







CLIMATE TECH 2023

EUROPE'S NEXT CHAPTER

Founder Interviews | Investor Insights | Climate Tech Startups To Watch







CONTENTS

Introduction	03	
European Climate Tech: In Numbers	04	
European Climate Tech Founders: A Call to Action	80	
Are You Investible? Insider Advice From Planet First Partners	12	
Future of European Climate Tech:		
Blue Economy Inna Braverman (Eco Wave Power) & Pierre Paslier (Notpla)	16	
Built Environment Lucas Carné Carcas (011h) & Simon Phelan (Hometree, backed by 2150)	20	
Carbon Tracking & Carbon Capture Christoph Gebald (Climeworks), Lubomila Jordanova (Plan A) & Rachel Delacour & Raphael Güller (Sweep)	24	
Circular Economy Bas van Abel (Fairphone), Miroslava Duma (Pangaia) & Simon Mellin (Modern Milkman)	30	
Energy Enass Abo-Hamed (H2GO) & Greg Jackson (Octopus Energy Group)	36	
Farming & Food Antoine Hubert (Ÿnsect)	40	
Mobility Linnéa Kornehed Falck (Einride) & Stephen Fitzpatrick (Vertical Aerospace)	42	
What Can You Do? A Message From Founders Pledge	46	
Investor Insights. Investment Trends & How to Raise		
23 Climate Tech Startups to Watch		
Partner With Us	66	

INTRODUCTION

Investors are hungry for climate tech! Climate tech funding represented more than a <u>quarter</u> of every venture dollar invested globally in 2022, with European startups raising record venture rounds.

But when President Biden announced the Inflation Reduction Act of 2022 (IRA) late last year, every climate tech founder's gaze turned to the United States.

The \$369b mega-package of subsidies and tax breaks for climate-friendly investments has already convinced two of Europe's biggest climate tech companies – Climeworks and Northvolt – to expand to the US.

So what's the current state of European climate tech? And how can Europe remain an attractive destination for climate tech founders?

In **Climate Tech: Europe's Next Chapter**, published in partnership with 2150, Dealroom, and London Tech Week, we bring together the continent's leading founders to issue a call to action for governments and legislators, outlining the key changes we need to encourage innovation in European climate tech.

From autonomous trucks to sunglasses made from CO2, we speak to founders from each climate tech sub-sector to reveal the challenges and opportunities shaping the space.

We highlight the biggest investment trends, recent raises, and most active investors. Plus, we look to the next generation, profiling the 23 European climate tech companies to watch in 2023 and beyond.

Read on to go inside the world of European climate tech!

Cover (left to right): Linnéa Kornehed Falck (Einride), Miroslava Duma (Pangaia), Antoine Hubert (Ÿnsect).

Content: Marco De Novellis Design: <u>7nine.uk</u>



EUROPEAN CLIMATE TECH IN NUMBERS

European Climate Tech Funding (2022)











\$7.1b



Blue Economy

Algae Tidal Energy



Built Environment

Advanced materials Smart & Green buildings Smart grid **Building retrofits** Sustainable HVAC



Carbon

Carbon capture & storage Carbon tracking & offset Climate Fintech Biochar MRV Direct air capture Methane **NBS**



Food waste Fashion waste Regenerative Materials Recycling Technologies Supply Chain managaement Waste to energy **Sharing Platforms**

Circular Economy



Energy

Energy efficiency **Energy storage** Solar Energy Hydrogen Wind Energy Nuclear energy



Farming & Food

Precision Farming Regenerative farming **Alternative Proteins Precision Fermentation Vertical Farming** Sustainable Fertilizers



Mobility

Electric vehicles **EV Chargers Biofuel Electric Aviations** Electric vehicles batteries











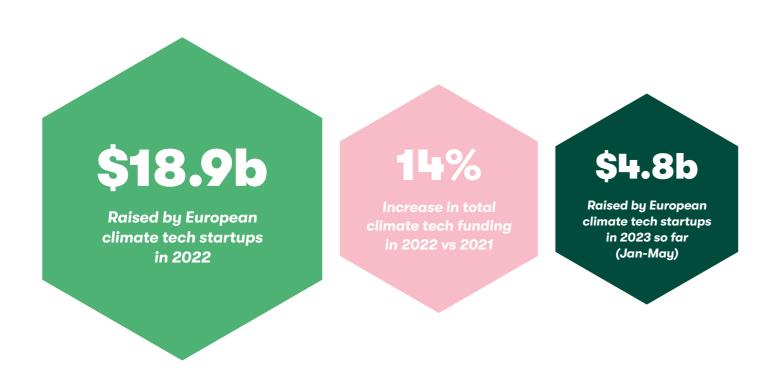




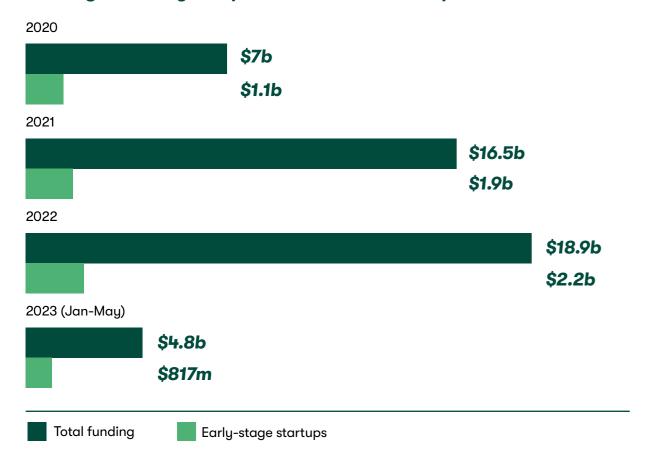








Funding Raised by European Climate Tech Companies



Top Climate Tech Hubs in 2022



Methodology

<u>Dealroom</u> analysed approximately 6,600 climate tech companies with headquarters in Europe to provide data for this report. Dealroom's climate tech definition only encompasses companies whose core business is directly related to decarbonisation or climate transition. Semiconductor companies or generic supply chain solutions are not counted as climate tech.

Note, total funding figures don't match the combined sum of all climate tech sub-sectors as some companies are categorised under more than one sub-sector. 'Early-stage startups' are companies that have raised rounds of up to \$15m. 2023 data is from 1 January to 1 June.



EUROPEAN CLIMATE TECH FOUNDERS A CALL TO ACTION

The European Commission's Green Industrial Plan marks the EU's response to the IRA. Yet, across continental Europe and the UK, founders feel that more can be done.

What must Europe do more to encourage innovation in climate tech? Here's our 10-step action plan from Europe's leading climate tech founders:

Protect the Innovators

Antoine Hubert Ÿnsect



Restructuring costs in Europe are often five times higher than in the US. That means it's way more expensive for large companies to test innovation, stop if it doesn't work, and restructure their business. We need grants or an insurance product to protect companies who take risks and innovate, so if they don't succeed, at least the costs they incur will match those of US companies.

Offer Risk-Ready Funding

Linnéa Kornehed Falck Einride



Support Alternative Materials

Pierre Paslier Notpla



The US has DARPA, which backs more creative, emerging technologies. We need a similar, Europe-wide fund to support creative innovation and to get founders to stay in Europe and not go elsewhere. Innovation is born out of experimenting, testing, and not knowing how things are going to play out. In Europe, we have the mindset that if you fail with your first company, you shouldn't start another one - and that needs to change.

We've been investing billions in recycling for 50 years, and we continue to prioritise it over everything else, but still less than 10% of plastic gets recycled. We need to shift focus and establish a clear, supportive framework for alternative materials.

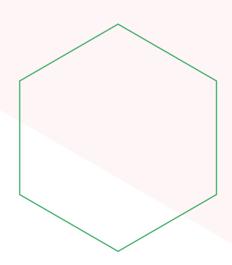
Make Sustainability Easy

Bas van Abel **Fairphone**



The system is set up to make producing new electronic products cheaper than reusing them. We're creating a reverse incentive for people to not be sustainable - just lowering taxes on repair services would help. Plus, rather than just meeting various unstandardised ESG taxonomies pushed down on companies by the financial system, we need to be able to incorporate as a circular company, with caps on returns so you reinvest in the company's mission. That will provide a clear circular label for governments so public funding and tenders go to the right places.

(Image Credit: Simon Gerlinger)



Digitise the Grid

Greg Jackson Octopus Energy Group



We need fundamental reform of regulation across the entire energy space. It's crazy that if you want to build a data centre, you can connect terabytes of data directly to the internet with virtually no barriers, but it can take you over a decade to get an electricity connection. The internet was transformative and is resilient because of decentralisation, which allows for innovation, and we need regulators to learn from that.

Fund Commercial-Scale Projects

Inna Braverman Eco Wave Power



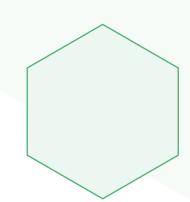
Most European funding goes into R&D. Today, a new wave power company that needs \$10m to produce its first one kilowatt of energy is more likely to get funding than a commercialising company that can generate 10 megawatts with \$10m. We need more funding for the construction of commercial projects that can supply households with energy and make an impact.

Incentives Over Restrictions

Simon Phelan Hometree



The IRA has changed the game – the first question investors ask me now is whether I'm going to expand to the US. To decarbonise our economy, we need more debt capital, infrastructure, and project financing, and we need pension funds to get into the market in a big way. We need European-wide incentives to get capital markets working together to bring low-cost capital into the space and help us compete.



