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Crowdfunding for Climate Tech Startups

A Global Analysis and the Opportunity Ahead

Report / July 2024

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About RMI

RMI is an independent nonprofit, founded in 1982 as Rocky Mountain Institute, that transforms global energy systems through market-driven solutions to align with a 1.5°C future and secure a clean, prosperous, zero-carbon future for all. We work in the world's most critical geographies and engage businesses, policymakers, communities, and NGOs to identify and scale energy system interventions that will cut greenhouse gas emissions at least 50 percent by 2030. RMI has offices in Basalt and Boulder, Colorado; New York City; Oakland, California; Washington, D.C.; Abuja, Nigeria; and Beijing.

About Third Derivative

Third Derivative, RMI's global climate tech accelerator, is accelerating the rate of climate innovation. Third Derivative's inclusive ecosystem rapidly finds, funds, and scales climate tech globally. By uniting and aligning investors, corporations, and experts with the world's most promising climate tech startups, Third Derivative bridges finance and resource gaps to increase the speed to market. The flexible and highly curated remote accelerator program enables startups to focus on their unique needs and opportunities. Together, we are moving markets to achieve an equitable climate future. Learn more at www.third-derivative.org

Contents

Introduction

The push to net zero is accelerating toward a 2050 deadline, but considering the enormity of the task ahead, this is an all-hands-on-deck moment. The energy transition is going to mean scaling technology solutions that are already familiar, such as wind and solar, but will also mean relying on technologies that are still nascent and yet to reach industrial scale. As the Silicon Valley boom years illustrated, technologies can scale and reach consumers rapidly off the back of a flexible and agile startup model. In the climate technology (climate tech) space, that same logic rings true, with now-common solutions from innovative heat pump technologies to electric vehicles all taking shape initially as startups.[1]

As the world moves to clean energy sources and increased electrification, investment in the global energy sector represents the largest wealth creation opportunity in a century, with new climate tech winners set to benefit enormously from success in a booming market[2]. But unlike in previous startup waves, new trends in fundraising mean that it is not just institutional investors and founders that will reap the financial rewards: The growth of crowdfunding to support early-stage startups also allows retail investors (both accredited and nonaccredited) to gain entry into what was previously a closed shop, ran by the world's leading venture capital firms.

This new form of outside capital comes at just the right time. It is estimated that the energy transition will require US$44 trillion of cumulative investments from 2023 until 2030 to keep us on the 1.5°C-degree pathway, with 80% going toward investments enabling transition technologies.[3] But current projections indicate that even as governments and global asset managers allocate trillions to climate investment, they will fail to meet the massive amount of capital necessary to support the transition.

Trends in venture capital behavior also merit analysis. Venture capitalists have historically concentrated more on asset-light, highly scalable technologies due to factors such as lower capital requirements, risk perceptions, and comfort levels, as well as the pursuit of higher margins and rapid growth. However, considering the nuts-and-bolts nature of the energy transition, there is a pressing need to include a focus on climate hardware technology (hardtech) investments — especially ones that have no less potential to produce high margins and rapid growth as compared to their asset-light counterparts.[4] Recent analysis indicates that there is a private funding gap of US$2 trillion dollars in what's needed to spur the next generation of climate tech to meet the growing adaptational needs in the face of the climate crisis.[5] As a result, alternative forms of fundraising — such as crowdfunding — merit consideration to meet this financial gap.

Retail investors offer an important opportunity to unlock additional capital needed to meet this financial challenge. It is estimated that the retail impact investor market is close to US$715 billion and all retail investors globally represent US$140–US$150 trillion.[6] This capital can go a very long way in closing the climate funding gap.

In this report, we outline the trends around crowdfunding for early-stage startups globally and the crowdfunding landscape for climate tech startups, offering a roadmap for effective climate action through crowdfunding support of innovative solutions. Our findings are based on a review of the crowdfunding deals and service provider landscape for climate tech startups to date, as well as interviews with startup founders and crowdfunding platform providers.

Defining Crowdfunding for Our Analysis

Crowdfunding is defined as a mechanism by which individual retail investors (accredited and nonaccredited) pool capital to provide funding or invest in a company or project. There are generally four models of crowdfunding: donation-based, product-based, debt-based, and equity-based. For the purposes of our analysis, we examine product-, debt-, and equity-based crowdfunding across the following typologies:

- Individuals directly investing in startups or projects they have personally selected. This type of crowdfunding typically is facilitated through online platforms showcasing various investment opportunities among startups, and can include equity, debt, or product models. Examples include Wefunder and climate-focused platforms like Raise Green.
- Individuals investing in funds that are disbursed by a (typically online) intermediary. The intermediary entity establishes the investment vehicle and pools retail investors' capital. This entity also typically performs due diligence and selects startups for investment, and can include equity or debt investment opportunities. Carbon Equity is an example of this kind of platform.

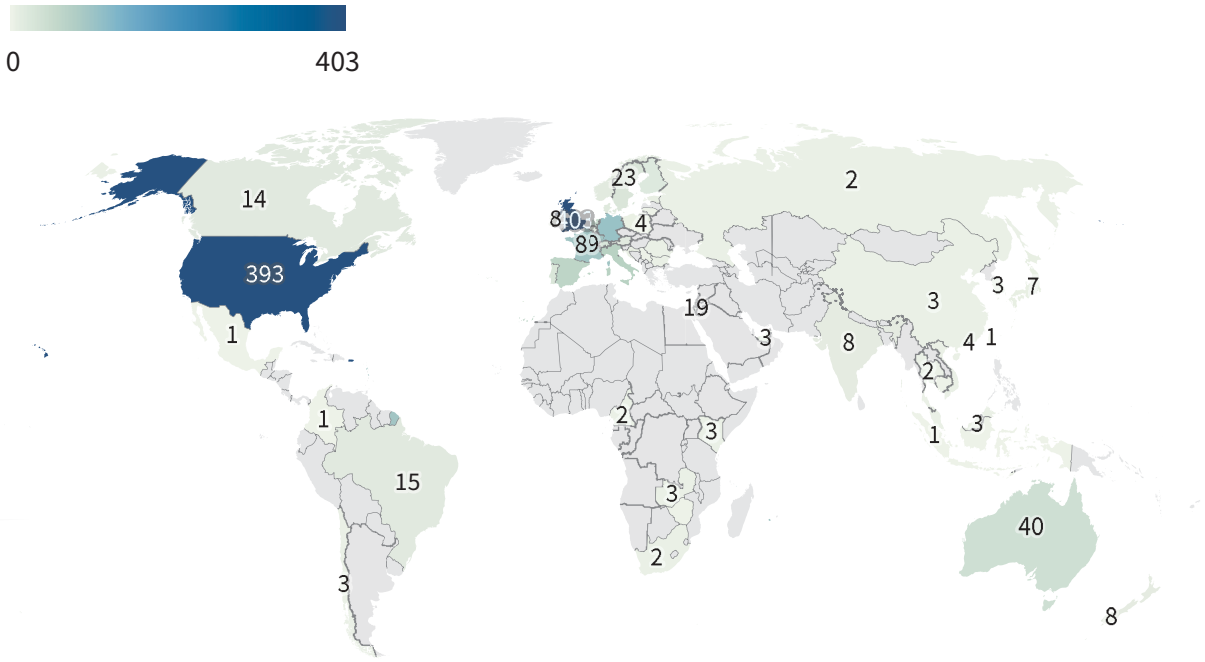
Please see *Exploring Trends in Successful Crowdfunding Deals* for further details about benefits and considerations when leveraging these various financial instruments for climate tech fundraising efforts.

