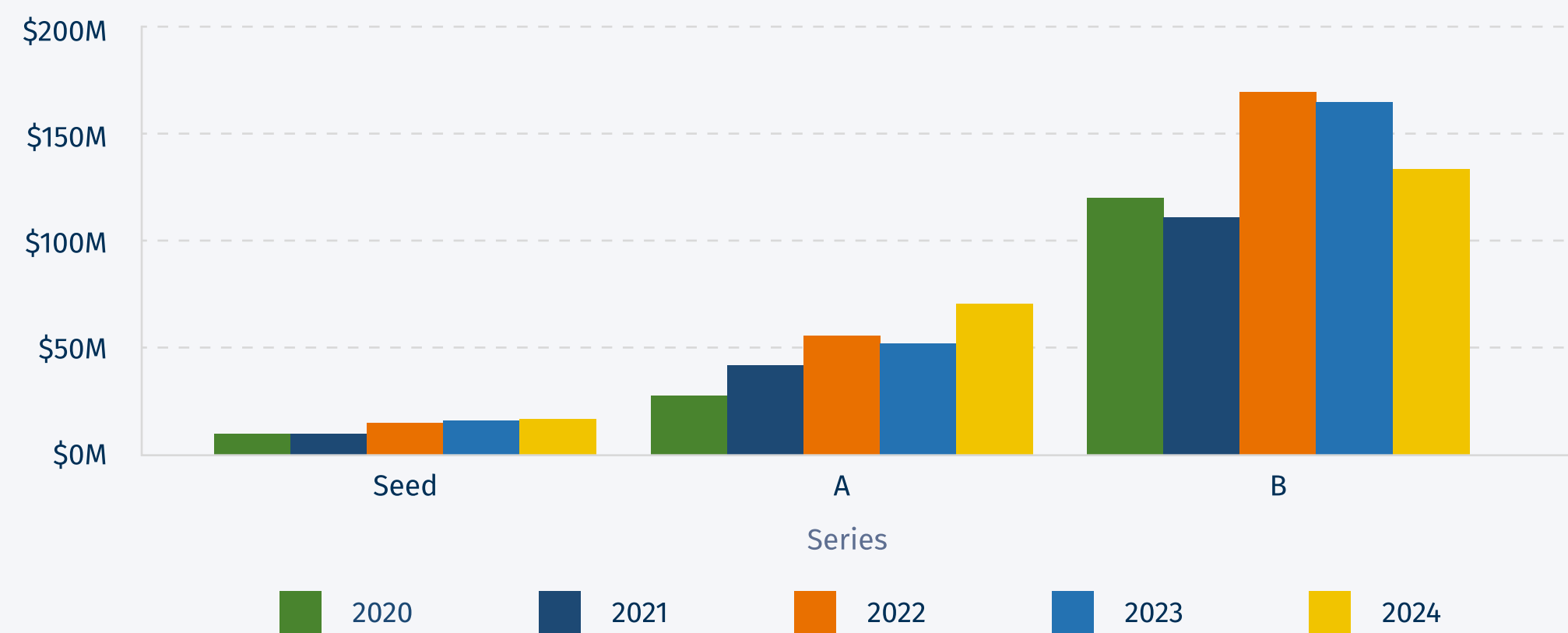
Source: PitchBook Data, Inc.; *Data has not been reviewed by PitchBook analysts.

Early-stage investors are active and agile. The early-stage Climate Tech venture capital landscape is robust, with well-informed investors driving growth. Funds like Breakthrough, EIP, and Prelude have shown the ability to scale and lead larger rounds as companies mature, though this is more the exception than the norm.

The growth-stage market is slowing. Climate Tech growth stages are slowing down and valuations are correcting, with 40% fewer Series B and C deals in 2024 vs. 2023. Median valuations for Series B and C have decreased by 19% and 21%, respectively. Series B is expected to see a 15% reduction in total capital deployed, while Series C may experience a 66% decline compared to 2023.

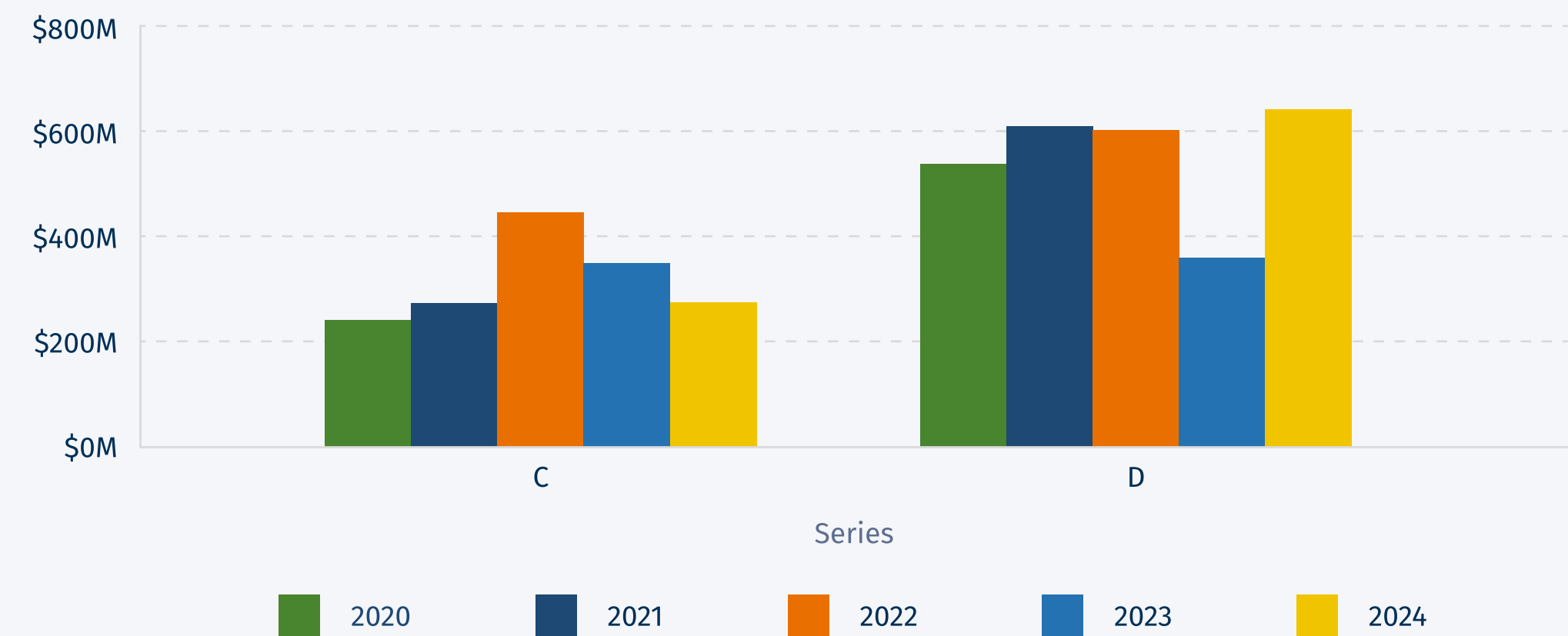
Late-stage investors hold back. The "growth to late-stage valley" remains a significant hurdle for Climate Tech companies. The long time horizon to commercialization and the investment required along the way leads to cautionary examples of late growth stage companies failing to access late-stage pools of capital. Typical late-stage crossover investors lack expertise in Climate Tech and need to learn the appropriate metrics and validations for the sector.