Bring in the Founders

H2GO Power Enass Abo-Hamed



If regulation is there to encourage entrepreneurs and scale new tech, it needs to match the pace of the market. Regulators need to bring decision-makers to the table – activists, entrepreneurs, people who bring people together and build things – and give them influence. Then you'll see less bureaucracy and more action-oriented decisions.

Foster Collaboration

Lubomila Jordanova Plan A



There are so many phenomenal hardware solutions that need to get out of the lab. We need to be able to experiment more, but bureaucracy is a big problem. If founders and regulators can combine their skills, resources, and start speaking the same language, Europe will become the leader in climate tech.

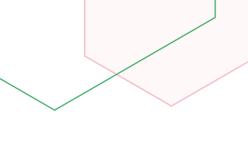
Prioritise the Planet

Miroslava Duma Pangaia



You can have all the money in the world, all the innovation, all of the right intentions, but if governments don't support implementation, regulation, and testing at state-level, then a piece of the puzzle is missing. Climate change is one problem we all have in common. Instead of coming up with solutions together, we're finding reasons to fight and, for governments, these issues have become more pressing.





ARE YOU INVESTIBLE?

Insider Advice From Planet First Partners



"Everything we do is at the service of the climate and raising capital to achieve change in the race to net zero."

Interview with Frédéric de Mévius, Executive Chairman & Managing Partner

PlanetFirst

"The Biggest Step is Productisation."

Moving from a tech-only business to a great commercial business is just as important as finding the right technology to start with. You need to be able to spot the commercial potential of your tech and then move from managing a team of 10 scientists to hundreds of people in an org chart that's flexible, agile, and addresses the key challenges of the market.

Move out of the research and development phase, understand your total addressable market and serviceable addressable market, and know how to position your product and service offerings to satisfy your core customers.

"Master Your Technology And Have Scale-Up Potential."

We look for passion, leadership, your ability to bring people from within and outside your organisation on board with your vision, and organisational skills so you can apply your vision to your organisation.

Our founders have a healthy dose of evangelism in them that we greatly support, but we look for the right mix of a commitment to sustainability and a great business opportunity.

Master technology, build your company around tech that creates a moat for the future, and be prepared to work with us on growing your businesses from €10m in sales to €500m-€1b over time.

"We're Excited About Hydrogen, But Cautious On Plant-Based Alternatives."

We're very excited about alternative materials, proteins, electrification and energy storage, and bioinputs in agriculture. Hydrogen is also a key pillar of our thinking and will be a huge sector of the future.

One we're more cautious about at the moment is plant-based alternatives. We like the sector, but there's still a mismatch between the product offering and consumer expectations. It seems tough to get consumers to make repeat purchases. We need products to improve further for that sector to become exciting again.

"Great Companies Still Have Suitors."

The current investment environment has rebased valuations, but that doesn't take away the size of the opportunity in the sustainability space. Instead, the valuation rebasing provides a welcome dose of realism.

What makes Planet First Partners unique is our team, a combination of our strong alignment to sustainability, the people and operational support we give the companies we invest in, and our ecosystem that helps our businesses to thrive.

€450m
Fund raised by
Planet First
Partners

INSIDE PLANET FIRST PARTNERS

AUM: **€450m**

Focus: Energy, Farm to Fork, Green Cities, Industry 4.0

Stage: Growth (Series B-C)

Ticket Size: €10m-€30m

Eka Ventures II LPH

Portfolio Includes: Sunfire GmbH, Submer Technologies SL,

<u>Planet First Partners</u> is a growth equity investment platform that invests in and partners with disruptive entrepreneurs to scale tech-enabled businesses that combine a purpose-driven mission, profitable growth, and a people-centric culture.

Planet First Partners is particularly focused on growth stage companies with proven products and services; current portfolio companies include world-leading industrial green hydrogen electrolysis company Sunfire, and Submer, whose immersion cooling technology is making data centres more sustainable.

Founded in 2020, Planet First Partners is classified as an Article 9 Fund under the EU's Sustainable Finance Disclosure Regulation, whereby investments are made exclusively in organisations which contribute to an environmental objective or an investment in an economic activity that contributes to a social objective.



FUTURE OF EUROPEAN

CLIMATE TECH

Linnéa Kornehed Falck Einride



Christoph Gebald & Jan Wurzbacher Climeworks



BLUE ECONOMY



Inna Braverman Eco Wave Power

Pierre Paslier Notpla



Inna Braverman, Eco Wave Power

"Wave power is the only renewable energy source that can generate electricity, 24/7."

Founded: **2011**

Country: Israel & Sweden

Stage: **Publicly traded on Nasdaq**Total Funding Raised: **\$27m**

Eco Wave Power produces clean electricity from ocean and sea waves by attaching its energy-converting floaters to existing structures like piers, breakwaters, and jetties. The company operated the world's only onshore grid-connected wave energy power station for six years in Gibraltar.

Now, Inna is set to open the first grid-connected wave energy power station in the history of Israel. She recently launched the first US-based power station in the Port of Los Angeles' AltaSea and announced plans to build the world's largest wave energy power plant on Turkey's Black Sea coast.

At just two weeks old, Inna suffered respiratory arrest due to pollution from the Chernobyl nuclear disaster. Her mother saved her life with mouth-to-mouth resuscitation. She's devoted her life to clean energy ever since.

Opportunities

Making Waves

Wave power is the least intermittent renewable energy source; it can generate electricity day and night, 24/7. More than half the world's population live within 100km of a coastline, so you can save on transmission costs. Water is also 832x denser than air, so a small ocean current produces more kinetic energy than 200 mph winds. That means you can produce much larger electricity amounts with smaller, cheaper devices.

The World Energy Council predicts that wave energy alone can produce twice the amount of electricity the world currently produces. If we're aspiring towards 100% environmentally-friendly energy generation, then wave energy has to be a part of the equation.

Challenges

Words Into Action.

It can take as little as six months to build a pilot power station and as long as three years to get approval for it. Regulation wants to be on our side, but many governments don't yet have the policies or the licensing procedures in place. There's a lot of talk, but we need a phase of implementation.

Insights

Impacting Regulation

If you've heard of wave energy's potential, but never seen a wave energy device, why would you regulate it? Dialogue alone is not the best catalyst for change. Instead, when regulators see a product in action – when they come to a pilot power station and see the media and other politicians respond well to it – they want to come on board.

Public Vs Private

Going public adds another layer of difficulty with financial reporting that has nothing to do with your operations. If you're a B2B or B2C company, postpone going public for as long as you can. However, if you're a B2G company, going public creates the transparency you need to work with governments. After we IPO'd, we were able to significantly extend our project pipeline and sign more concession agreements.

International Expansion

Innovative tech requires innovative thinking, and you need to work flexibly. Make strategic partnerships and learn from them. Then, create awareness through the media. You want every government, city, and local mayor to know you exist – that will make it much easier to promote your technology.



Pierre Paslier, Notpla

"Seaweed packaging is no longer in the lab – we're now able to manufacture products made from seaweed at scale."



Founded: 2014
Country: UK
Stage: Series A

Total Funding Raised: £16.4m

Notpla makes sustainable packaging from seaweed. Its natural, plastic-free products – including paper, coating for takeaway boxes, and edible bubbles for liquids – biodegrade naturally in 4-6 weeks. Notpla was named one of the £1m winners of Prince William's Earthshot Prize in December 2022 and, together with Just Eat, distributed two million plastic-free takeaway boxes last year.

Now, Notpla is working with Heinz, on packaging for condiments and spices, and Decathlon, on plastic-free energy gel for runners. Pierre's mission is to fight plastic pollution by making packaging disappear. By the end of 2023, he's looking to raise £30m in Series B funding, distribute six million takeaway boxes with Just Eat, and launch the first set of Notpla products in the US.

Opportunities

Sustainability By Sea

Seaweed is a zero input crop. It doesn't use up fertile land, fresh water, or fertiliser. Compared with anything coming out of intensive agriculture, it has by far the best sustainability credentials.

There are also massive seaweed blooms in the ocean that are a direct result of us pumping fertilisers into rivers. We firstly need to reduce our use of fertilisers. But if the biomass is there, why not use it for something good?

Oceans Untapped

In the ocean, everything is in constant motion and nothing happens in isolation. There are huge opportunities to create regenerative models, where you're not intensively using one plot of land and taking all the nutrients out of the soil. Over 70% of the planet is ocean, so we're working with a system that's hugely scalable. We're only scratching the surface of what's possible.

Challenges

Legislation Loopholes

The EU's <u>Single Use Plastics Directive</u> is a great piece of legislation in theory, because it defines what is and isn't a plastic – anything that occurs in nature and isn't chemically modified isn't a plastic. However, the legislation only considers the main structural component of a product. This qualifier undermines the whole definition. Any product with synthetic plastic coating or additives can get away with it and still be considered 'not plastic'.

Greenwashing

Because of these loopholes, we're seeing greenwashing like never before. The market is king. Companies are putting plastic dispersion coating on boxes, which falls through the regulatory cracks – so you can buy cheap, plastic takeaway boxes from China and still get the certificates to say they're not plastic. Some companies are purposely saving money with this approach; others think they're doing the right thing but they aren't.

Pricing Versus Plastic

We're working against an extremely commodified material, which is also heavily subsidised. Seaweed can be one of the most affordable material biomasses there is, but it still takes a long R&D cycle to get out of the lab. We've called for 10 policy changes to shift to a world free of plastic waste and pollution. Price is something that comes with scale and having regulation on your side.