Crowdfunding Takes Off

Although venture capital (VC) funding has been the predominant form of fundraising for early-stage startups, crowdfunding has been growing in popularity, with the two largest markets being the United States and the United Kingdom as evidenced in Exhibit 1.[7]

Exhibit 1

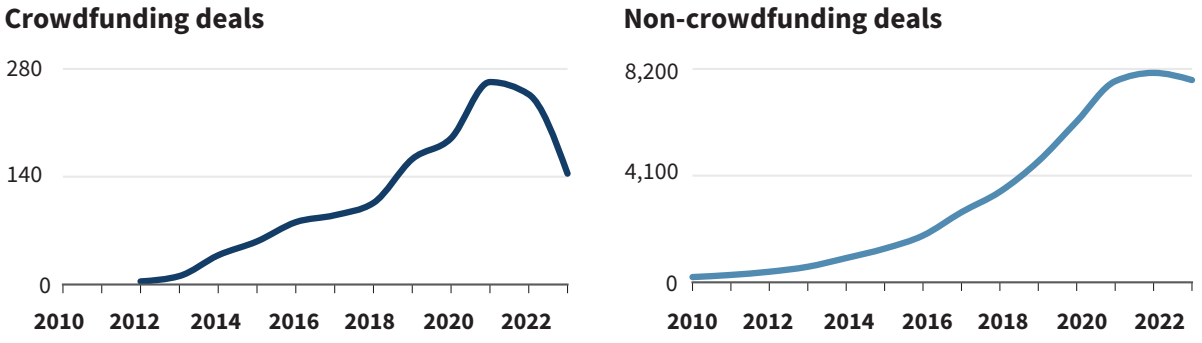
Global distribution of crowdfunding deals (2010-23)



Source: Net Zero Insights, RMI Analysis

In 2018, equity crowdfunding campaigns in the United States raised over US$74 million. In 2019, well-known VC investors began leading equity crowdfunding rounds for startups, raising over US$100 million. In 2020, that number more than doubled to over US$211 million.[8] In 2023, the global crowdfunding market was estimated at over US$1.4 billion and it is expected to double by 2030.[9] These trends are also echoed raised by climate tech startup crowdfunding. Exhibit 2 shows the rapid rise in crowdfunding deals from global startup climate tech crowdfunding deals beginning in 2010, reaching a peak of 4.3% of all global climate startup deals in 2016, and holding steady at around 3%–4% of all climate deals through 2022, with a dip to 1.8% in 2023, reflecting the wider investment slowdown in 2023.

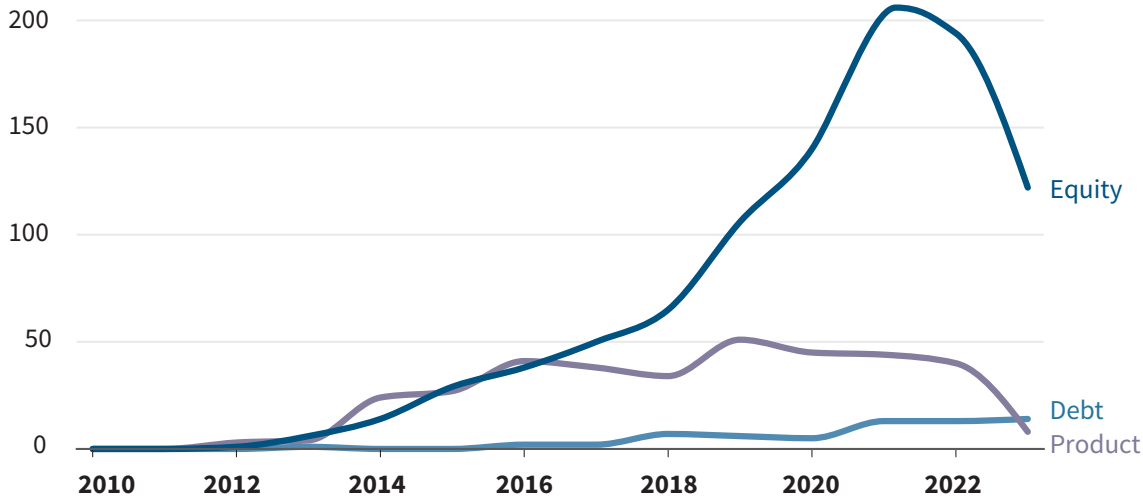
Exhibit 2 Number of global startup climate tech deals (2010-23)



Source: Net Zero Insights, RMI Analysis

Looking at the breakdown of deals (see Exhibit 3), we can see that equity crowdfunding makes up the majority of crowdfunding deals, seeing the strongest increase over the period, followed by product and debt. From 2013 to 2023, the number of global climate tech equity crowdfunding deals surged by nearly 2,000%, while debt and product crowdfunding grew by 1,300% and 100%, respectively.

Exhibit 3 Breakdown of global startup climate tech crowdfunding deals by crowdfunding type (2010-23)



Source: Net Zero Insights, RMI Analysis

These results are unsurprising and align with broader investment trends within the climate tech space. Three main factors can begin to explain this growth. First, climate crowdfunding growth reflects the general trends in climate tech more broadly, Exhibit 2 demonstrates the growth in crowdfunding deals following a similar, if not slightly more moderate, trajectory as all climate tech deals. This is due to substantial growth

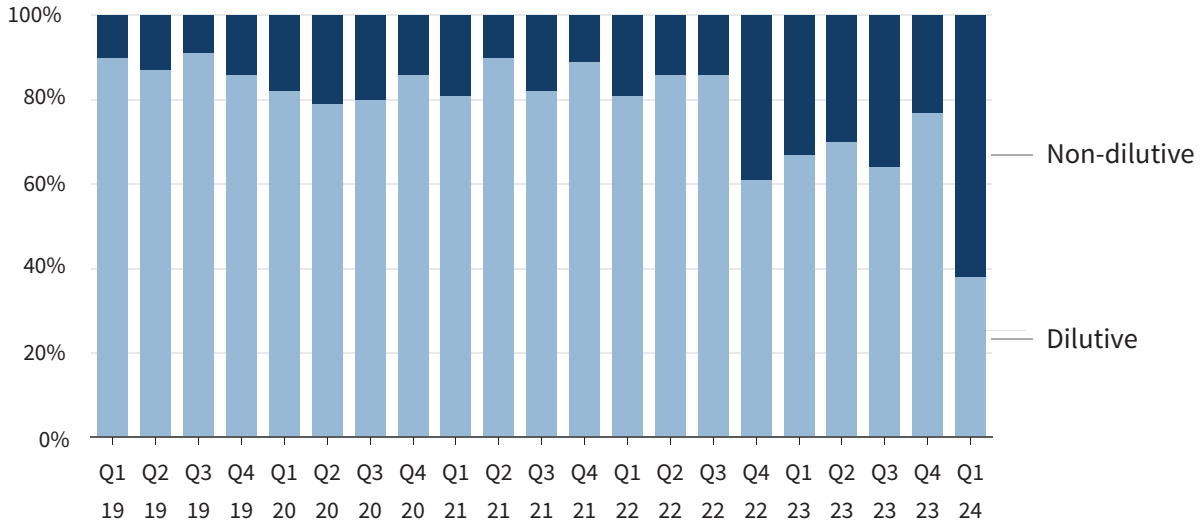
in the climate tech sector, with the ecosystem increasing its combined value 45x over the last decade, from US$55.4 billion to US$2.5 trillion.[10]