Median Post Valuation - Seed, A, B Series



Source: PitchBook Data, Inc.; *Data has not been reviewed by PitchBook analysts.

Median Post Valuation - C & D Series



Source: PitchBook Data, Inc.; *Data has not been reviewed by PitchBook analysts.

Sources: PitchBook Data, Inc.; *Data has not been reviewed by PitchBook analysts.

Funds Navigating Long Horizons Yet Sustaining Momentum

Climate Tech poses unique fundraising challenges. Due to its extended exit timelines, often over 10 years, Climate Tech fundraising differs from traditional tech investing. Early on in the lifecycle of a climate-focused fund, there are often few tangible proof points to validate company valuations and in turn portfolio performance—unlike software investments, which can deliver returns in 3-5 years and have clear benchmarking along the way. Despite these challenges, fund managers have been able to raise large amounts without the usual portfolio return data that LPs typically expect.

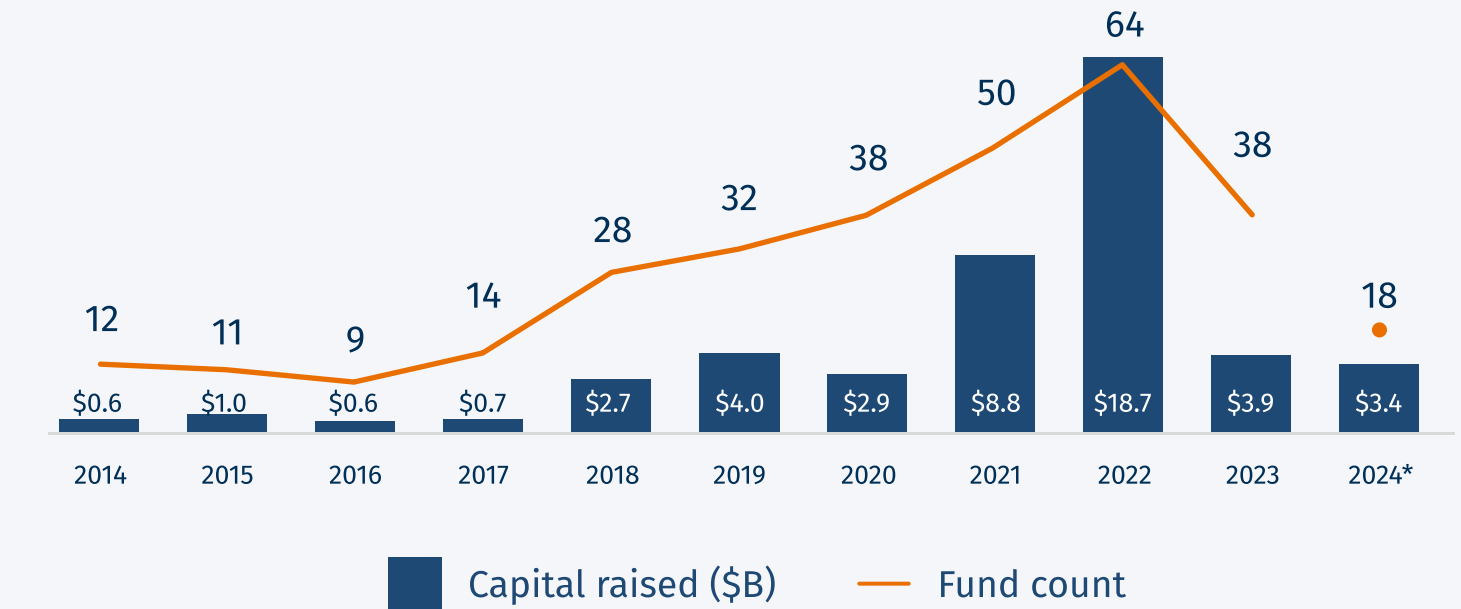
Fundraising shows momentum despite challenges. In 2023, Climate Tech saw a drop in fundraising to \$3.9B, reflecting broader venture capital trends. However, 2024 is on track to outpace 2023, with \$3.4B raised in the first half of the year alone. Recently raised additional funds are not reflected in this data—for instance, this figure doesn’t include Breakthrough Energy Ventures, which has raised nearly \$1B after its latest fundraising round in August 2024.

This influx of funds in 2024 indicates investor confidence remains strong, perhaps buoyed by general optimism and the tailwinds driving this sector. However, the sector is not immune to economic downturns, and the long development cycles make it particularly vulnerable during recessions.

Slow exit activity is having an impact. Exit activity in Climate Tech has been low in the current macroeconomic environment, contributing to slower Series D and beyond investments. This trickle-down effect has made late-stage investing more cautious compared to previous years.