Insights

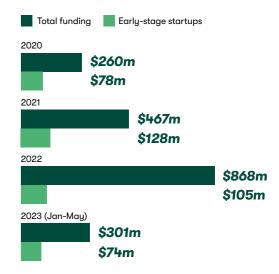
Family Offices

VCs are struggling to raise new funds at the moment, but we're getting a lot of interest from family offices. They make up about half our existing funders. They're more patient with long-term, deep tech investment, and more willing to look beyond mainstream solutions. Our Series A was led by Horizons Ventures, who behave like a VC, but never have to raise a next fund or find new LPs.

\$868m

Raised by European blue economy companies in 2022

Funding Raised by European Blue Economy Companies



Recent Raises

X Shore €27m Series B April 2023

Algama €13m Series A Jan 2023

Candela \$20m Series B March 2023

Most Active Investors



Series A



Seed



Seed

Source: Dealroom

Most active investors based on the number of rounds participated in the category between Jan 2022-May 2023.

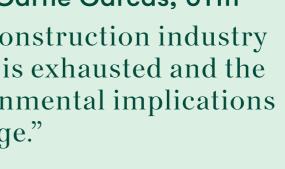


BUILT ENVIRONMENT



Lucas Carné Carcas, 011h

"The construction industry model is exhausted and the environmental implications are huge."



model, plan refurbishments with new components, and have a robot physically mark on the floor where you should place them. With software apps, you can also manage and track waste disposal and ensure you comply with regulation automatically.

Founded: 2020 Country: Spain Stage: Series A

Total Funding Raised: €35m

011h does 'real estate lego' with timber, digitally codesigning components for construction with industrial partners, before they're made in a factory and assembled on-site like flatpack furniture.

Typical construction projects can take several months to complete. By standardising and digitising the construction process, 011h can help build low-carbon, residential buildings out of wood in a matter of weeks.

Lucas raised €25m in Series A funding in July 2022. With each new project, he's building out his tech platform to bring the industry's entire supply chain together and make construction more repeatable, scalable, and sustainable.

Opportunities

Connecting Construction

Construction accounts for 40% of annual CO2 emissions. Firms use concrete, steel, and manual labour, making residential construction unsustainable and difficult to scale. With digitalisation, we can bring all the industry's actors and processes - from design, to manufacturing, to assembly – under one system to organise better, share data, and automate tasks to boost productivity.

With the data we'll have, you'll be able to see the environmental impact of any type of material. If you're modelling a building, you'll be able to calculate the environmental impact straight away.

Soft+Hardware

By combining software and hardware, we can innovate with new materials like mass timber or recycled steel. Robots with visual recognition technology can 3D map existing buildings. You can then put that into a digital

Challenges

Cost Of Change

Anything new is going to cost more to start with, and anything with additional cost is going to take time to penetrate the market. That's why regulation is so important. If we introduce the right incentives and obligations to lower environmental impact, build faster with less waste, and make financing for sustainable development more available, that's really going to move the needle.

Integration

Construction today is mostly based on artisan labour, which gives you a lot of room for improvisation and ad hoc changes, so integrating a new standardised solution is a challenge. New software has to be accessible to everyone working in a building, integrate with paperwork, and allow for changes and modifications.

Insights

Raising Investment

Funding for climate tech is still healthy, but we don't know for how long. Be opportunistic and try to raise capital in the next 12-18 months. Also, sustainability is not sustainable if it's not value competitive and convenient. Have a solid impact thesis that is 100% consistent with your strategy and business model. Focus on climate, but also think about scalability and risk versus return.



Simon Phelan, Hometree

"The decarbonisation of heat in the home, and how that gets financed, is an enormous opportunity."



Total Funding Raised: \$78m

<u>Hometree</u> is on a mission to help millions of people decarbonise their homes. To start out, Hometree offers home emergency breakdown cover, plus installations and financing for energy efficient hardware, to tens of thousands of homes.

In April 2023, Hometree raised \$46m in a Series B funding round led by 2150, Legal & General, and Energy Impact Partners, and acquired green home improvement financing platform, BeWarm. Now, Simon wants to scale his core insurance business to get access to more homes, launch new finance offerings, and boost the installation of heat pumps and climate-friendly home energy solutions across the UK.

Opportunities

Now Is the Time

Investors and governments finally recognise the scale of the opportunity and the pace we need to move at to decarbonise our homes. The climate argument has always been there, but the war in Ukraine has accelerated the trend and made European countries see the need for energy independence



Financing Decarbonisation.

If you think about the traditional grid, it would be bizarre to think that consumers would fund all the infrastructure just because it's on their road or in their town. Now that the grid is extending into people's homes, it doesn't make sense that the consumer funds the hardware.

The broader decarbonisation of the home and how that gets financed, maintained, and serviced, is the big opportunity we're looking into. We need a suite of financing plans to take away the upfront cost for homeowners. And we're going to need significant amounts of low-cost capital that will own, finance, and repair critical assets – in battery storage, charging, and heating – to accelerate adoption.

Challenges

Government Support

There's confusion in government about the best tech to decarbonise heating in the home and whether to use hydrogen or not. We need to focus on tech that works today rather than the pipedreams of the future. We need more incentives for capital markets to back residential heating and more government-backed campaigns to educate consumers on why they need to upgrade from gas boilers.

Upskilling Engineers

We have a network of 5,000 engineers who have all struggled with learning about heat pumps and new technologies. It's the existing contractor base who will install this new tech. We need incentives for engineers to retrain and upskill, which will eventually help reduce the soft cost of installation.

Backed By:

2150

Insights

Raising Investment

With utility-scale projects worth £500m, it's much easier to go to institutional investors and get funding as the scale of the project makes it worthwhile for them to invest. In a residential setting, where your average project size might be £20k, it's very different. Capital markets need origination platforms that can take enough volume of residential energy efficiency jobs to make it worth their while.

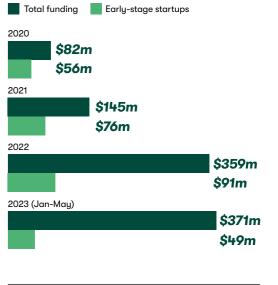
Furthermore, as a company, you could just focus on installing new technology such as heat pumps, but the economics of pure-play D2C installation companies are challenging. Only 45,000 heat pumps were installed in the UK last year and the marketing costs to convince consumers are high.

We've already built a big customer base of homeowners who mostly have gas heating. We're protecting them with insurance and we're able to migrate them over to heat pumps and support them with financing products when they're ready, rather than having to convince them overnight – that's what resonated with our investors.

Given our scale, we expect we'll be able to bring hundreds of millions worth of residential energy efficiency project volume in the coming years, and act as the bridge between micro-infrastructure projects and the big financiers.

> \$359m Raised by European built environment companies in 2022.

Funding Raised by European Built Environment Companies



Recent Raises

Infogrid\$90mSeries BApril 2023Gropyus€100mSeries BJan 2023

HTMS \$15m Series A March 2023

Most Active Investors



Seed



Series A



Seed

Source: Dealroom



CARBON TRACKING









Middle: Rachel Delacour & Raphael Gueller, Sweep

Lubomila Jordanova, Plan A

"The carbon accounting space has exploded and companies are joining on a daily basis."



Founded: **2017**Country: **Germany**

Stage: **Series A**

Total Funding Raised: \$15m

Plan A helps companies measure, monitor, and reduce their carbon footprint, with automated ESG reporting, decarbonisation planning, emissions calculations, and net zero target setting. Plan A already has seven megatonnes of carbon under management and counts BMW, BNP Paribas, and the European Union among its customers.

Lubomila's goal is to reach one gigatonne and help businesses worldwide achieve net zero. She's also the Co-Founder of the <u>Greentech Alliance</u>, which supports and connects more than 3,000 green tech startups to 500 leading VCs, media organisations, and expert advisers.

Opportunities

Exploding Space

The carbon accounting space has exploded, companies are joining on a daily basis, and that's only going to continue. Customer engagement has pressed organisations to take action. We've seen more appetite for investment and the organisations we work with are more advanced in their sustainability journey. They're in sectors influenced by legislation; they want to comply, and are financing value chains to become more sustainable.

Challenges

Educating Investors

I see continued discrimination from VCs against anything related to hardware, women, solo founders, scientists who don't speak their language, and startups from outside hubs like Berlin and London. Every investor needs to go through an educational course on sustainability and ESG. Investors know how to approach SaaS and marketplace businesses, but climate tech, which is bigger than anything a VC has ever invested in, isn't well understood.

Saturated Market

Individual consultants, big consulting firms with ESG departments, digital tools, and health and safety platforms are all offering some form of carbon accounting. Plus, some organisations are building carbon management tools themselves. You need to explain why your value proposition is different and why your platform is the best bet when it comes to satisfying regulation and preparing for decarbonisation at scale.

Insights

Corporate Partnerships

We went through BMW's accelerator program,
Respond, and now they're our biggest client.
When big companies run accelerator programs,
they mostly want to establish long-term relationships
with you. The innovation teams that set up these
partnerships are judged and even get bonuses
based on how successful a pilot is.

Raising Investment

A relationship with a VC is like a marriage you can't get out of, so you need to think long-term. Do your background checks and ask portfolio companies whether they've been supported. Have any decisions been blocked? Did they get support for their next funding round? When we started, no VC had a thesis on sustainability. Now, I get 20 inbound requests each week. We are very selective and spend time with investors we feel are most knowledgeable about our topic.

Rachel Delacour & Raphael Gueller, Sweep

"Every business will have to tackle their carbon emissions. Those that do now will be the leaders of tomorrow."