The second factor is the development of increasing crowdfunding regulations, creating clearer frameworks and improving the transparency and protection of both investors and issuers. Reviews of legislation across various countries found that several regulators (including in Australia, New Zealand, and the United States) have taken liberal approaches (vs. protectionist) specifically related to equity crowdfunding, enabling more growth in these markets.[11] For example, in the United States, since Regulation Crowdfunding (Reg CF) was introduced in 2016, it has supported over 6,500 startups and raised nearly US$2.4 billion in capital through 8,400 investment rounds for early-stage companies.[12] The final factor is the proliferation of the internet, and social media specifically, ultimately increasing the reach of crowdfunding campaigns. One study even found a correlation with an increase in number of tweets and successful campaign outcomes.[13]

These trends are replicated when looking at fundraising totals by global climate tech crowdfunding deals. Total crowdfunding fundraising amounts grew by a median of 37% per year over the last decade. From 2013 to 2023, the total raised by global climate tech equity crowdfunding deals surged by 3,200%, with debt crowdfunding increasing by 3,800%, while product crowdfunding saw a slight decrease of 13%.

The trend of significant growth within equity fundraising is consistent with broader trends in climate tech startups funding. Exhibit 4 outlines the share of global funding for climate tech startups and the dominance of dilutive funding up to Q4 2022. Evaluation of all climate tech fundraises show that from 2019 to 2022, dilutive funding (cash in exchange for ownership in the company) made up the majority of funding secured by climate tech startups globally. Post-2022, debt financing made up an increasing portion of funding for climate startups, and in Q1 2024, over 60% of the funding was non-dilutive (cash with interest repayment terms).[14] Exhibit 3 shows a marginal increase in aggregate debt crowdfunding rounds over the last two years, similar to the trend observed in global climate tech non-dilutive funding. We can hypothesize this is connected to the global slowdown in equity investments and a shift in remaining equity investments from earlier to mid- or later-stage climate startups.[15]

Exhibit 4 Share of global funding for climate startups (2019-24)

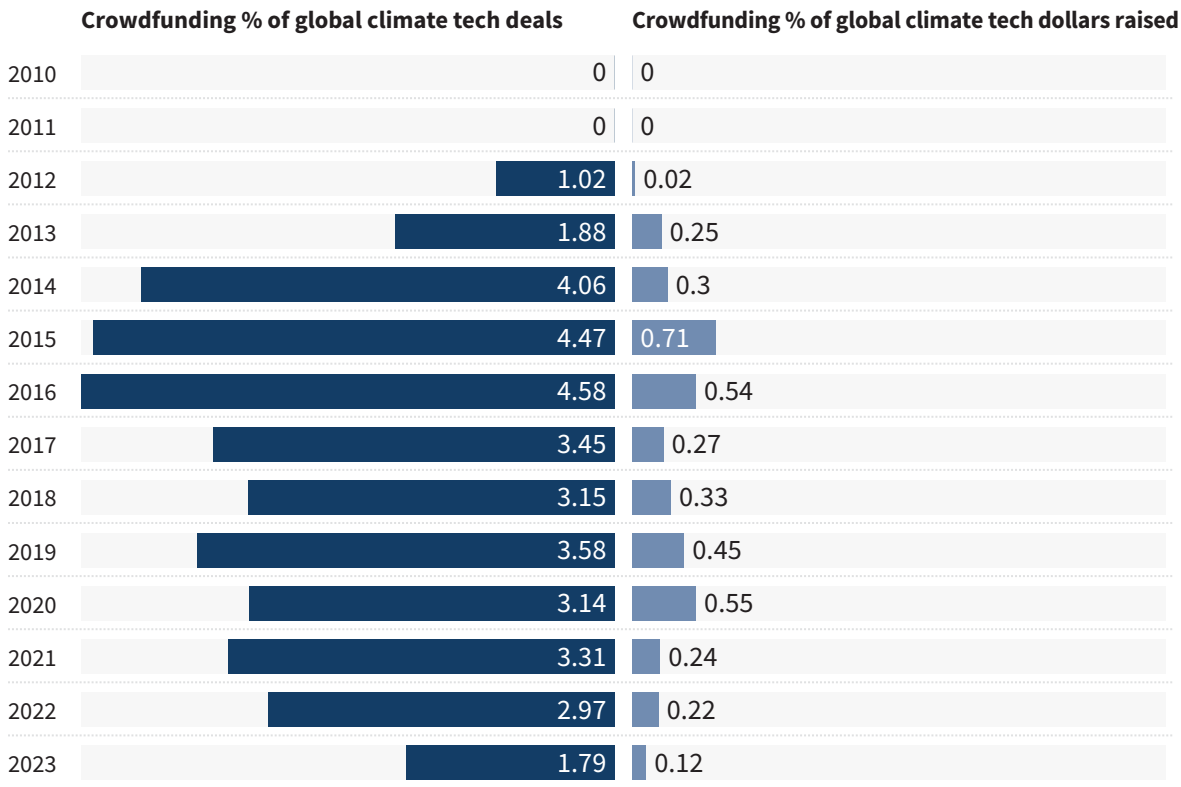


Source: Net Zero Insights, RMI Analysis

When examining the contribution of crowdfunding to global climate tech startup fundraising (see Exhibit 5), observe that in terms of deal number, crowdfunding peaked at around 4% of global climate tech deals in 2016 and has since declined through 2023. Similarly, in terms of dollars raised, crowdfunding trends closely mirror the number of deals, ranging from 0.2% to 0.7%.