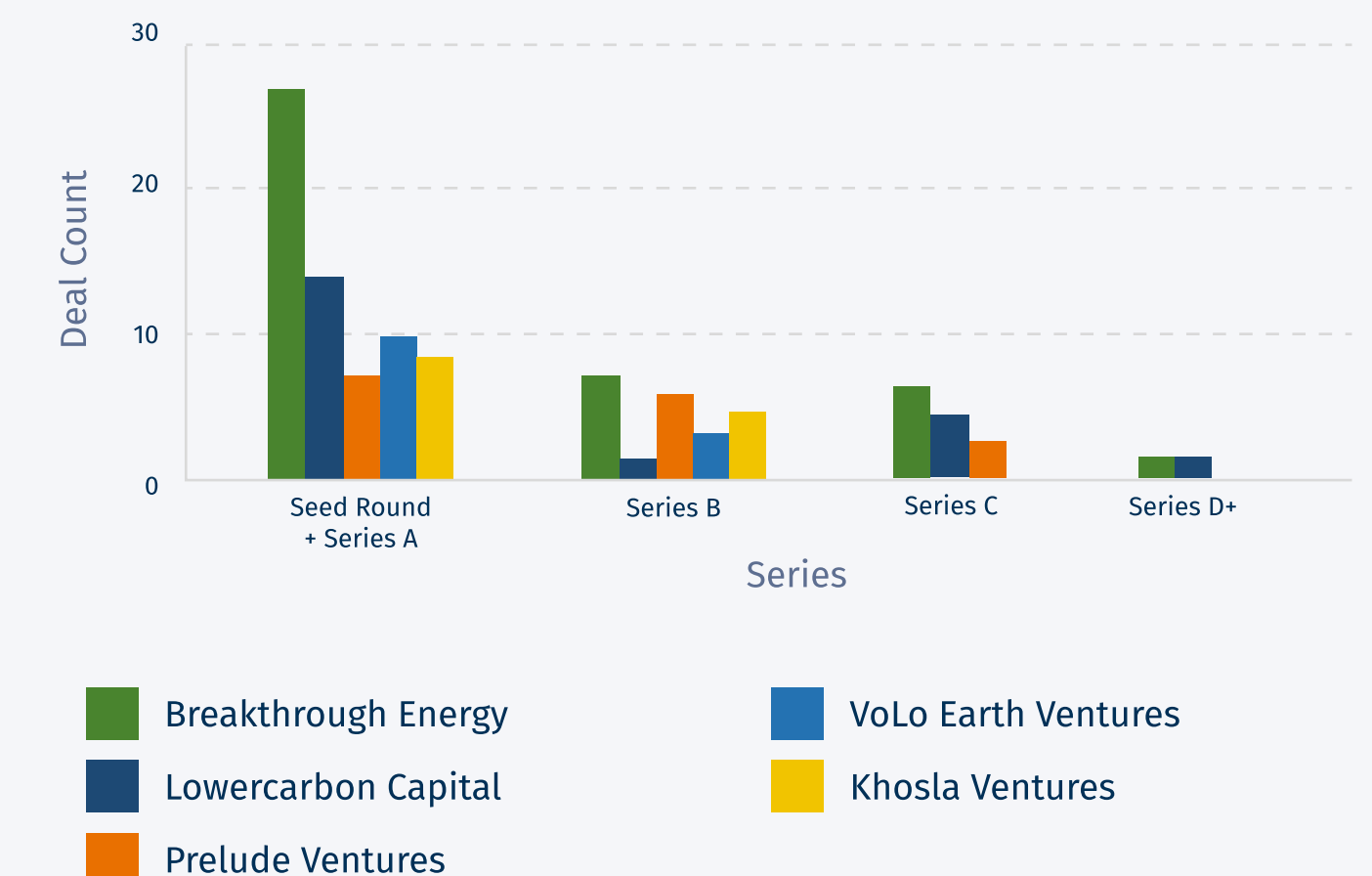
Sources: Nizar Tarhuni, Paul Condra. PitchBook Data, Inc. 2024 Climate Tech Funds Report. July 16, 2024; PitchBook Data, Inc.; *Data has not been reviewed by PitchBook analysts.

Climate Tech VC Fundraising Activity



Source: PitchBook Data, Inc.; Global data as of June 24, 2024

Top Climate Tech Lead Investors (2021-2024)



PitchBook Data, Inc.; *Data has not been reviewed by PitchBook analysts.

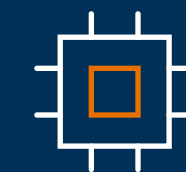
Biden's Climate Tech Initiatives Driving Venture Opportunities

The Biden administration's key legislative acts have allocated **over \$1T for climate, energy, and infrastructure** initiatives. As of June 2024, **less than 17% of the total has been spent**—about \$208B—according to a POLITICO analysis.

The 2022 Inflation Reduction Act (IRA) is a cornerstone of the administration's climate strategy

- ◆ The IRA offers incentives for clean energy manufacturing, investments in demonstration projects, and loans and loan guarantees for various clean energy technologies.
- ◆ This provides the private sector with unprecedented investment certainty, with several provisions extending over a decade.
- ◆ The IRA allocated approximately \$11.7B to the Department of Energy's Loan Programs Office (LPO), significantly increasing its loan authority by about \$100B.
- ◆ So far, the LPO has announced or completed nearly \$30B in loans or loan guarantees for about 23 commercial projects, supporting critical areas such as the domestic supply chain for electric vehicle batteries, clean hydrogen production, and the replacement of fossil fuels in steelmaking.

Since January 2021, private companies have announced **\$898B** in commitments in Clean Tech industries:



\$395B Semiconductors & Electronics



\$42B Biomanufacturing



\$81B Clean Energy Manufacturing & Infrastructure



\$177B EVs & Batteries



\$160B Clean Power

Source: Invest.gov (2024). Investing in America Map. Retrieved from https://www.whitehouse.gov/wp-content/uploads/2023/11/Invest.gov_PublicInvestments_Map_Data_CURRENT.xlsx.