Founded: **2020**Country: **France**Stage: **Series B**

Total Funding Raised: \$100m

In its first 12 months, <u>Sweep</u> raised \$100m from VCs – including 2050, Balderton, and La Famiglia – and top angel investors like Tony Fadell. The carbon tracking platform helps companies understand, manage, and reduce their carbon emissions across their entire business and value chain – and 40,000 emissions factors are stored and maintained in its database. Sweep boasts four megatonnes of carbon under management and its clients include Saint-Gobain, Swisscom, and Ubisoft.

Opportunities

Regulation Onside

Regulation is helping to drive our business and create the market. Finance teams are under pressure to do additional reporting and procurement teams need to know where new carbon emissions come from. More companies understand that carbon management needs to be a day-to-day business practice embedded across functions. Eventually, every team in a business will have a carbon budget to manage as well as a financial budget.

Challenges

Data Struggles

The <u>Greenhouse Gas Protocol</u> has various categories that regulate how you report emissions. But once you dig into each category, it's still a black box; everyone is generating their data differently.



Plus, for most companies the largest chunk of their emissions come from their business partners, purchased goods or services, or investments.

Reporting carbon emissions from your own organisation is a challenge, but getting data from thousands of suppliers is even harder. Making data comparable and finding ways to structure and automate data sharing is key.

Insights

International Expansion

If your product is global, it can be tempting to sell it everywhere and do everything at once. It's important to have a clear focus. We target certain markets first, find what's scalable and repeatable, and then move somewhere else.

Managing Growth

We started in stealth with two customers with very different use cases – Saint-Gobain and HP – and built our product with them. Saint-Gobain is a large, carbon-heavy organisation and we focused on reducing their Scope 1 and 2 emissions, while HP was more about the network, working with partners across their value chain to reduce Scope 3 emissions. We learned so much by working on real use cases and those companies are still our customers today.

Raising Investment

We've surrounded ourselves with people who believe in our mission as much as the rewards that come with it. With every investor, we've gained a new network and area of expertise we can leverage. As a traditional SaaS model, expectations were revenue early. We've been on rocket growth and there's a lot to build. Now, with our Series B, there's a stronger focus on scaling and go-to-market.

CARBON CAPTURE





Christoph Gebald Climeworks





Christoph Gebald, Climeworks "The biggest challenge is to scale the industry as fast as possible to the magnitudes required by climate science."



Founded: **2009**

Country: Switzerland

Total Funding Raised: \$820m+

A pioneer in direct air capture, <u>Climeworks</u> fights climate change by removing CO2 from the air. Climeworks raised \$650m in equity funding in April 2022. It already runs the world's largest direct air capture and storage plant. Now, Christoph and his team are set to launch a plant nine times bigger in Iceland in 2024 and expand to the US. The goal: scale fast to remove a gigatonne of carbon from the atmosphere by 2050.

Opportunities

Emergence of Standards

Standards that create shared principles for defining and verifying carbon removal credits are so important for creating a level-playing field and establishing trust in our product and market. This is a key focus for us as we established the first direct air capture and storage methodology earlier this year and delivered the first independently verified CO2 removal service to our customers.

More Government Action

The US has taken a clear leadership position with policies that help advance carbon removal solutions and the <u>DAC hubs</u> program. The EU is choosing to regulate first before financing new technologies, but we're going in the right direction. We see important progress in defining carbon removal standards and preparing for a regulated carbon dioxide removal market in the EU.

Demand From the Voluntary Carbon Market

The voluntary carbon market could provide <u>demand</u> for over two gigatonnes of carbon credits by 2030, 13x more than in 2021. We see an ever-increasing demand for high-quality, permanent carbon removal.

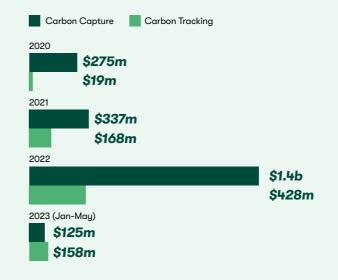
Challenges

Scaling Fast

The single biggest challenge is to scale the industry as fast as possible to the magnitudes required by climate science. This requires the conjunctions of all forces: more funding (through grants, public funding programs, and equity and project finance), the development of both the voluntary and the compliance carbon markets, supportive policies and regulations, including high-quality standards, and a supply chain able to deliver on a massive scale.

My message for founders is: be ambitious, follow science, always work with high integrity, and build a credible roadmap towards your goals.

Funding Raised by Carbon Capture Vs Carbon Tracing Companies



Recent Raises

Agreena	€46m	Series B	April 2023
Carbonplace	\$45m	Seed	Feb 2023
Abatable	\$13.5m	Series A	April 2023

Most Active Investors



Source: Dealroom

\$1.4b

Raised by European carbon capture companies in 2022.



CIRCULAR ECONOMY



Bas van Abel Fairphone

Miroslava Duma PANGAIA





Bas van Abel, Fairphone

"We need a cultural transition to re-establish a healthy relationship with our products. Technology alone can't solve that."

Founded: 2010

Country: The Netherlands

Stage: **Series C**

Total Funding Raised: \$93.9m

Bas started <u>Fairphone</u> as a movement for fairer electronics, campaigning for climate-friendly production, repairable products, and better working conditions for people across the value chain.

Fairphone sources conflict-free materials from mines in the Democratic Republic of Congo and works with manufacturers to produce sustainable smartphones with longer-lasting battery lives. Its Fair Cobalt Alliance brings together big tech firms, like Google and Tesla, to improve the cobalt mining sector in DR Congo.

Fairphone raised €49m in growth capital in January this year and recently launched a subscription model, Fairphone Easy, rewarding people who keep their phones for longer.

Opportunities

Rethink the Business Model

If you're a circular economy company, but your business model is based on pushing as many products into the market as possible, you have a paradox there. One of our KPIs is to sell more sustainable phones; another is to make sure people use their phones for as long as possible. That's a real mindscrew for our sales people!



If I sell you a phone now, you become a cost to me – every software update or customer service I offer costs me money and I have to put reserves into my P&L to cover that. With a subscription model, I'm intrinsically motivated to support you as a customer – the longer people keep their phones, the less production cost I incur. Plus, I can incentivise people to keep their products for longer by lowering costs for those who look after their phones.



Challenges

Beyond Tech

We suffer from phone anorexia! We're obsessed with thin phones and that means built-in batteries that can't be replaced. The only way to change that is through regulation and a new eco-design paradigm. But circular innovation isn't always tech. We need more funds allocated to social innovation that is still scalable but might not have that hockey stick growth curve.

Culture Shift

I've heard big tech players talk about extracting minerals from the bottom of the ocean. That's seriously alarming – we know more about the surface of the moon than the ocean floor!

Everything is based on a linear growth model and companies finding ways to increase supply. But what about demand? We don't need two Teslas in our driveways. Ultimately, we need a cultural shift to rethink the relationship we have with our electronics and trigger systemic change.

Insights

Implementing the Circular Economy

You need to look at the entire product life cycle; the mining and sourcing of materials, manufacturing, recycling, and reusing.

The argument for reuse is simple. If people use your product for twice as long, you can cut what you produce, and your electronic waste, by half. Recycling should be a last resort. In reality, most electronics are tossed into an incinerator. Companies are creating unsustainable products and then embracing recycling so they can say they're doing a good thing.

Impacting Regulation

First, you need to create awareness of the problem. Get people angry, agitated, and amazed by what's happening. Then, show it's possible to do things differently and inspire the rest of your industry to join you. Position yourself as a broker between governments, NGOs, and the business world.



Bas van Abel Fairphone Photo by: Jerome de Lint

Miroslava Duma, PANGAIA "Our earth-positive business model means every product we produce is better for the planet than if it did not exist."



Founded: 2019 Country: UK Stage: Series A

Total Funding Raised: Undisclosed

Pangaia is a material science company that makes everyday garments from lab-grown, bio-engineered, regenerative materials. As well as sunglasses made from CO2 and plant-based leather, its latest innovations include The Infinite Tee, the world's first t-shirt made from 100% post-consumer, cotton-rich textile waste, and The NXT GEN Hoodie, made from animal-free protein fibres.

While most fashion firms outsource their entire manufacturing process, PANGAIA has its own research and development facility and creates its own-brand collections in partnership with sustainability-conscious designers and artists. Mira is now working to launch a platform to democratise sustainable product creation and make PANGAIA's material science library available online.

Opportunities

Earth-Positive Business

Our mission is to design an earth-positive business model, meaning that every product we produce is better for the planet than if it didn't exist. We turn agricultural waste into yarn for next-generation t-shirts and hoodies, and we've created sunglasses made from CO2 with carbon capture company, Twelve.

We can't suddenly stop producing. People need jobs and an income – that's how today's economy works. Our solution is not to create less, but to design a way to create in an earth-positive way so businesses give back more than they take.

Lab To Market

You can have the most amazing innovation sitting in your lab, but if you can't showcase or communicate it well, you won't be able to sell it. Scientists with great solutions need support with storytelling, content, and a way to inspire people. We identify amazing individuals with great IP in their hands, invest in them, and help them take their ideas to market.

Challenges

Emerging Technology

Our Impact team are the guardians of our purpose and the filter that all our new product ideas go through; they decide whether we go ahead with something or not. With existing traditional supply chains, in 99% of cases it's a 'no'.

We considered launching sustainable swimwear made from plastic ocean waste. But anything made from plastic releases microplastic particles when it's washed that are then released into water streams. The technology to do a fully bio-based replacement just isn't there yet.