Exhibit 5

Percent of total global climate tech startup deals and funding raised from crowdfunding (2010-23)

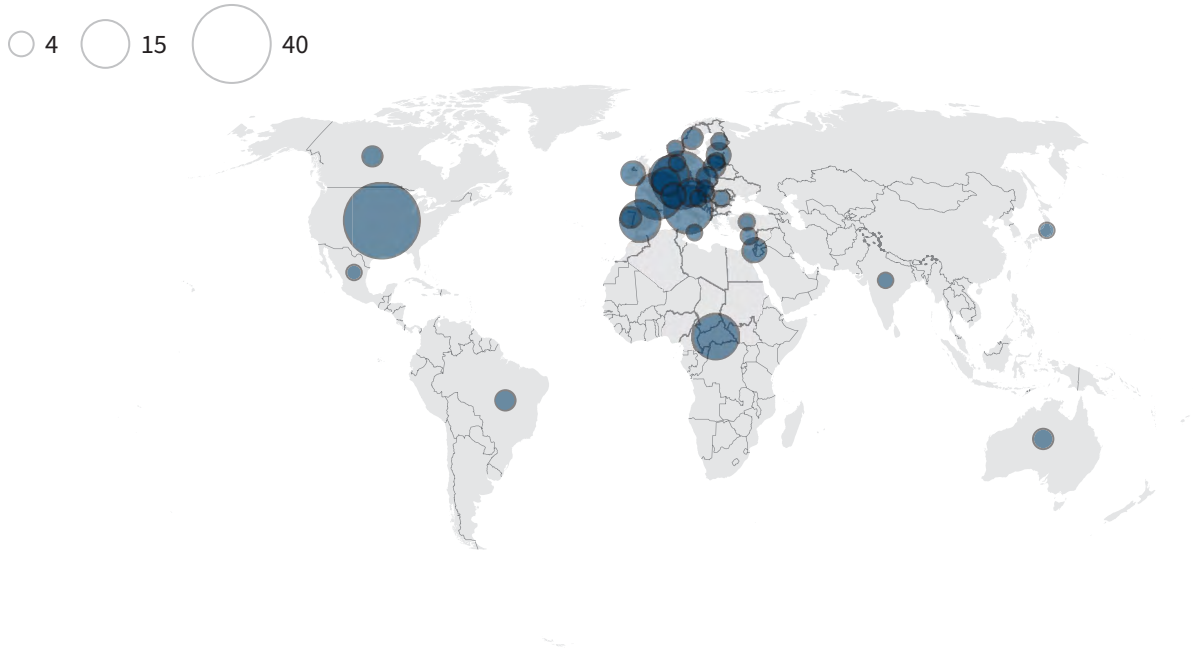


Source: Net Zero Insights, RMI Analysis

Alongside deals and fundraised amounts, the provision of crowdfunding platforms and service offerings has also steadily increased over the years in correlation with the rise in internet and social media usage. Through desk research, we identified 165 crowdfunding platforms that support climate-focused tech startups across 34 countries. These platforms were founded as early as 2004; the growth of new platforms peaked in 2014, with 25 founded that year, and an average of 10 platforms were founded per year from 2015 to 2023. When looking at the geographic distribution in Exhibit 6, we can see that the countries with the largest number of crowdfunding platforms are concentrated in Europe (France, Germany, and Italy), the United Kingdom, and the United States.

Exhibit 6

Number of global climate tech supportive crowdfunding platforms, by country HQ



Source: CrowdSpace, P2P Market Data, RMI Analysis

When examining the financial instruments offered by these platforms, we found that they are correlated with the overall deal and fundraising trends, with the majority of platforms supporting equity crowdfunding fundraises (123 platforms), followed by debt (55 platforms) and then product (5 platforms).[i]

i In some instances, a platform supported more than one crowdfunding financial instrument.

The Hardtech Challenge

Hardtech startups face many unique barriers compared with traditional software technology startups, most notably with fundraising efforts. One of the biggest challenges is the high up-front capital requirements for many climate hardtech solutions to reach scale. According to recent analysis, there is a private funding gap of US$2 trillion dollars in what is needed for the next generation of climate tech to address the climate crisis.[16] Venture capitalists have historically focused more on asset-light, highly scalable technologies (such as software) due to a range of factors including lower capital requirements, lower risk, higher margins, and rapid growth potential; however, there is a growing (and pressing) need to consider hardtech investments to both meet climate goals and make the most of this coming investment opportunity.[17] Crowdfunding presents an opportunity for a broader group of investors, with potentially different incentives and risk-appetite profiles and a higher tolerance for a longer time horizon to return.

Exploring Trends in Successful Crowdfunding Deals

Exhibit 7

Features identified across successful climate tech startups crowdfunding deals

	Equity	Debt	Product
Startup Stage	• Early Stage	• Early Stage	• Early Stage
Business Model	• Business-to-Business	• Business-to-Business • Business-to-Consumer	• Business-to-Consumer
Offering (hardware vs. software)	• Physical or Digital product	• Physical or Digital product	• Physical product
Top 3 climate challenge topic areas	• Transport • Circular economy • Energy	• Transport • Food and agriculture • Energy	• Circular economy • Food and agriculture • Energy
Benefits to startups	• Allows them to raise capital without giving up a large share of control or ownership of the company, unlike traditional venture capital or private equity investments	• Non-dilutive funding source/ownership retention • Process can be faster than securing a loan through traditional banks, • Restrictions can be less strict compared to traditional lenders • Clear repayment schedule	• Avoids debt and interest of loans, non-dilutive funding source market validation • Opportunity to develop sales for the product you are offering • Marketing opportunity to raise awareness about your product as well as developing a community around your product
Drawbacks to startups	• Dilutive funding source • Regulation and reporting complexity/requirements can increase costs and timelines for crowdfunding raises	• Repayment requirements with interest, regardless of company performance • Potential impacts to credit score if loan cannot be repaid, potentially impacting future financing opportunity • Potential requirements for collateral or personal guarantee/risk of losing these assets	• Delivery risks, delays in providing the product to customers can result in reputation damage or needing to return funds • Providing details of product could put company at risk of sharing IP/copycats

Source: Stripe, "Types of Crowdfunding for Startups: Four Types to Know," Stripe, August 17, 2023; Olga Okhrimenko, "7 Key Benefits of Crowdfunding for Investors: What Exactly Makes It Cool?," JustCoded, November 13, 2018.

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Analyses on crowdfunding equity, debt, and product deals for climate tech startups offer some interesting opportunities for trend analysis. Above we analyzed some of the emerging trends around predominant startup characteristics we see across the various crowdfunding typologies, in addition to some hypotheses for these trends.

Early-Stage Fundraising Rounds Are Most Suitable for Crowdfunding Fundraises

Based on our analysis of previous climate tech startup crowdfunding deals and the opportunity ahead, supporting early-stage startups can be the best opportunity to leverage crowdfunding platforms in accelerating the energy transition.