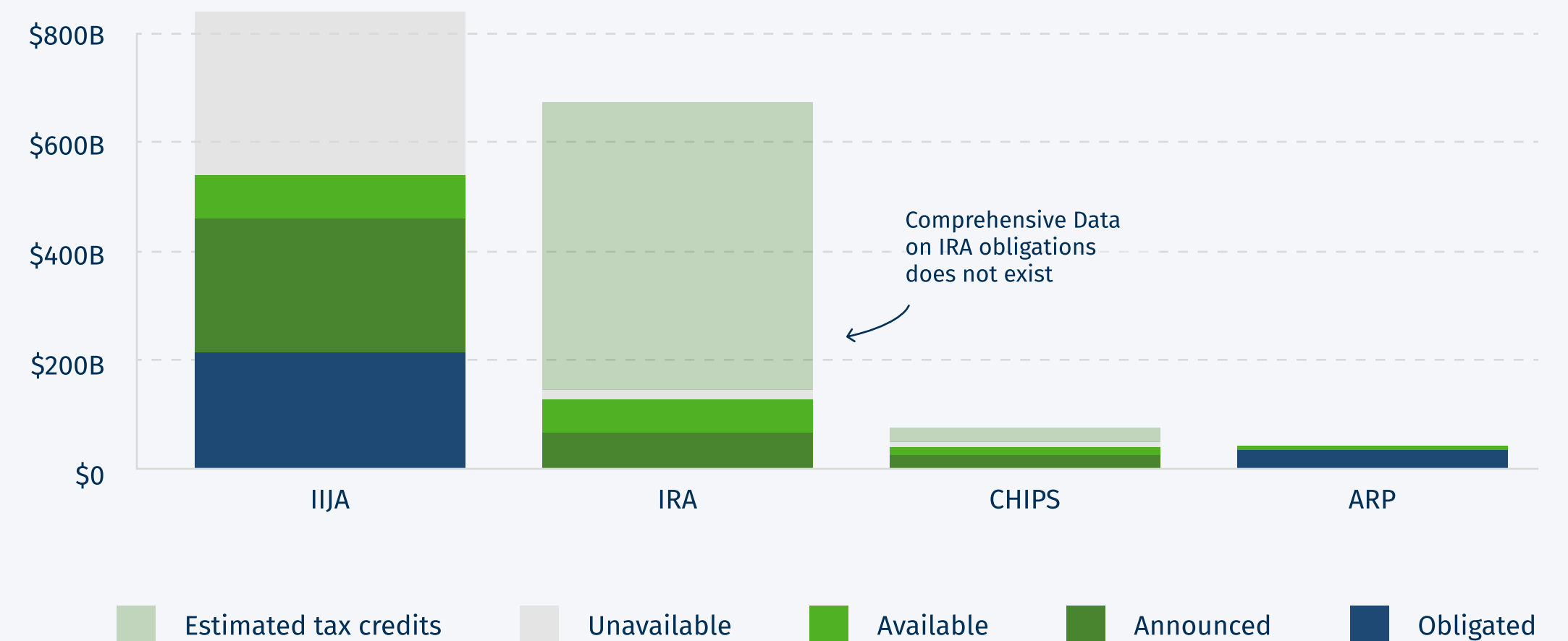
Climate Tech incentives extend beyond the IRA

- ◆ The **2021 Infrastructure Investment and Jobs Act (IIJA)** provided \$1.2T in funding to modernize transportation systems, improve broadband access, and enhance the nation’s energy infrastructure, with indirect benefits to Climate Tech through infrastructure improvements.
- ◆ The **2021 American Rescue Plan** supported Climate Tech by providing economic recovery funds, which enabled investments in renewable energy projects and green infrastructure at the state and local levels.
- ◆ The **2022 CHIPS and Science Act** funds advanced manufacturing, R&D, and workforce development, driving innovation in technologies that support clean energy and Climate Tech initiatives.

Sources: Invest.gov (2024). Investing in America Map. Jul 17, 2024. https://www.whitehouse.gov/wp-content/uploads/2023/11/Invest.gov_PublicInvestments_Map_Data_CURRENT.xlsx; Kelsey Tamborrino, Timothy Cama, and Jessie Blaeser. Trump vs. Biden’s historic climate agenda. POLITICO. Jul 29, 2024. <https://www.politico.com/news/2024/07/29/biden-climate-spending-trump-2024-00171593>

POLITICO: More Than 70% of Appropriations Have Not Been Obligated

Stages of funding across IIJA, IRA, CHIPS and the infrastructure, climate, and energy portions of ARP



Source: USA Spending, Invest.gov, CHIPS.gov, POLITICO reporting; Jessie Blaeser/POLITICO; Note: Unavailable funding becomes available in FY 2025 and later. Obligations are as of June 30, 2024, except for those under CHIPS, which are as of April 2024. Announcements are as of June 11, 2024.