We're still just helping these new startups to go to market, bring their prices down, and scale. We need more big companies and the broader industry to take risks and look at making climate investments with a long-term view on ROI. It's about looking at the next 50 years, not the next month.

Simon Mellin, Modern Milkman "We need to integrate the household into supply chains and make it easier to give something back."



Founded: 2018
Country: UK
Stage: Series C

Total Funding Raised: £68m

Modern Milkman is bringing doorstep milk delivery back, connecting local farmers and independent suppliers to deliver milk, as well as food and household goods, in compostable, recyclable, reusable packaging.

Modern Milkman raised £50m in Series C funding in November 2022. Simon's mission is to revolutionise consumer habits to reduce plastic waste. He's planning a European expansion and testing package tracking tech to better understand household consumption and find new ways to reduce waste across the supply chain.

Opportunities

Integrating the Household

There's an expectation from consumers for convenience that you can't reset. We need to integrate the household into the supply chain to reduce hassle for customers and make it easier to give something back.

Food is a huge opportunity. We've built a foundation with customers. Now, it's about further leveraging tech so customers know how many products are in their household, how much they've used, and can adapt their usage rates. The more efficient we can be as a society, the fewer things we have to produce, and the less waste and carbon output.

Challenges

Bad Habits

Changing consumer behaviour is the biggest challenge, so you need to speak in a language the average consumer can understand. That's why plastic is so powerful – people can understand it and buy into it. We try to present little-and-often habit changes and encourage people to build on those over time.

Milk Margins

Convincing suppliers and large retailers to change how they work in a low margin industry is a challenge. It goes back to consumer expectations. Food is very cheap, and it should remain affordable, but we need a shift to happen in the perceived value of food.

Insights

Raising Investment

Build something with commercial viability that fixes a consumer need and an environmental problem. Many impact startups hang everything on the fact they're going to change something. For a startup to succeed, it's got to be commercially viable and have some cost parity with what it's competing with.

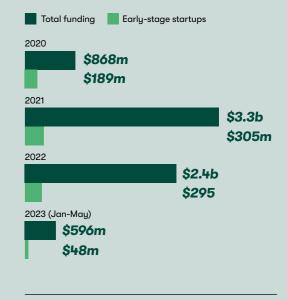
Managing Growth

We regionalised our supply chains to grow at a much faster pace. Rather than pumping volume through one producer, we spread the load around. To ensure quality, we set standards from the start. Customer feedback also plays a big part. If we see negative trends in certain areas, we can see where the problems are and act.

\$2.4b

Raised by European circular economy companies in 2022.

Funding Raised by European Circular Economy Companies



Recent Raises

APK €130m Seed Feb 2023

Raylo £110m Debt/Equity Jan 2023

Wallapop \$87m Series G Jan 2023

Most Active Investors

European Innovation Council

Early VC

INSIGHT PARTNERS

Series B

Accel

Series A

Source: Dealroom

ENERGY





Greg Jackson Octopus Energy Group

Enass Abo-Hamed, H2GO Power

"More unpredictable events will happen and the only way to counter their impact is through energy storage technology."



Founded: **2014** Country: **UK**

The conventional way of storing hydrogen, under high pressure, can be costly and dangerous. Enass started <u>H2GO Power</u> to develop clean, safe, low-cost hydrogen production and storage technologies. The company's core technology stores hydrogen in a solid state and releases it on-demand, using 1% of the pressure that typical storage solutions use and saving over 100 megatonnes of CO2 per year.

H2GO Power is rolling out a smart hydrogen storage system in the Orkney Islands, a large-scale heat decarbonisation project with Northern Gas Networks, and recently partnered with Baxi to develop the world's first decarbonised pure hydrogen boiler for commercial use. Its storage systems have twice the capacity, last three times longer, and offer a 40% cost saving compared with lithium-ion battery systems.

Opportunities

Storage Solutions

The more hydrogen systems you scale, the more hydrogen you need to store, and doing that with the conventional approach is problematic. Compressing the gas accounts for more than 50% of the cost of storage and, if something goes wrong, there are huge safety implications. We focus on markets that need to generate huge amounts of energy and have a continuous supply.

Energy Security

We know what happens to energy demand and prices when you get hit by unpredictable events, like the pandemic or the war in Ukraine. If you have a

planned buffer and the ability to predict with Al, you have a reliable supply and control over pricing. More unpredictable events will happen and the only way to counter their impact is through energy storage technology.

Challenges

New Market Risk

Private markets are usually hesitant to commit to what's still emerging tech. The challenge is how fast you can scale in these environments. But we are seeing governments come under pressure to invest in new innovations.

Insights

Corporate Partnerships

If you know you'll commercialise in five years, plan your journey year by year and offer something relevant to your partner in year one. You have to customise and build a relationship that facilitates collaboration. Your partners should buy into your product, team, and your capabilities as an entrepreneur.

Managing Growth

When you grow too fast, you don't have time to build a proper culture that allows for healthy growth. We started our company before the market existed. That was difficult, but going through challenging times allowed us to develop a stronger culture. The culture grew as the company grew. Now, the people who were there in the beginning are the leaders of the business.

Greg Jackson, Octopus Energy Group

"We're through the worst of the crisis. We need to see this as an opportunity and grab it."

Founded: **2015**Country: **UK**Stage: **Series F+**

Total Funding Raised: \$2.1b

When Greg sold his software business in the early 2010s, he started looking for a new industry that hadn't been disrupted by technology. Energy stood out. Today, Octopus Energy Group powers over five million UK homes and businesses with 100%-green electricity. It has operations in 14 countries and over 32 million accounts licensed worldwide to its green technology platform.

Beyond supplying energy, Octopus Energy boasts 10 businesses working across four continents, tackling energy generation, services, research, manufacturing, and electric vehicles. Wherever the energy system still needs transforming, Greg says, that's where Octopus Energy will be.

Opportunities

Renewables + Tech

Renewables are the cheapest form of power we've ever had at the point of generation. Technology that allows us to consumerize cheap renewables will deliver scaled businesses and accelerate decarbonisation.



Uber didn't need flying cars or autonomous vehicles; it just needed the tech to better connect supply and demand. That's the most important thing we can do to help accelerate renewables. There are colossal opportunities to deploy capital at the consumer end of the spectrum – including EVs, heat pumps, how you optimise buildings, and the smart management of batteries.

Emerging From Crisis

At one point the wholesale cost of energy was 14x higher than usual. Now, it's 2-3x higher. It looks like we're through the worst of the crisis. We need to see this as a new opportunity and grab it. In 2022, we received 82,000 applications for 888 job vacancies – there's an astonishing array of talent that wants to work with us

Challenges

Regulation Barriers

If you want to deploy energy assets today, you're stuck with a cloying regulatory and planning system. If you want to deploy digital technologies, you're stuck with analogue grids. The voice of incumbents in government is strong, even if their motivations aren't aligned with what the government wants to do. That's why you see more activity at household level where you have minimal regulation.

To change regulation, we need to relentlessly demonstrate to consumers that our approach is the better approach. Simultaneously, we need dialogue with regulators to say that consumers are liking this and we need to make it possible at scale.

Insights

Managing Growth

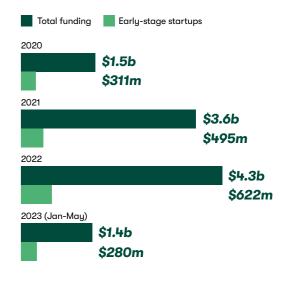
Ask yourself, can you deliver a cheaper, better solution at scale? Or will you have to rely on government subsidies or wishful thinking to make it work?

There are many temptations to deviate from your true climate path and you never want to misrepresent yourself. Octopus is a cleantech business, but we're also one of the biggest polluters in the UK, because we sell gas to four million households. I want to be very open about that. Our answer is to invest in R&D and relentlessly try to replace gas with clean energy.

\$4.3b

Raised by European clean energy companies in 2022.

Funding Raised by European Clean Energy Companies.



Recent Raises

Amarenco €300m Growth Equity March 2023

Enpal €215m Series D Jan 2023

GeoPura £36m Series C



Most Active Investors

Seed

Feb 2023



Early VC



Seed

Source: Dealroom

FARMING & FOOD

Antoine Hubert, Ÿnsect

"We are entering a new generation of alternative protein products."

Founded: 2011
Country: France
Stage: Series C+

Total Funding Raised: \$645m

<u>Y</u>nsect makes sustainable food from insects by processing mealworms into protein and vitamin-rich ingredients for all stages of the food chain, from the fertilisers in our soil to the food on our plates.

Ÿnsect's pioneering work has led to over 380 patents and it boasts the largest vertical insect farm in the world – home to three trillion mealworm beetles! In April 2023, Ÿnsect raised €160m in initial Series D funding. Antoine now plans to ramp up production, refocus on high-margin markets like pet food, and expand internationally with two new partnership agreements signed with Ardent Mills in the US and Corporativo Kosmos in Mexico.

Opportunities

Next-Gen Alternative Proteins

We're entering a new generation of alternative protein products. Until recently, these products have been ultra-processed with too many ingredients. Now, the question is, can you make meat or sausages with less than five ingredients? There have been down cycles and questions about the growth of the segment, but with these new innovations we could see a new wave of investment.

Eurasia

For alternative food products, there's still a need for more education to convince consumers. In the US, even plant-based alternatives have been politicised and condemned as 'woke'. We'll likely see more innovation in Europe and, in Asia, where many people eat alternative food ingredients already, there's big potential.