Regulations and historical trends point to why early-stage fundraising rounds are most appropriate for crowdfunding. The average crowdfunding raise is US$1.08 million and the average equity crowdfunding raise is US$1.24 million — not a large amount for later-stage startups, but a perfectly acceptable sum for early-stage startups, who would see similar amounts in typical pre-seed, seed, and smaller series-A fundraising rounds.[18] Limits on the scale of crowdfunding allowed by law also make early-stage startups attractive because later-stage startups would likely breach those regulatory barriers. For example, in Europe and the United States, companies are limited to raising 5 million dollars or euros per year through crowdfunding; in the United Kingdom, companies can fundraise up to EUR 13 million (US$13.8 million) through platforms that are licensed in both the UK and the EU; in Singapore, it is SGD 5 million (US$3.7 million).[19]

Finally, we heard from platforms and startups that leveraging crowdfunding for early-stage fundraises can help startups attract follow-on funding from VCs and angel investors by proving product-market fit. For example, in product crowdfunding raises, startups are able to demonstrate a market demand for their existing product through successful crowdfunding campaigns. In equity and debt crowdfunding, feedback and involvement from their large investor base can support startups in user research and other activities to ascertain product-market fit. Crowdfunding platforms can offer a low barrier to entry opportunity for early-stage climate startups (especially business-to-consumer [B2C] startups, which we get to more in the next section) to make the pivots necessary to better tailor their products. This is especially true when considering other approaches to evaluating market fit such as surveys, marketing, and needs assessments that can be more costly and time intensive.[20] As startups mature, they consolidate their audience and offerings, which may diminish the additional benefits that crowdfunding opportunities once provided, especially as their capital needs grow.

A Variety of Business Models Can Take Advantage of Crowdfunding

While product crowdfunding has typically thrived in B2C companies — where investors receive the product in exchange for their financial contribution — equity and loan crowdfunding campaigns have shown mixed success across both B2B and B2C sectors, albeit slightly favoring B2B for equity crowdfunding raises.[21]

A survey-based research study determined that B2B was preferable to investors for equity crowdfunding investments.[22] Similarly, Scott Simpkin, UK Team Lead of the Seedrs crowdfunding platform, observed a similar trend during an online webinar in 2020, indicating that B2B outperformed B2C on the platform when it came to equity crowdfunding raises.[23]

Exhibit 8

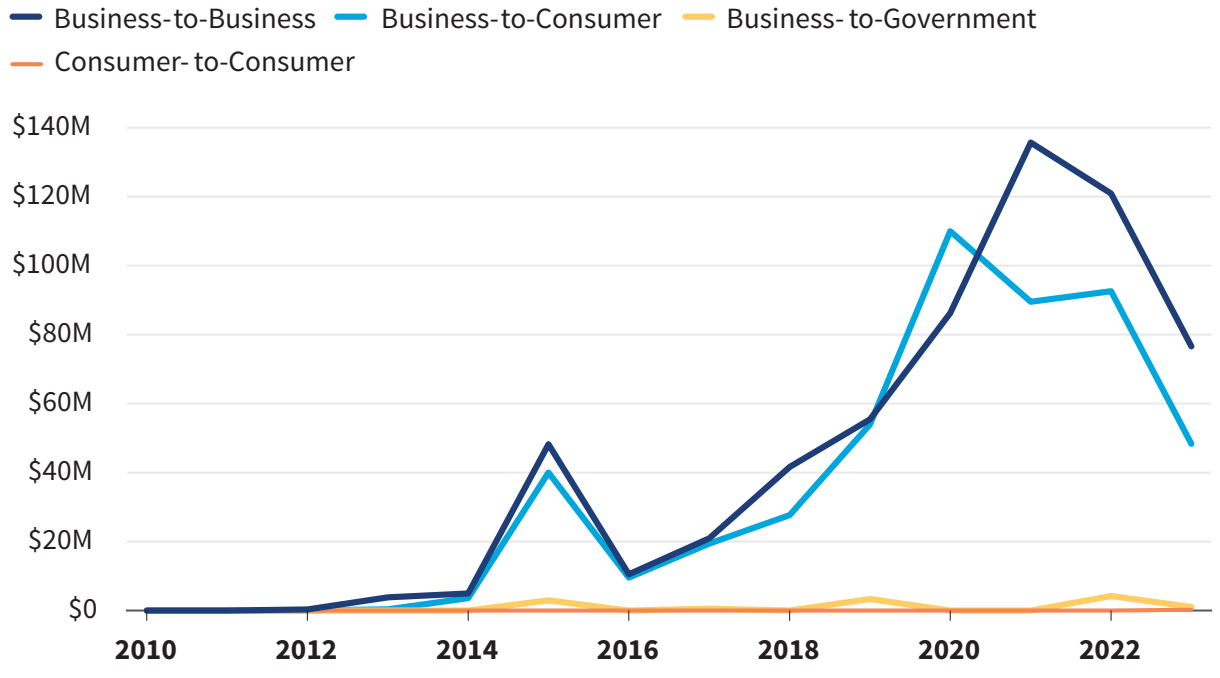
Business model associated with global climate startup crowdfunding deals (2010-23)

Source: Net Zero Insights, RMI Analysis

Similarly to the trend we see when we look at global crowdfunding raises, Exhibit 8 shows that there is no significant funding preference shown between B2B and B2C companies that completed successful crowdfunding campaigns. B2B organizations are engaged in 61% of equity crowdfunding deals, while B2C organizations account for 37%. In debt crowdfunding, B2B comprises 67% of deals, with B2C at 31%. Product crowdfunding deals are predominantly led by B2C organizations, constituting 58%, while B2B organizations account for the remaining 42%.

Exhibit 9

Total amount raised by global clean tech crowdfunding deals, by business type, by year in USD (2010-23)



Source : Net Zero Insights, RMI Analysis

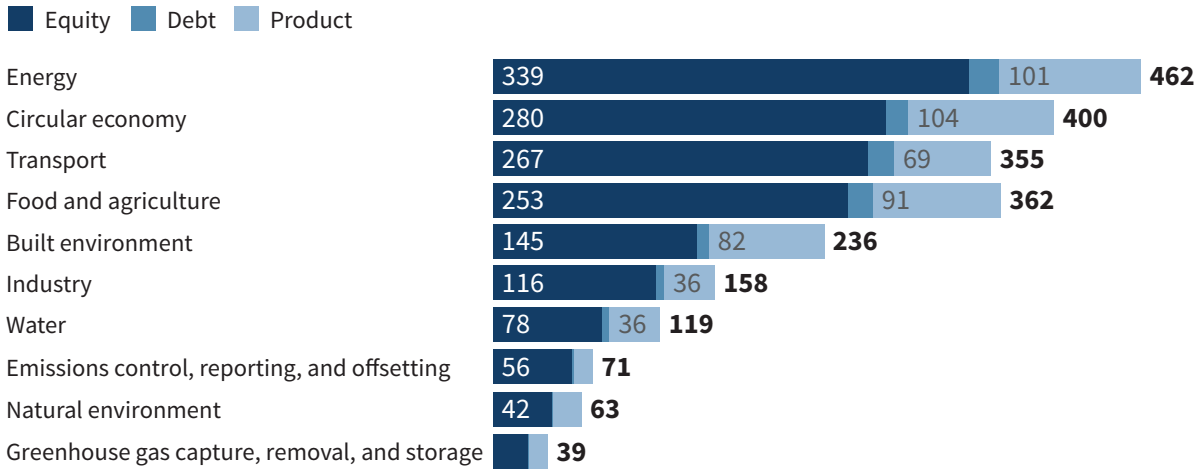
We see similar trends when looking at the total amounts fundraised by global climate tech crowdfunding deals outlined in Exhibit 9: both B2B and B2C follow a similar trajectory, with B2B raising slightly larger totals. However, B2C companies reported larger average deal sizes: equity, debt, and product deals averaged US$1.5 million, US$1.6 million, and US$1 million, respectively, compared to US$1.2 million, US$1.1 million, and US$1 million for B2B companies.