Top Investment Areas Under the Inflation Reduction Act



Solar and Wind Energy

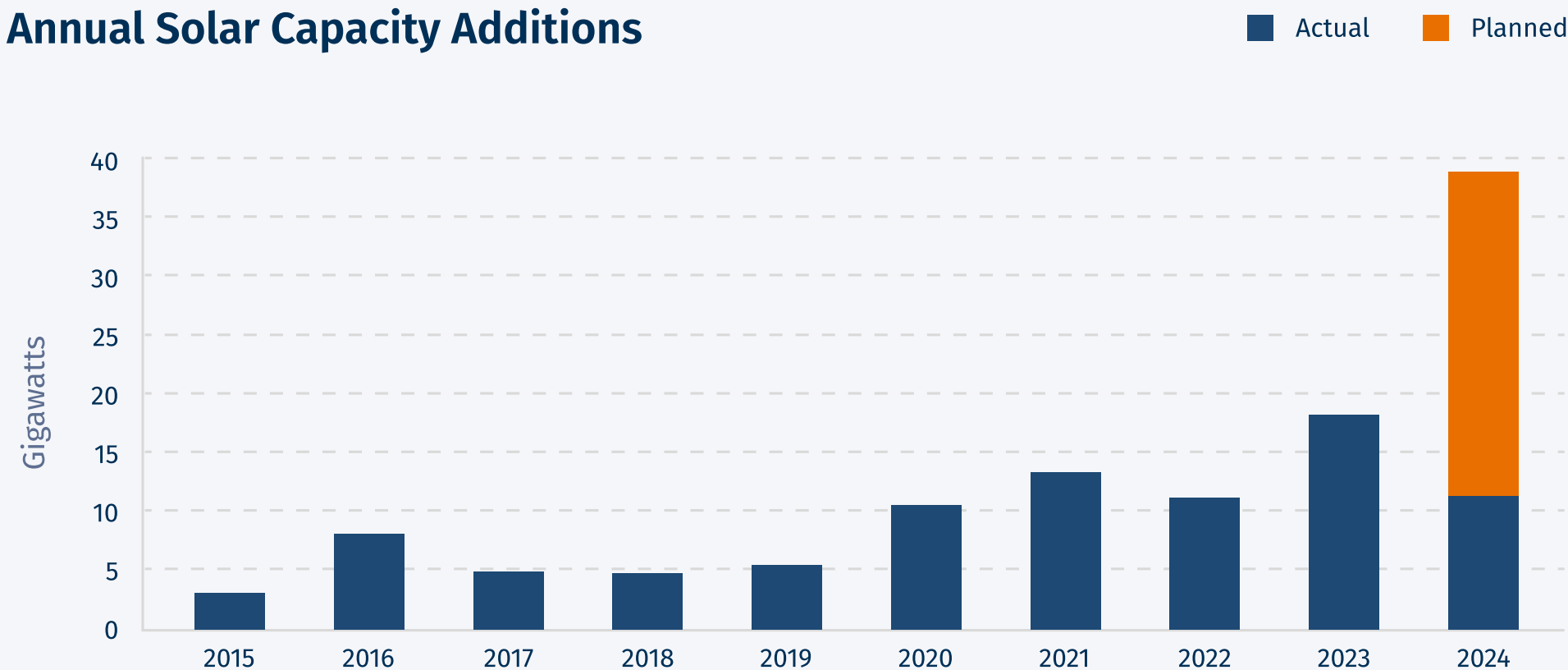
The IRA has spurred nearly \$17B in planned U.S. solar manufacturing investments since August 2022, leading to a 31% increase in new facilities. Solar capacity is now projected to reach about 340 gigawatts by 2030, nearly double the forecast from early 2021, while wind capacity is expected to grow by 43% to around 300 gigawatts by the same year.



Grid-Scale Electric Storage

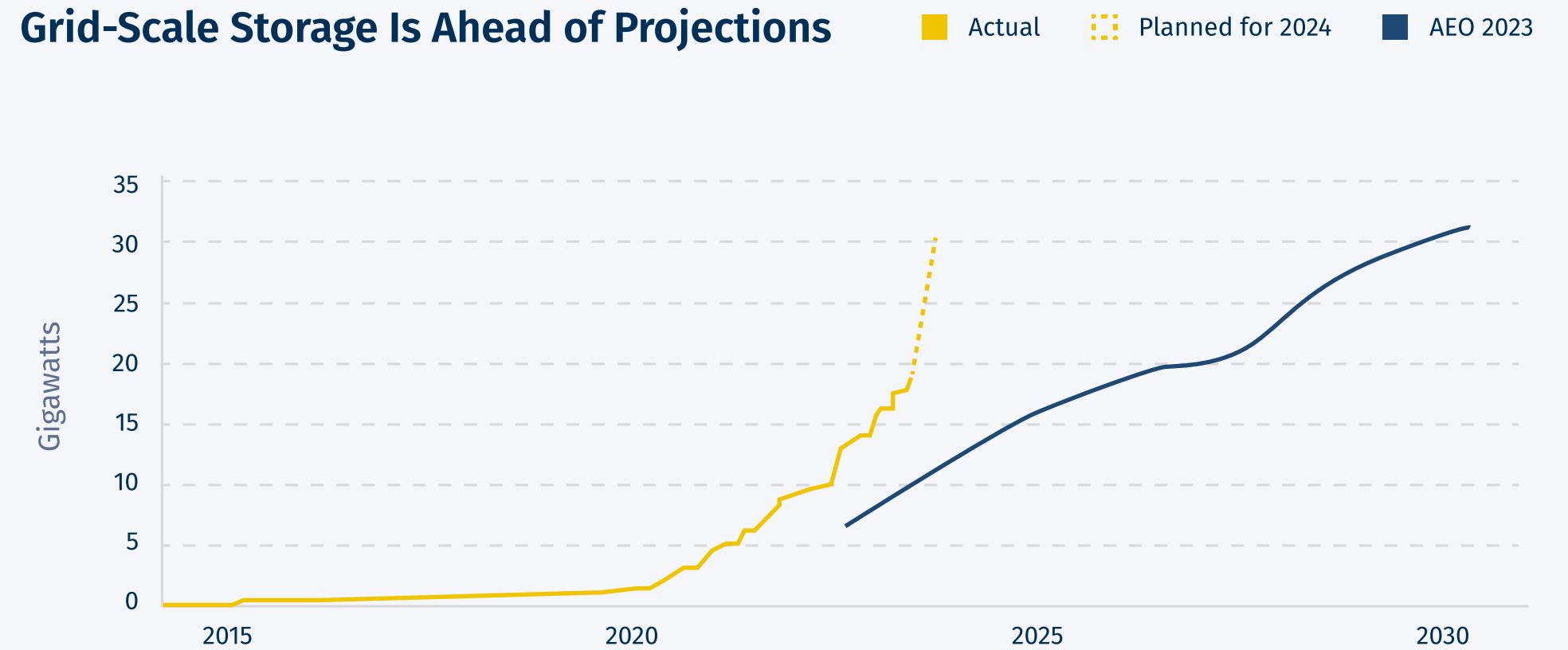
Incentives have driven a nearly twelve-fold increase in grid-scale energy storage capacity since 2021, with projections indicating that 2024 deployments could double the expected levels, significantly surpassing earlier estimates.