Challenges

Funding Fertilisers

Decarbonising fertilisers and pesticides will have a tremendous impact on biodiversity, but funding and the pipeline for new businesses is not as big as in alternative proteins. The segment needs more investment; strategic funds, sovereign funds, and subsidies to encourage more founders. It's also a maturity issue. The more exits we have, the more founders will invest money into new funds, and the more the ecosystem will grow.

Regulation Barriers

Regulation can be a fantastic catalyst for companies in fields where there is already regulatory pressure. But in Europe it can take 5-10 years to get new biopesticides or biostimulants to market. We had to change EU regulation several times, get the right to sell, and then convince customers to buy our products. To improve the funding environment, we need an accelerated framework at EU level.

Insights

Impacting Regulation

It's impossible to do it alone. Most regulators won't speak to you as a single company, so you need to build a lobbying group with your competitors. Identify your non-competitive areas, like getting markets approved and government finance.

\$1.5b

Raised by European

farming & food

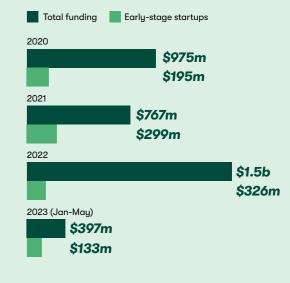
companies in 2022.

When we started out, nothing was allowed. We started the International Platform of Insects for Food and Feed (IPIFF) with four competitors in 2014. Now, there are more than 80 of us. Together, with data from members in various markets, we were able to help the European Commission positively frame the regulatory framework.

International Expansion

In manufacturing, you need to be running one or two factories at scale, with efficient margins, to have a strong playbook and sell a top-tier solution. But many startups go way too fast into licensing – and some start even before their first plant. Both M&A and joint ventures are a good way to scale internationally and learn about local ecosystems, markets, and customers, through local partners..

Funding Raised by European Farming & Food Companies.



Recent Raises

Unibio \$70m Corporate April 2023
Source.ag \$23m Series A Feb 2023

Omie & Cie €15m Series A Feb 2023

Most Active Investors



Seed



Seed

SUSV

Seed

Source: Dealroom



MOBILITY





Linnéa Kornehed Falck Einride

Stephen Fitzpatrick Vertical Aerospace

Linnéa Kornehed Falck, Einride "We're at the beginning of a

big shift in mobility, and energy companies need to adapt."

Founded: **2016**Country: **Sweden**Stage: **Series C**

Total Funding Raised: \$652.3m

When Linnéa started out, some people thought it would never be possible to operate heavy duty electric vehicles at scale. <u>Einride</u>, together with its customers, now operates one of the largest fleets of heavy electric trucks in Europe.

Einride designs, develops, and deploys technologies for freight mobility. The company's ecosystem includes the intelligent mobility platform, Einride Saga, electric and autonomous fleets, charging infrastructure, and connectivity networks.

Einride was the first company to operate a fully autonomous, electric heavy duty vehicle on public roads. In December 2022, it raised \$500m in equity and debt funding to support its expansion in Europe and the US. Linnéa's mission is to build freight mobility grids that re-engineer the movement of goods to unlock clean capacity at scale.

Opportunities

The Smart Grid

We often talk about generating new energy, but the distribution of energy is just as big an opportunity. Freight has a big advantage. It's repetitive, structured, and planned many years in advance. Heavy duty electric vehicles have the potential to be part of the smart grid, where you're not only charging from the network but also giving back.

We're no longer going to have gas stations; we're going to have charging stations with energy coming from renewable sources. We're at the beginning of a big shift in mobility that's going to play out in the next decade – and energy companies need to adapt.



Capital Costs

Building out infrastructure and hardware is capital intensive. There's a lot to be figured out in building a more efficient and smarter system to handle new mobility technologies, and that takes time and investment.

Insights

Venture + Debt Funding

We're rolling out thousands of electric trucks. We want to source this hardware, but not necessarily own it. Using a debt vehicle to finance the new vehicles made sense. What's important for us is building the software platform for the vehicles to operate in a new mobility ecosystem.

Public Money

We apply for permits and subsidies for specific A-to-B routes that are suited for electric vehicles and where we have a good business case. We explain how we plan to build up infrastructure in the region, how many goods we're going to move in this new grid, and how funding can help us get there faster. With our data, we also showcase how much CO2 we're saving with our technology, which serves as a good foundation for those conversations.

Corporate Partnerships

We could be just another electric haulage company that provides technology, or we can work towards a better future that serves society in the best way possible. There are two different narratives; the second one is how you get people to follow you.

When you're starting out it's easy to focus everything on your product, but you need to build your brand promise and your mission. Think big, because having that big ambition is going to attract the right partners. Plus, don't underestimate the optics of what you're trying to do. We could have put all sorts of branding on our vehicle, but we wanted to keep it clean to spark people's imagination.



Stephen Fitzpatrick, Vertical Aerospace

"Electric battery technology will change the economics of aviation."



Founded: **2016**Country: **UK**

Stage: **Publicly traded on NYSE**Total Funding Raised: **\$300m**

Stephen started <u>Vertical Aerospace</u> to decarbonise air travel with zero emission, electric vertical take-off and landing (eVTOL) aircraft. Vertical listed on the NYSE at a \$2.2b valuation in 2021 and has over 1,400 aircraft pre-orders from global customers including AirAsia, American Airlines, and Virgin Atlantic.

In September 2022, Vertical completed the first stage of test flights of its VX4 prototype, targeted to be a piloted, five-person aircraft, 100x quieter than a helicopter, with a range of up to 100 miles and a cruise speed of 150mph. In March 2023, it became the first eVTOL aircraft company to receive Design Organisation Approval by the UK Civil Aviation Authority.

Stephen now plans to extend Vertical's test flight programme and prepare for certification in 2026. Previously, Stephen founded OVO Energy, now one of the UK's largest energy retailers with 4.5 million customers.

Opportunities

Aviation Economics

People say electric aircraft will be a new way for the wealthy to travel, but the opposite is true. Electric motors and batteries don't require the same development costs and constant maintenance that jet turbines do throughout the life cycle of an aircraft. That means the efficiency of motors goes from 30% to 90%. Compare the operating cost of our VX4 aircraft to a helicopter, and you're talking about a 75-80% cost reduction.

We're going to see a revolution in air transport. Whether it's air ambulance services, defence, or passenger transport, zero-operating emissions electric vehicles will be more efficient to fly, quieter, and cheaper to buy and run than jet turbine powered aircraft. By the end of the decade, people will be flying in electric aircraft all over the world.

Challenges

Safety Bar

There's a reason why aviation is the safest form of travel; it's heavily regulated and the bar to pass to prove your aircraft is safe for passengers is a failure rate of one in a billion flight hours. The hardware we need to electrify aerospace is there. Regulators in Europe and the UK have published clear standards to support the certification of new electric aircraft. We're on the right path; it will just take time.

Insights

Managing Growth

Founders often have a clear and pure vision of what they want to build. But you need to be pragmatic. Large corporations have VC arms that look for strategic synergies. If you can balance your initial vision with providing something valuable to an investor, that's going to really help.

In hardware, you also need to stay focused on your core tech, and invest in your IP and competitive advantage, rather than spreading yourself too thin. Iterate and learn by doing. Our aircraft has 18,000 components, and 4,000 of them are individually designed, but we're always experimenting and upgrading to improve performance. We look for partners who can bring expertise and scale to the problem we're trying to solve.

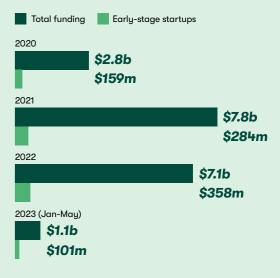
Raising Investment

The schemes we have in Europe to incentivise investment in small startups don't scale to the numbers you need to build successful energy transition companies. Plus, public focus on the transition to net zero isn't reflected in the ambitions of investors to the same extent that we see in the US. Be capital efficient, partner where you can, and find ways to demonstrate your success milestones, with test runs or prototype products, that help derisk your next phase of investment.

\$7.1b

Raised by European clean mobility companies in 2022.

Funding Raised by European Clean Mobility Companies.



Recent Raises

Arrival \$300m Post-IPO Equity Mar 2023

Oxbotica \$140m Series C Jan 2023

Lilium \$100m Post-IPO Equity May 2023

Most Active Investors



Seed



Seed



Series A

Source: Dealroom



WHAT CAN YOU DO?

A Message From Founders Pledge

"By influencing policy through philanthropy, you can have a bigger impact than through private investment."

Johannes Ackva is the Climate Research Lead at <u>Founders Pledge</u>, a global nonprofit empowering entrepreneurs to do the most good possible with their charitable giving.

Founders Pledge equips members with everything needed to maximise their impact, from evidence-led research and advice on the world's most pressing problems to comprehensive infrastructure for global grant-making, alongside opportunities to learn and connect.

To date, members have pledged over \$9b to charity and donated more than \$800m. Founders Pledge is funded by its members and other generous donors. In the past decade, climate change has evolved from a pretty niche environmentalist cause into a global, nearly unanimous concern, and there is a real concerted effort to further invest in and develop clean technologies.

Given the widespread focus on renewables, electric cars, and other well-liked and matured technologies, the question is: What should we do next and how can we best improve these large societal efforts?

Long-term Global Vs Short-term Local

Mainstream solutions already receive a lot of attention, so we see value in hedging against their failure. Moreover, we should evaluate climate action by its global long-term effects rather than its local short-term effects, and those two are often negatively correlated.