Crowdfunding Fundraises Closely Align with Broader Climate Tech Investment Trends

Crowdfunding deals reflect the wider trends in climate investing, with four sectors — the circular economy, energy, food and agriculture, and transport — receiving the bulk of investment across equity, debt, and product fundraises, as detailed in Exhibit 10.[ii]

Exhibit 10

Sectors associated with global climate startup crowdfunding deals (2010-23)



Source: Net Zero Insights, RMI Analysis

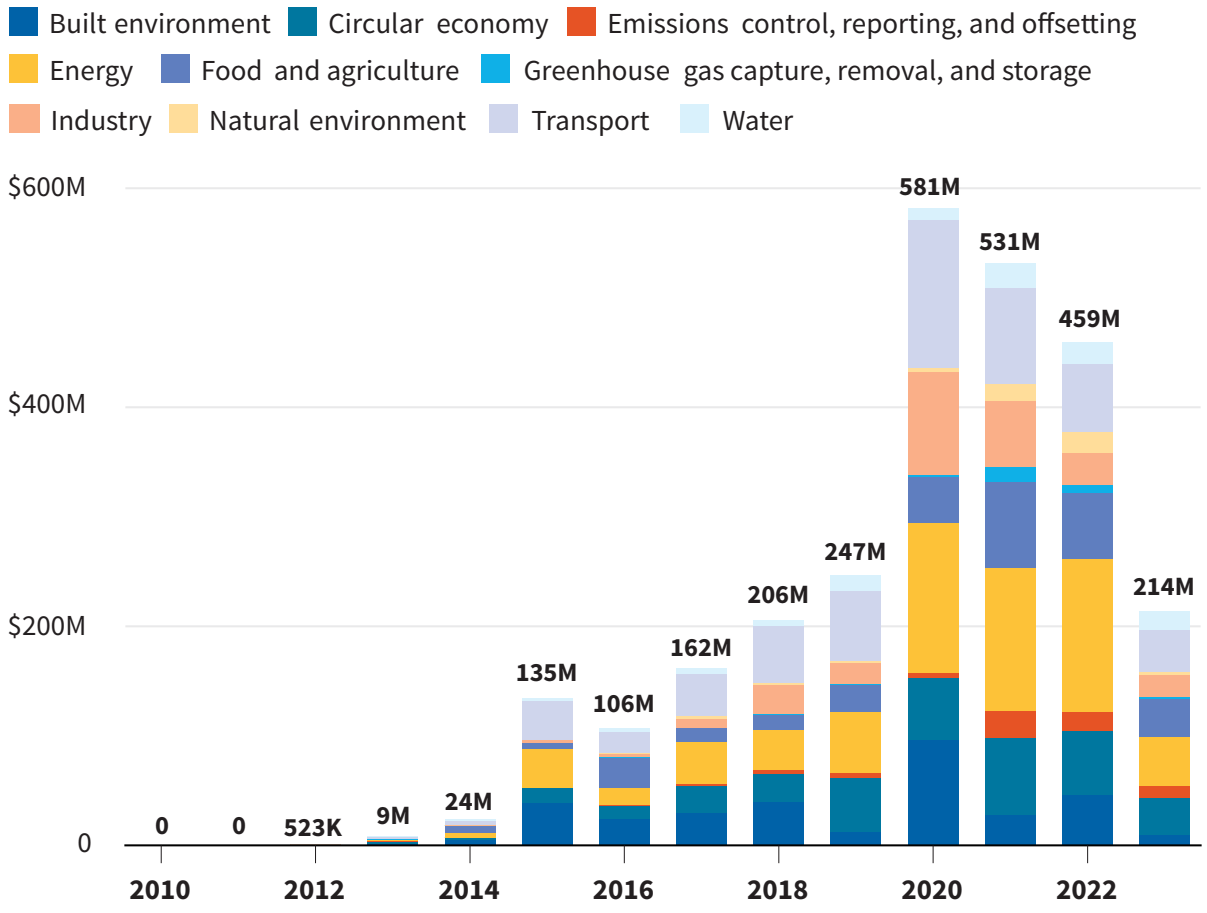
Exhibit 10 shows the distribution of different types of crowdfunding by sector. A potential explanation for product crowdfunding's largest allocation in the circular economy sector, followed by energy and food and agriculture, is the product-consumer nature of the technologies available in these markets: innovative product solutions to reduce waste, save energy, and deliver more local, homegrown food solutions are very tangible, consumer-facing opportunities. In many instances, retail investors will invest in product crowdfunding raises to be the first customer and benefit from the product and its development.[24]

ii An organization can fall into multiple categories, potentially being counted more than once.

This reasoning can also explain the higher allocation in these sectors across all crowdfunding typologies. These are easier areas within the climate space for retail investors to understand because they impact daily lives, versus categories such as emissions data, greenhouse gas capital, industry natural environment, and water, which are seeing fewer deals. These sectors are more technically challenging to understand as concepts and are also less a part of the day-to-day life of retail investors. One of the challenges we heard from startups and platforms for crowdfunding raises specific to climate tech is translating what are often highly technical processes to retail investors. Sectors that are less familiar to the average retail investor have an uphill battle in translating their offering (and the technology behind it) in a way that is clear and understandable to a lay audience.

Exhibit 11

Total amount raised by global clean tech crowdfunding deals by sectors per year in USD (2010-23)



Source : Net Zero Insights, RMI Analysis

When examining crowdfunding raise totals across sectors over time in Exhibit 11, energy, transport, circular economy, and built environment have consistently held a large portion of investment dollars. In the past three years, sectors like food and agriculture, along with industry, have seen a notable growth in funding prominence. In 2023, the trends were aligned with broader investments in climate tech with total early-stage non-crowdfunding investment in the top four sectors including transport, built environment, food and agriculture, and industry, respectively.

Physical Climate Tech Products See the Majority of Crowdfunding Dollars

When examining average deal size in Exhibit 12, the most notable flag is the significant discrepancy in product crowdfunding raise amounts between startups offering digital vs physical solutions. This likely speaks to the perceptions within product crowdfunding of digital products being inherently riskier investments or investors being less likely to receive the completed product, in addition to the lower number of digital crowdfunding raises generally (25 completed raises over a 13-year period).[25]

Our research found that startups that promised a physical product made up the majority of successful crowdfunding raises, with digital products making up only 31%, 40%, and 23% for equity, debt, and product deals, respectively.[iii] As outlined in Exhibit 13, we can see that this breakdown holds consistent over the years. This is likely due to the nature of climate tech more broadly as a hardtech industry. These percentages are reflective of the hardtech/digital technology breakdown across all early-stage climate tech deals, where digital products make up 30% of all deals.