Annual Solar Capacity Additions



Source: U.S. Energy Information Administration; Note. Actual from EIA Monthly Energy Review. Planned from EIA Form 860M; As of June 27, 2024 at 12:00pm.

Grid-Scale Storage Is Ahead of Projections



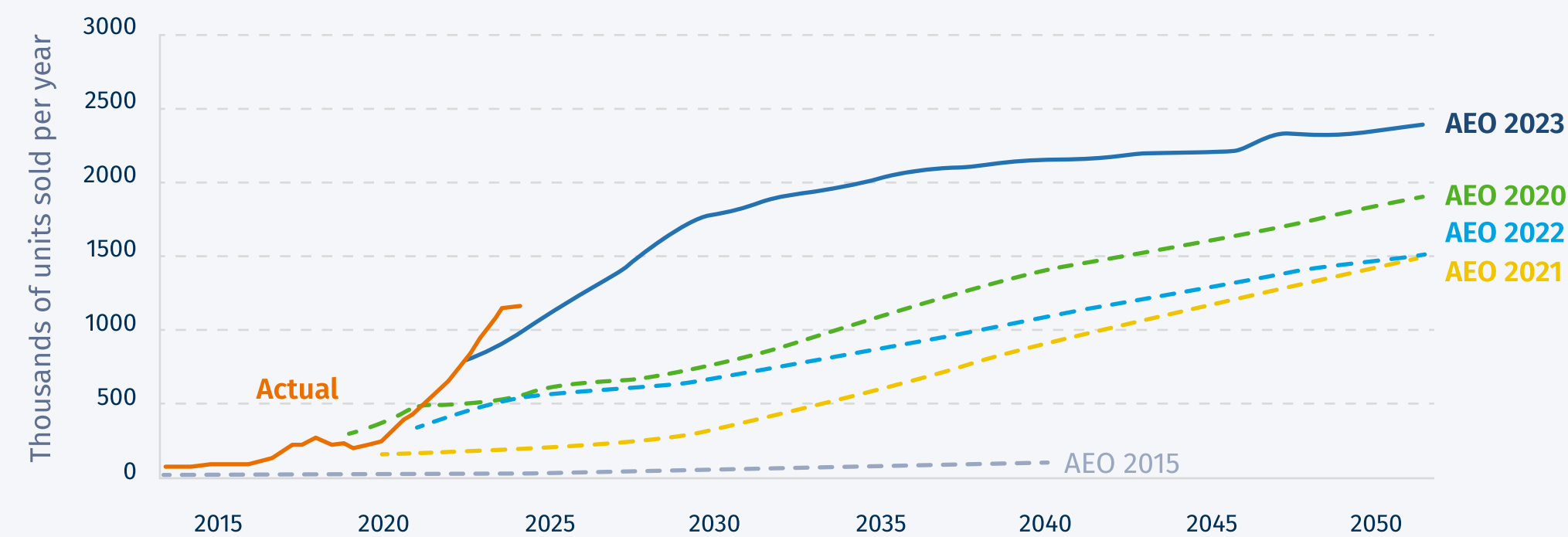
Source: U.S. Energy Information Administration; Note: Projections from EIA Annual Energy Outlook. Actuals from EIA Monthly Energy Review. Planned from EIA Form 860; As of June 27, 2024 at 12:00pm.



Electric Vehicles

The IRA has led to nearly \$180B in announced investments for EV and battery manufacturing since 2021, contributing to a five-fold increase in EV sales by 2023. The number of public EV charging ports has also nearly doubled, with more than one million EVs sold in 2023, three years ahead of initial projections.

Annual EV Sales Projections



Source: U.S. Energy Information Administration, Argonne National Laboratory; Note. Projections from EIA Annual Energy Outlook. Actuals from ANL Light Duty Electric Drive Sales Monthly Sales Updates, shown as a rolling 12-month sum to account for seasonality. As of June 27, 2024 at 12:00pm.



Manufacturing Facility Construction

Along with the CHIPS Act and IIJA, the IRA has contributed to a surge in U.S. manufacturing construction, particularly in computer, electronics, and electrical manufacturing—areas that underlie Climate Tech. Real spending has more than doubled since 2021 and private sector investments exceed \$410B.

Manufacturing Construction Spending



Notes: Value of Private Construction Put in Place for Manufacturing U.S. Census Bureau. Monthly at a seasonally adjusted, annualized rate. Nominal spending deflated by the Producer Price Index for Intermediate Demand Materials and Components for Construction, Bureau of Labor Statistics.

Sources: Heather Boushey, Justina Gallegos. Building a Thriving Clean Energy Economy in 2023 and Beyond: A Six-Month Update. The White House. Jul 1, 2024. <https://www.whitehouse.gov/briefing-room/blog/2024/07/01/building-a-thriving-clean-energy-economy-in-2023-and-beyond-a-six-month-update/>; Eric Van Nostrand, Tara Sinclair, Samarth Gupta. Unpacking the Boom in U.S. Construction of Manufacturing Facilities. U.S. Department of the Treasury. Jun 27, 2023. <https://home.treasury.gov/news/featured-stories/unpacking-the-boom-in-us-construction-of-manufacturing-facilities>

Are Climate Tech Incentives at Risk?

Climate Tech has gained momentum under the current administration, thanks to initiatives like the Inflation Reduction Act (IRA). However, with the potential for a Republican sweep, founders and investors must prepare for risks that could reshape the sector.

Securing off-take agreements and new project development for clean energy could be challenging amidst political uncertainty. This uncertainty might delay the commercialization of new energy technologies by a year or two. Venture-backed Climate Tech companies, many of which are operating with high burn rates, may not have the runway to weather these delays.

What is at risk?










- ◆ **Mandates will be targeted but are difficult to change.** Republicans are likely to target decarbonization mandates, though changing them will be difficult. They may attempt to use budget reconciliation to bypass the 60-vote requirement in the Senate, but its rules of use could limit their efforts.
- ◆ **Tax credits could be limited but are more broadly popular.** Tax credits are easier to cap or limit than mandates. However, many of these credits support jobs in Republican districts, so a new administration may not repeal them but instead cap their value, especially as costs exceed initial forecasts.
- ◆ **The LPO's \$200B may be redirected.** The Department of Energy's Loan Programs Office, which has over \$200B in remaining authority to finance projects, could see its operations slowed or redirected. A new administration may instead direct unspent IRA funds to fossil fuel projects.