This approach would prompt us to reassess the way we're spending our resources and attention on climate, because often it ends up being hyperlocal and heavily focused on the short term (I talk more about this in a recent podcast).





Influencing Public Policy

The biggest opportunity we see to achieve additionality in the climate space is public policy and advocacy to make local action – such as Europe's Green Deal – as useful as possible for global decarbonisation.

Ultimately, solving climate change is a policy problem, and will require a huge amount of policy to be in place. By supporting policy-oriented climate philanthropy, we can all play a role in ensuring the over \$1t global, public budget on climate is spent well and being optimised for long-term, additional gains rather than being captured by technologies with strong existing interest groups.

Importantly, private money usually follows policy, so by influencing policy through philanthropy, you can likely have a bigger impact than through private investment.

High-Impact Giving

The high-impact funding opportunities which we recommend all engage in policy advocacy in Europe and beyond:

Clean Air Task Force's work in Europe focuses on bringing forward innovative climate policy solutions, in concert with the efforts of the European Green Deal.

Future Cleantech Architects specialises in innovation in hard to decarbonise sectors (those sectors, like shipping and cement, that need additional innovation the most but are easily forgotten) and promotes policy to prioritise research and development.

TerraPraxis is driving large-scale solutions to evolve our energy systems, including decarbonising the global coal fleet.

You can learn more about these organisations and support their work with a contribution to the **Founders Pledge Climate Change Fund**, a philanthropic co-funding vehicle pursuing additionality and maximising impact.

INSIGHTS INSIGHTS







SUSV

Benjamin Joffe

AUM: \$1.5b

Focus: DeepTech, Food & Agriculture,

Industry, Materials

Stage: **Pre-Seed-Series B**Ticket Size: **\$250k-\$500k**

Portfolio Includes: EVERY, Geltor, MycoWorks, Notco, Perfect Day, Prolific Machines, R-Zero, Seppure, Unicorn Biotechnologies, Upside Foods, VoltStorage

"More VCs are Looking at Deep Tech."

The food tech category has been affected by the economic downturn and the loss in value of Beyond Meat casts a long shadow, but we think the best is yet to come. There's a new wave of exciting companies in the fermentation space, cellular agriculture, and mushroom-based products, as well as the pick-and-shovel tools that will accelerate the entire industry.

Industrial companies are also under pressure to reduce emissions and, in addition to the expensive tech, there are new startups that provide a green discount from the get-go. Forget the green premium; any industrial player with a promise of ROI in two years is going to bet on this new tech. Now, more VCs are looking at this kind of deep tech and adding scientists and engineers to their teams.

"We Invest When Science Risk is Out of the Way."

Our first cheque is always at pre-Seed via our bio and hard tech programmes, <u>IndieBio</u> and <u>HAX</u>, so we're typically investing in a team with a prototype.

We're not too concerned about the cost, size, and look of your product at an early stage. We invest when science risk is mostly out of the way and what you're planning to do is technically feasible. If you have industry experience, can demonstrate the functionality of your prototype, and have proven interest from customers, you'll stand out.



2150

Christian Hernandez Gallardo

AUM: **€268m**

Focus: **Built Environment**Stage: **Seed-Series B**Ticket Size: **€3m-€20m**

Portfolio Includes: Biomason, CarbonCure,

Hometree, Normative

"A New Climate Fund is Announced Every Week..."

When we started 2150, climate tech was not yet a widely used term. Now, it feels like a new climate fund is announced every week! We need trillions of dollars across venture, growth, private equity, project finance and infrastructure, and we need to deploy it fast and at scale.

We've invested in companies that were still prerevenue or in some cases pre-launch, but we've also taken companies that had bootstrapped themselves into profitability and injected capital to accelerate their deployment. In our DD, we must be convinced that the company and its technology have the potential to scale to a significant multiple at exit. We must also be convinced of the material impact the technology could have on our greatest sustainability challenges.

"...But We Still Face a Misallocation of Capital in Climate Tech."

Reimagining the physical world requires reinventing physical stuff. VCs have traditionally shied away from hard tech, but that's changing and there's significant funding for CO2-sucking machines, novel air conditioning architectures, and the scaling of production methods that leverage biology over petrochemicals.

We still face a misallocation of capital though. 50% of climate venture dollars are being invested in mobility, which accounts for 12% of greenhouse gas emissions, while 50% of emissions come from buildings and industry, but the sector receives only 13% of investments. We set up 2150 to address this mismatch and co-invest into critical, but often overlooked problems like lower-carbon cement, high-efficiency windows, and biodiversity monitoring.



LOWERCARBON

Clea Kolster

AUM: \$1.6b

Focus: Slashing emissions, removing CO2 from the atmosphere, buying more time

Stage: Pre-Seed-Series A (first investments)

Portfolio Includes: Antora Energy, Cervest, Charm Industrial, Commonwealth Fusion Systems, Crusoe Energy, Electra, Epoch Biodesign, Heirloom, InRange, Lilac Solutions, Loam Bio, Lun, Novalith, Renaissance Fusion, Solugen, Sublime Systems, Uncommon Bio, UNDO, Woodoo, Zap Energy

"Climate Tech Investing is Responding to Critical Needs."

Climate tech investing is simply responding to critical needs, whether it's energy security, food security, or national security. There's huge interest in technologies for extracting or recycling critical minerals closer to home and with lower environmental footprints. These include metals like lithium, nickel, copper, and cobalt that are necessary for our future energy needs because they're used in batteries for our cars, electrical wires, solar panels, and wind turbines.

Building electrification and efficiency is also attracting more attention as energy prices have become highly volatile following the start of the war in Ukraine. New regulations banning gas boilers are also spurring the development of new platforms to enable access to heat pumps and incentivise rooftop solar power.

"Be Cheaper, Better, Faster."

We look to partner with founders at the earliest stages of company inception. We work with them to build solutions that are cheaper, better, faster, than the incumbents, can capture multi-billion dollar markets, and address 100s of million tonnes of greenhouse gas emissions.





WORLD FUND

Daria Saharova

AUM: **€350m**

Focus: Energy, DeepTech, Food & Agriculture, Industry, Manufacturing, Transport

Stage: **Seed-Series B**Ticket Size: **€1m-€15m**

Portfolio Includes: CustomCells, Cylib, FreshFlow, IQM, Juicy Marbles, Space Forge, SunRoof

"More Funding Will Go to Agriculture and the Built Environment."

Most VC money is going into mobility and energy, but these sectors account for just 27% of global emissions. Plus, in mobility, a lot of investment has gone into e-scooters, which we know today have a negative emissions balance.

We invest in tech that can contribute to decarbonisation at scale. We focus on the highest-emitting sectors, like agriculture and the built environment, and I expect to see more funding go this way.

"The Higher the Risk, the More Market Reference Points You Need."

We look at three KPIs: how big is the VC case, how mature is the tech, and how big is the <u>climate</u> <u>performance potential</u>? We only invest when there is at least a prototype product. The higher the risk of the investment, the more reference points you need from the market; like potential customers, research partners, and first customer feedback.

We also see a lot of experienced serial entrepreneurs who now want to get into climate tech. Technical founders should find a non-technical counterpart. Be more daring, break out of your current mindset, and focus on communicating why your solution to the problem you're solving is the best.



generation_

David Easton

AUM: \$32.1b

Focus: Climate, Healthcare, Financial Inclusion

Stage: Series D+

Ticket Size: Growth Equity: \$50m-\$150m.

Just Climate: \$30m-\$100m

Portfolio Includes: Growth Equity: Asana, Back Market, CiBO Technologies, o9 Solutions, Pivot Bio, Project44. Just Climate: ABB E-mobility, H2 Green Steel, Meva Energy.

"Supply Chains Will Be Crucial."

The companies that will be most important for the decarbonisation of industries may not think of themselves as climate tech. We think using more efficient supply chain management software to decarbonise supply chains will be crucial. We've also focused on the future of remote work, because while electrifying transport is great, reducing transportation needs in the first place is even better.

In our growth equity business, we mostly look at asset-light business models, software, and marketplaces. With <u>Just Climate</u>, we look at assetheavy, carbon reducing technologies. You'll see increasing diversification between teams applying a traditional growth equity and VC skill set and those focusing on capital-intensive investments..

"Don't Think of Yourself as a Climate Tech Company!"

We only invest in things that offer significant customer ROI. Be mission critical, sticky, hard to copy, and have a business model that's going to sustain long-term value.

Don't think of yourself as a climate tech company (You're not. Or at least, not only!); you're a supply chain or energy distribution company. Your customers are not at a climate tech conference; they're at the conference for their industry. Climate tech matters, but it's ultimately played out in individual markets – and that's where you need to be. We look at where industries are going over the next decade, where value will accrue, and which companies will have the right to exist.

"There's Important Capital Attacking Tough Sectors."

In recent years, there have broadly been two buckets of climate tech companies. Climate at the intersection of consumer software or fintech, where generalist tech entrepreneurs are coming in and attacking low-hanging fruit with capital-light software business models. And then a growing universe of nex-gen founders building hard science companies in the hardest-to-abate sectors like food, industry, and real estate. In the short-term, more funding will flow into the first bucket, but there is important capital attacking these tough sectors..

"There's no SaaS-Style Playbook for Climate Tech."

We're a thesis-led investor looking at the transition of key industries, where system-level change is happening, and we assess which technologies are going to become the new standard.