Despite the larger number of deals associated with equity physical product crowdfunding raises, we can see a nominal difference between digital and physical product fundraises, with digital fundraises being slightly higher on average.

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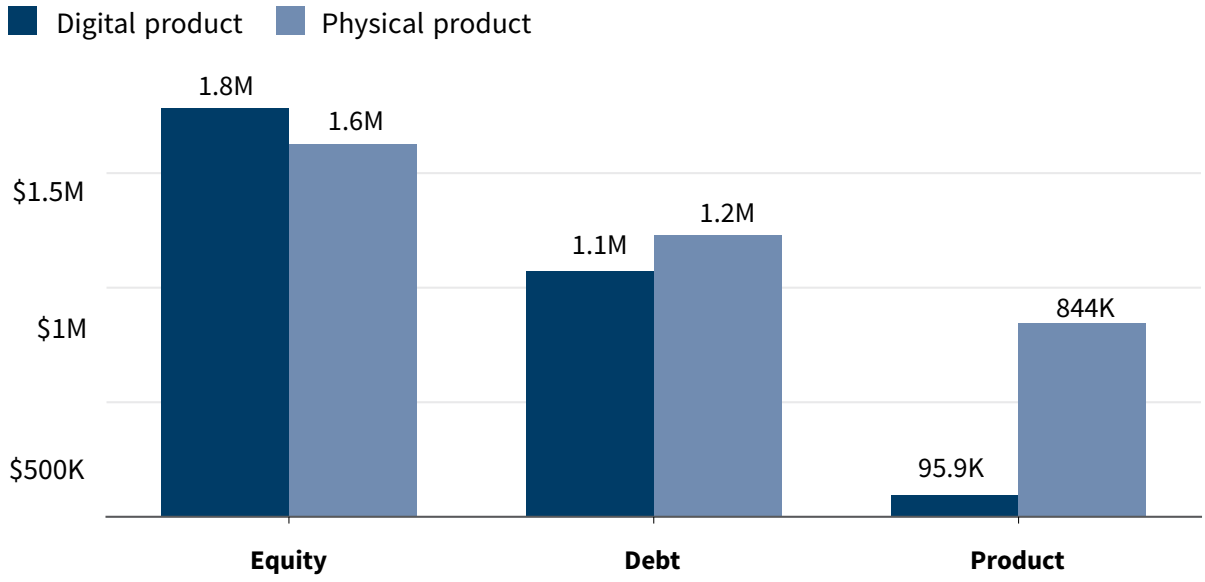
iii An organization can fall into multiple categories, potentially being counted more than once.

Exhibit 12

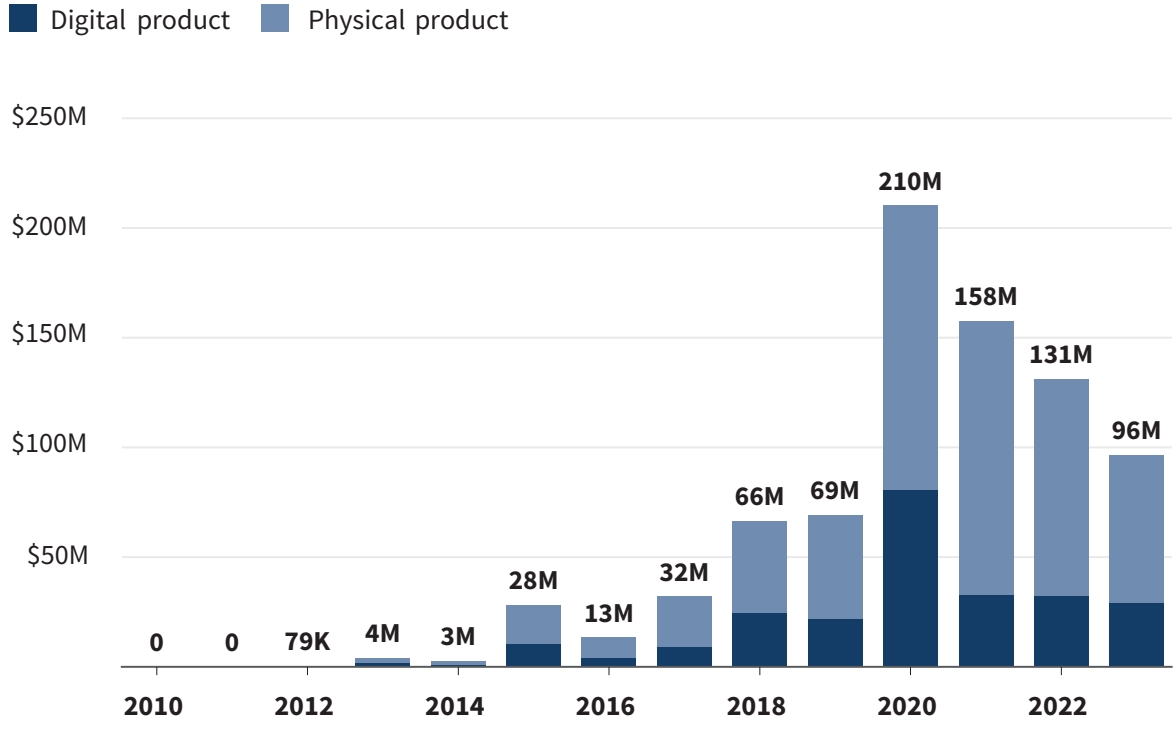
Average deal size for global clean tech crowdfunding deals, by product type (2020-23)



Source: Net Zero Insights, RMI Analysis

Exhibit 13

Total amount raised by global clean tech crowdfunding deals, by sector per year in USD (2010-23)



Source: Net Zero Insights, RMI Analysis

Challenges to Effective Crowdfunding

Despite the opportunities equity crowdfunding presents for climate tech startups, we have identified a handful of challenges with the status quo based on research and conversations with startups and crowdfunding organizations.

Distributed Crowdfunding Organizations

In most jurisdictions, crowdfunding is regulated at the national level. As a result, it can be challenging for existing crowdfunding platform companies to scale to other jurisdictions because they are then required to comply with new sets of regulations. Furthermore, government regulation at multiple levels may not permit accredited or nonaccredited investors from other countries to invest. For example, even though crowdfunding is now regulated through the EU, a European-based crowdfunding platform we spoke with indicated challenges to scaling their services across Europe due to national-level regulations and restrictions.

This can pose real challenges for climate startups to leverage crowdfunding from a broader group of investors for their fundraising efforts. First, strict or inconsistent regulations can result in less availability of crowdfunding platforms with which a startup is able to work, in addition to limited competition, which can result in high fees or lower quality of platforms available to startups. For example, in Canada, crowdfunding rules are relatively restrictive and regulated at the provincial or territorial level, resulting in varying requirements for crowdfunding platforms.[26] As a result, crowdfunding deals in Canada lag other climate tech fundraising deals. Specifically, Canada makes up 0.8% of climate tech crowdfunding deals versus 4.4% of other climate tech fundraising deals globally during the 2010–23 period.