What is less at risk?



- ◆ **Pre-allocated funds are locked.** Awarded grants and finalized loans are less likely to be clawed back. These funds are locked into contracts that are difficult to undo, regardless of political changes.
- ◆ **Projects in red states are likely safe.** Grants and loans that benefit red states or industries supported by Republicans, like biofuels and carbon tech, are less likely to face cuts.
- ◆ **Bipartisan projects are less vulnerable:** Initiatives like the CHIPS and Science Act and bipartisan-supported infrastructure projects are less likely to be disrupted. These efforts are critical for national security, economic growth, and public safety, and often enjoy broad political support.

Most at Risk	 Clean power projects	A new administration's Treasury appointees could rewrite or reinterpret these incentives without Congressional approval—potentially directing the tax benefits to fossil fuel companies instead. Incentives set to support power plants coming online in 2025 or later are especially at risk.
Unclear Risk	 Electric vehicles	The Treasury has already finalized EV consumer tax breaks, requiring a lengthy rulemaking process for changes. It's unclear how a change of administration would impact EVs. The Republican administration previously took steps to slow EV growth, but the current campaign has shifted to support EVs, citing Elon Musk's endorsement.
	 EV charging	Given Elon Musk's endorsement, it's unclear whether a Republican administration would remove the \$7.5B allocated for a national EV charging network. On the other hand, the candidate has repeatedly mocked this specific initiative.
	 Batteries	Much of the work on tax credits for EV batteries remains unfinished, leaving room for a new administration to change the rules to favor traditional energy sectors, without needing Congressional approval.
Least at Risk	 Clean manufacturing	The IRA's tax credits and domestic content requirements have driven a resurgence in U.S. manufacturing and added over 100,000 clean energy manufacturing jobs. A new administration may hesitate to undermine the 305 announced projects, with billions invested in key red states.
	 Carbon tech	Carbon capture and storage technologies are vital for reducing greenhouse gas emissions from industrial processes and power generation. In fact, this technology can remove emissions from coal or natural gas, leading some Republican leaders to heavily support it.
	 Biofuels	The biofuels industry benefits from strong backing in agricultural states, many of which are represented by Republican lawmakers. The previous Republican administration supported biofuels through measures like the Renewable Fuel Standard (RFS).



Sources: 100,000 Clean Energy Manufacturing Jobs Announced Since IRA; Companies Add 1,500 New Jobs in April. E2. May 7, 2024. <https://e2.org/releases/100000-clean-energy-manufacturing-jobs-announced-since-ira-companies-add-1500-new-jobs-in-april>; Blanca Begert. Trump can't cool Republicans' ardor for this climate tech. POLITICO. Jun 26, 2024. <https://www.politico.com/newsletters/california-climate/2024/06/24/trump-cant-cool-republicans-ardor-for-this-climate-tech-00164782>; Amanda Chu, Alexandra White. Has Joe Biden spurred an American manufacturing renaissance? Financial Times. Aug 16, 2024. <https://www.ft.com/content/e445038d-cff0-4aec-b2cf-5cc7228ef46b>; FACT SHEET: Two Years In, the Inflation Reduction Act is Lowering Costs for Millions of Americans, Tackling the Climate Crisis, and Creating Jobs. The White House. Aug 16, 2024. <https://www.whitehouse.gov/briefing-room/statements-releases/2024/08/16/fact-sheet-two-years-in-the-inflation-reduction-act-is-lowering-costs-for-millions-of-americans-tackling-the-climate-crisis-and-creating-jobs/>; Liz Goodwin. Electric vehicles emerge as flash point in 2024 election. Washington Post. Jun 17, 2024. <https://www.washingtonpost.com/politics/2024/06/17/electric-vehicles-evs-biden-trump-brown-tester/>; David Roberts. Electric vehicles are gaining momentum, despite Trump. Vox. Jul 18, 2018. <https://www.vox.com/energy-and-environment/2018/6/26/17500074/electric-vehicles-evs-zevs-fuel-trump>; President Trump Delivers on a Key Promise to American Farmers as EPA, USDA Announce Agreement on Promoting Biofuels. USDA. Oct 19, 2019. <https://www.usda.gov/media/press-releases/2019/10/04/president-trump-delivers-key-promise-american-farmers-epa-usda>

Climate Tech Tailwinds Driving Investment

01

The push for net zero continues

The momentum toward net zero targets is rapidly building, with 47% of countries having pledged or codified their commitments.

In the U.S., 13 states have established net zero targets, and another 5 have formulated related policies or pledges.

Nearly 300 U.S. companies have made net zero commitments, and over half of the world's largest 2,000 public companies have published similar pledges, signaling a significant global shift toward achieving these critical climate goals.

02

The financing landscape matures

As the sector evolves, a broader array of financing options has become available, from specialized venture capital funds to government incentives and loan programs.

This increased access to capital is complemented by a substantial amount of undeployed venture capital specifically earmarked for Climate Tech.

For founders, this means greater opportunities to secure the funding necessary to scale their technologies and bring them to market.

For investors, the maturing landscape offers a more robust and diverse pipeline of investment opportunities and capital partners.

03

Tech moves from pilot to production

Investors are increasingly directing funds into mature, deployable Climate Tech, which accounts for 60% of Climate Tech investments according to Net Zero Insights.

This tech can deliver impact sooner, driving tangible progress. However, mature tech alone may only achieve 10-20% of the reductions needed to reach net zero by 2050.

The remaining progress hinges on emerging technologies that are still in development but hold the potential to close the gap—if they receive the necessary investment and funding.