Second, for smaller geographies, a startup's home country may not have a sufficient investor base, and if platforms are not able to accept international retail investors, it could be challenging for these startups to leverage crowdfunding as a meaningful avenue for fundraising.

Translating the Technical to the Approachable

Unlike other forms of fundraising such as VC investments or loans for institutional investors, the crowdfunding model relies on telling a compelling — and approachable — story. This involves not only highlighting the unique features and benefits of their offering but also effectively communicating their vision, values, and impact potential. In an interview with FrontFundr, it was pointed out that "you can have a great vision but if it isn't communicated in a simple or effective way, then they will be pushed away, specifically retail investors." For those climate startups that may work in a technology that is not yet easily understood or widely available, the ability to tell a compelling story that resonates with a target audience may be limited or at least face an uphill battle compared with other sectors where the value proposition is clearer or easier to understand by a broader audience of potential investors.

Capacity Constraints and Putting in the Work

Setting expectations and educating investors is crucial, particularly when bringing in retail investors who may not be familiar with investment procedures. Startups often bear the burden of educating investors, which can strain resources and divert attention from core business activities. Overcoming this barrier requires effective communication strategies and a commitment to transparency and investor engagement. Startups could also benefit from educational resources that help them prepare for a successful campaign. Wefunder discovered that startups often fail because of not understanding the right level of the work, preparation, during the launch and after the launch. Collaborating with industry associations and leveraging educational resources can help startups navigate these complexities and foster a more informed and supportive investor base.

Nascent Nature of Crowdfunding

Crowdfunding is still a nascent industry, and there are several aspects of this reality that keep potential segments of investors away. The first challenge is in vetting the reliability and claims of crowdfunding campaigns from an investor perspective. Few crowdfunding platforms cater exclusively to climate tech investment, and most platforms do not typically distinguish between impactful initiatives and greenwashing attempts, which can be an important piece of information investors are seeking when evaluating how to make meaningful contributions to the energy transition. Robust impact measurement frameworks can help identify projects with the potential to drive significant environmental change and combat climate change effectively.

A second challenge is that we still do not have proof of concept in terms of case studies of investors benefiting from their investments. US general equity crowdfunding data shows there have been only 77 exits from 6,735 Reg CF and Regulation A+ crowdfunding raises in the United States (1.2%). A reason for this is that many crowdfunding raises are still relatively young (median 2.3 years since their raise) and positive

exits typically take 8–12 years from investment.[27] As a result, it is hard to point to many success stories because we are still waiting to see the outcome of many of these investments. There are even fewer data points for climate-tech-specific fundraises. Our data did not indicate any exits to date for climate-focused startups globally. For many retail investors, seeing the proof of concept will be required before entering the crowdfunding investment arena.

A third challenge is that there is still a prevalent perception that crowdfunding is for fun "trinkets" and not for making investments in startups. When most people think of crowdfunding, their minds go to product-based raises. Debt and equity crowdfunding raise options are relatively new and under the radar for many. As a result, many potential retail investors are left out because they may not be aware of the opportunities for equity or debt crowdfunding and the options of different structures (as outlined at the beginning of this report).

Balancing Transparency and IP Protection

Traditional loans from financial institutions or VC investments typically involve a level of protection of a startup's private information and intellectual property (IP), which provides investors and loan evaluators with transparent information to be able to make an informed decision. In some instances with crowdfunding, providing this type of transparency can be of great risk to the startup. As a result, sometimes crowdfunding investors cannot have the full picture when making an investment, and this generally adds a level of risk to crowdfunding transactions, threatening their scalability.[28] Some countries have developed more stringent regulations around disclosures obligations including prospectus, financial statements, and/or annual reports.[29] However, startups can still be put in the challenging position of balancing adding transparency to their campaigns and risk sharing IP, or providing fewer details publicly and limiting the ability for retail investors to evaluate investments to their comfort level, risking potential investors walking away.

Conclusion

Crowdfunding campaigns have a role to play in increasing the reach of and access to the opportunity to invest in the climate transition. These campaigns open new doors for early-stage startups focusing on nascent technologies, and allow for a broader and more diverse group of individuals to privately fund and support innovations they believe in. Crowdfunding platforms are quickly becoming an interesting fundraising tool for startups focused on climate tech to consider as they navigate different sources of capital. Still, this is still an opportunity that needs to be further investigated to become more accessible and better understood.

The most popular crowdfunding campaigns have been concentrated in a select number of geographies that, unsurprisingly, already have the largest share of investments in climate tech. The climate transition must be an equitable transition, where innovative startups in the farthest reaches of the globe have the same opportunities to scale and enact change as companies in traditional capital and innovation hubs. Crowdfunding can also give innovative startups and retail investors the same opportunities to contribute to reaching our global 2050 climate goals, regardless of where they are located.

For crowdfunding to achieve a greater climate impact, sectoral preference would also have to shift and match the current breakdown of emissions, requiring more startups and investors aligning around the opportunity to innovate and invest in the highest-emitting sectors such as buildings, industry, electricity, and agriculture and forestry.

Technical Appendix

Overview

The Intergovernmental Panel on Climate Change estimates that fighting global warming will require US$3.5 trillion of investment annually by 2050. The energy transition is thus one of the great investment opportunities of our time. Unfortunately, the ability to share in the upside from the energy transition is primarily limited to institutional funders, especially for early-stage technologies and startups that are often supported by venture capital or high-net-worth investors. Unaccredited retail investors have few avenues to participate. This presents a missed opportunity, because the global crowdfunding market was estimated at over US$1.4 billion in 2023 and is expected to double by 2030. Accessing these investors, however, generally imposes an increased compliance burden under US federal and state securities laws.

Morrison & Foerster LLP and Third Derivative, a program of RMI, have collaborated to prepare a technical appendix that provides an overview of certain key US securities laws, how these laws can make raising funds from unaccredited retail investors difficult, and structures available to broaden participation from this constituency.

Such options include forming registered funds (such as interval funds), conducting securities offerings through nonprofit entities (that may qualify for certain exemptions), and establishing a crowdfunding platform or internet-based funding portal — or partnering with existing crowdfunding platforms for either purpose. For each of the legal structures analyzed to aggregate capital from retail investors, the technical appendix includes an overview; an analysis of the compliance considerations, key terms and conditions, and relevant stakeholders; and an example, as well as considerations for the advantages and disadvantages of pursuing each of the options analyzed.

If interested in exploring further…

Sponsors and other persons interested in reading the technical appendix in detail and exploring the legal issues posed by soliciting capital from unaccredited investors, and the potential solutions discussed above, are invited to reach out to Third Derivative (**info@third-derivative.org**) and Morrison & Foerster LLP (**BenjaminFox@mofo.com**, **SMaccormac@mofo.com**).

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