Sources: Net Zero Tracker. Aug 2024. <https://zerotracker.net/>; Rona Cohen. States with net-zero carbon emissions target. CSG East. Mar 24, 2023. <https://csg-erc.org/states-with-net-zero-carbon-emissions-targets/>; What would it take to scale critical climate technologies?. McKinsey. Dec 1, 2023. <https://www.mckinsey.com/capabilities/sustainability/our-insights/what-would-it-take-to-scale-critical-climate-technologies>



Macro Trends

Climate Tech Headwinds Undermining Investor Confidence

01

Late-stage capital remains hard to access

The transition from growth to late-stage funding remains a challenge for Climate Tech companies due to unclear access to sophisticated capital.

While large funds are increasingly investing in the sector, many growth funds lack the clear metrics or deep understanding needed to navigate climate-specific subsectors effectively.

This uncertainty is compounded by the inherently long development timelines of Climate Tech companies, which often require 8-10+ years to reach an exit.

Many companies funded between 2017-2019 are still in their early stages, with limited M&A activity and few IPOs, aside from those that went public via SPACs in 2021.

02

The sector faces political uncertainty and regulatory risk

Much of Climate Tech's momentum relies on government policies and incentives, like those in the Inflation Reduction Act. However, changes in political leadership or policy priorities could lead to the rollback of these measures, creating uncertainty for companies and investors.

Climate Tech also operates within complex regulatory environments across energy, transportation, and environmental sectors, where changes add further risk, especially for emerging technologies.

Additionally, global differences in carbon pricing, trade policies, and climate agreements can impact the scalability and competitiveness of Climate Tech solutions.



Conclusion

End Notes and Methodology

As Climate Tech companies face evolving market dynamics, Stifel Bank's team is here to provide guidance in this unique sector, helping founders and investors navigate the complex landscape of fundraising and capital deployment.



Matt Trotter

Managing Director
Stifel Bank Venture Banking

in [Matt Trotter](#)



Cody Nenadal

Managing Director
Stifel Bank Venture Banking

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Emily Gast

Vice President
Stifel Bank Venture Banking

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Methodology

Data comes from PitchBook Data, Inc. Data has not been reviewed by PitchBook analysts.

Deal Date: Through Jun 30, 2024

Deal option: Search on a full transaction

Deal status: Completed

Location: U.S. HQ

Deal Types: Seed, Early Stage VC, Later Stage VC, Restart early stage VC, Restart later stage VC, Equity for service

Location: U.S. HQ. unless otherwise noted

About Us

Meet Stifel Bank

Based in St. Louis, Missouri, Stifel Bank serves growth and middle-market businesses and their owners with a full range of lending, deposit, treasury, and private banking services.

We have the flexibility and resources to offer our customers the banking and lending services they require, with the legacy of Stifel, a leading Wealth Management and Investment Banking firm established in St. Louis in 1890.

We are known for our superior customer service, flexibility, and entrepreneurial approach to banking. Our success is built upon the strong relationships we develop with clients and our deep knowledge of their businesses, financial markets, and access to a wide array of lending and liquidity tools. This empowers us to provide the financial resources required to meet our clients' ever-changing needs.

Disclosures

Stifel Venture Banking is a division of Stifel Bank. Stifel's banking and lending services are provided by Stifel Bank, Member FDIC, and Stifel Bank & Trust, Member FDIC, (collectively, "Stifel Banks"). Unless otherwise specified, references to "Stifel" may mean Stifel Financial Corp. and/or any of its subsidiaries. Non-deposit products purchased from or held by Stifel and/or Stifel Banks are not insured by the FDIC, are not deposits, and may lose value. None of Stifel and/or Stifel Banks provide legal or tax advice.

Stifel Bank provides the financial resources required to meet our clients' ever-changing needs.

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[!\[\]\(6059a5aa8b4ca7bb793408023d6c6e42_img.jpg\) \(866\) 303-8003](#)

[!\[\]\(c50c8b7b2cc2cf9ff925edec0ee94c0d_img.jpg\) bankwithstifel.com](#)



Climate Tech Subsectors 2023-2024

Energy	H1 2023	All 2023	H1 2024
Median Deal Size	\$7.8M	\$7.65M	\$8.45M
Venture Capital Invested	\$3.83B	\$8.74B	\$3.81B
Deal Count	125	260	102

Based on Climate Tech vertical + Energy keyword; PitchBook Data, Inc.; *Data has not been reviewed by PitchBook analysts.

Industry	H1 2023	All 2023	H1 2024
Median Deal Size	\$7.88M	\$7.50M	\$8.18M
Venture Capital Invested	\$2.06B	\$4.15B	\$1.64B
Deal Count	77	159	73

Based on Climate Tech vertical + industrial keyword; PitchBook Data, Inc.; *Data has not been reviewed by PitchBook analysts.

Transportation & Logistics	H1 2023	All 2023	H1 2024
Median Deal Size	\$7.55M	\$6.21M	\$4.36M
Venture Capital Invested	\$731.72	\$817.09M	\$234.57M
Deal Count	25	40	15

Based on Climate Tech vertical + transportation/logistics keywords (non-overlapping); PitchBook Data, Inc.; *Data has not been reviewed by PitchBook analysts.

Built Environment	H1 2023	All 2023	H1 2024
Median Deal Size	\$18.33M	\$7.07M	\$8.29M
Venture Capital Invested	\$602.16	\$804.18M	\$222.95M
Deal Count	12	27	16

Based on Climate Tech vertical + built environment keyword; PitchBook Data, Inc.; *Data has not been reviewed by PitchBook analysts.

Food & Agriculture	H1 2023	All 2023	H1 2024
Median Deal Size	\$6.61M	\$4.77M	\$7.23M
Venture Capital Invested	\$614.35M	\$1.03B	\$688.94M
Deal Count	58	92	30

Based on Climate Tech vertical + food/agriculture keywords (non-overlapping); PitchBook Data, Inc.; *Data has not been reviewed by PitchBook analysts.

Carbon Tech	H1 2023	All 2023	H1 2024
Median Deal Size	\$11.19M	\$9.81M	\$17.19M
Venture Capital Invested	\$825.16M	\$2.38B	\$493.90M
Deal Count	16	30	16

Based on Climate Tech vertical + carbon tech keyword; PitchBook Data, Inc.; *Data has not been reviewed by PitchBook analysts.