There's no SaaS-style playbook yet for hard climate tech. You're up against regulatory barriers, consumer challenges, complex financing, and powerful incumbents. This is what makes it an exciting category for the most ambitious. You need to be a flexible, creative entrepreneur, and be very deliberate in the articulation of the technical, financing, and commercial milestones you think you can hit.



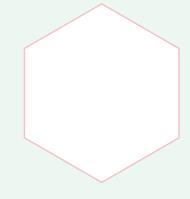
Jamie Rowles

Focus: Carbon, Circularity, Industry, Materials

Stage: **Pre-Seed / Seed**Ticket Size: £500k-£2m

Portfolio Includes: Circulor, Epoch BioDesign,

Greyparrot, Notpla









The VC-backed companies we monitor are those heading rapidly from \$2m to \$10m ARR and doubling their revenue every 6-12 months. For SaaS startups, we like to see a 60-80% gross margin on the product and a location strategy that supports a 30-40% margin at scale. We also try to identify B2B products with \$100k+ price tags; lower than that and it's a real slog.

Lance Uggla

AUM: **\$75b**

Focus: Carbon, Circular Economy, Energy

Stage: Series C+

Ticket Size: \$50m-\$300m

Portfolio Includes: 80 Acres Farms, ABB E-Mobility, EcoVadis, o9 Solutions, RoadRunner, Sun King

"The Whole Carbon Management Area is Important."

Large global players want support in managing supply chains, mapping carbon footprints, and reaching net zero targets. The whole carbon management area – credits, measurement, verification, benchmarking, and reporting – is going to be important as we offset those hard-to-abate emissions.

We're seeing a lot of activity in emissions management and making construction more energy efficient. Plus, everything around electrification and powering EVs is on an upward trend. Not just new EV players, but the charging infrastructure, batteries, and tech that connects the car back to the home; we're seeing more entrepreneurs building companies in that space.

"It's All About Revenue Growth And Signing Up Real Customers."

For early-stage companies, it's all about revenue growth, getting through concept risk, and signing up real customers. Early adoption is very impressive; it means there's demand for your product and the market likes it.



EQT

Sandra Malmberg

AUM: **€2.3b**Focus: **Generalist**Stage: **Seed-Series B**Ticket Size: **€1m-€50m**

Portfolio Includes: Formo, Kive, Insempra,

Instabox, Nothing, Sana Labs

"Jobs Will be Affected by the Transition to Net Zero."

We see engineers flocking to climate tech as well as strong geopolitical headwinds and customer demand in the clean energy transition, biomanufacturing, and industries replacing petrochemicals. We're also looking at generative design to help designers explore different types of materials and experiment faster with sustainable solutions.

A less obvious one is edtech. A third of jobs in the EU will be affected by the transition to net zero. We invested in Sana Labs, an Al-powered learning tool, which upskilled 200,000 nurses during the pandemic. We'll see the same need for upskilling and reskilling as we progress to net zero.

"Great Opportunities Get Lost in Bad Storytelling."

Every founder should think about their equity story. What are the fundable milestones along the journey to scale? It can take time to see revenue in deep tech; we like founders who can explain how they plan to activate different pools of capital over time and capture demand as they scale.

Great opportunities sometimes get lost in bad storytelling. Especially in deep tech, founders should spend time working out how to translate their amazing tech into something investors, customers, and talent can relate to, understand, and get excited about. We invested in Einride when it was just an idea. Now, their vision is becoming reality.



firstminute

Will Wells

AUM: \$350m
Focus: Generalist
Stage: Pre-Seed-Seed
Ticket Size: \$0.25m-\$5m

Portfolio Includes: Airly, Alcemy, Diferente, Fork & Good, Kapu, Magrathea Metals, Oka, Phaidra, Tenet, True Circle, Verse, VitroLabs, Volare

"We Believe in the Electrification of Almost Everything."

You can't escape the importance of wide-scale electrification at the core of any short-term decarbonisation strategy, and possibly, you can't take someone seriously as a climate investor unless they have an energy thesis (or at least I don't!).

We need to electrify aviation, maritime, and heavy industry, but the biggest near-term opportunities are represented by three core themes: the car,

the home, and the company. Europe is leading the electrification charge in terms of ecosystem maturity and adoption across EVs, charging infrastructure, heat pumps, and solar markets, but we see enormous grid inefficiencies that need to be solved through elegant software and ML.

We recently backed <u>Verse</u>, which matches renewable assets to data centres. These point solutions keep coming up and they're all converging into one giant data universe: how to use tech to improve grid connectivity and match supply and demand.

"There's a Trillion Dollar Data Play in the Energy Space."

We foresee convergence both amongst energy sources (solar, wind, nuclear, etc.) and within each individual energy sub-sector. For example, we see multiple approaches within the electrification space targeting the data moat needed to inform holistic grid management.

Ultimately, there is a trillion dollar data play where storage vs charging vs energy source vs vehicles meet. What happens when Enpal takes on heat pumps, or giants like Northvolt start buying the WeaveGrids and Wallboxes of this world? Things will get very competitive as the market matures, and longevity is key. We need to find the killer teams who can ride out the hype, tough out the competition, and win big later on.

"Crack On And Build!"

Climate is a once-in-a-generation investment opportunity. Of our 130 unicorn founder LPs, there must be a dozen who've recycled the bulk of their fortunes into a purer climate strategy. Plus, you're now getting the second wave of Revolut, Klarna, Celonis, and DeepMind data scientists and product leads partnering with people with relevant domain expertise – the calibre of energy software teams today is markedly different from 5-10 years ago.

We look for great opportunities across everything from agrifood tech, computational bio, and synthetic protein, to aviation fuels, smart buildings, and green cement. Life is short, and your kids are going to give you trouble unless you do something meaningful, so why not crack on and build a climate venture?



GLIMATE TECK STARTUPS TO WATCH 2023



Ksenija Milicevic Neumann & Sarah Fleischer, tozero

High-potential climate tech startups, nominated by the Founders Forum community.

Blue Economy

Seafields

Seafields is introducing new technologies focused on the tracking, harvesting, baling, and storage of Sargassum, a seaweed it plans to grow in its aquafarms in the South Atlantic Ocean gyres, to remove over 1 gigatonne of CO2 from the atmosphere each year by 2032

Founder/s: Erik Contag, John Auckland, Randall Purcell, Sebastian Stephens

Country: **UK** Stage: **Seed**

Total Funding Raised: £1.8m





Built Environment

Checktobuild

Checktobuild uses Al and 3D modelling to make construction processes more efficient and sustainable. The platform automatically analyses the progress of construction projects to ensure the reality and digital models match.

Founder/s: Alejandro Ruiz Lara

Country: **Spain** Stage: **Seed**

Total Funding Raised: €250k / Raising \$5m

Enter

Enter is an end-to-end platform offering homeowners a simple way to assess and improve the energy efficiency of their homes. Enter raised €13.5m in Series A funding in April 2023.

Founder/s: Alexander Müller, Justus Menten, Max Schroeren

Country: **Germany** Stage: **Series A**

Total Funding Raised: €19.4m



Lun is a new SaaS platform designed to scale the installation of heat pumps across Europe. Lun raised €10.3m in Seed funding in March 2023.

Founder/s: **Anders Valentin, Martin Collignon**

Country: **Denmark**Stage: **Seed**

Total Funding Raised: €10.8m



Furbnow

Backed by Founders Factory, Furbnow is the UK's first online energy efficiency platform which helps homeowners plan, finance, install, and monitor their low-carbon home projects.

Founder/s: Becky Lane, Laurence Watson

Country: **UK**Stage: **Pre-Seed**

Total Funding Raised: £300k



PVcase

PVcase is a software solution for solar engineering, making installing solar panels easier, optimising design, and improving efficiency. In five years, PVcase has grown from a software project into a global firm, with customers in over 70 countries.

Founder/s: David Trainavicius

Country: Lithuania Stage: Series A

Total Funding Raised: \$23.6m





Woodoo

Woodoo replaces carbon-heavy steel, aluminium, glass, leather, and plastics with sustainable materials made from wood. Woodoo raised \$31m in Seed funding in April 2023 and has ongoing partnerships with premium carmakers, luxury fashion companies, and construction firms such as Garnica.

Founder/s: **Timothée Boitouzet**

Country: France Stage: **Seed**

Total Funding Raised: \$35.4m



tepeo

tepeo is disrupting the heating industry with revolutionary low carbon boiler technology. The ZEB (Zero Emission Boiler) is a plug and play boiler replacement and a low cost alternative to heat pumps for people who want to decarbonise their home..

Founder/s: Johan du Plessis

Country: **UK** Stage: **Series A**

Total Funding Raised: \$15m

Carbon

44.01

44.01 eliminates CO2 by turning it into rock. 44.01's pioneering technology accelerates the natural process of CO2 mineralisation in a rock called peridotite, meaning it can remove captured CO2 permanently in under 12 months. The company has operations in Oman and the UAE and will start commercial-scale mineralisation in 2024.

Founder/s: Ehab Tasfai, Karan Khimji, Talal Hasan

Country: **UK** Stage: **Seed**

Total Funding Raised: \$6.2m



Circular Economy

Aeropowder

Inspired by the circular economy, Aeropowder is a material and process innovator creating a new value chain from the millions of tonnes of waste feathers generated each year by the food industry. Its first product is Pluumo, a thermal packaging material that outperforms expanded polystyrene for food and pharmaceutical deliveries.

Founder/s: Ryan Robinson

Country: **UK** Stage: Pre-Seed

Total Funding Raised: £650k



Again

Again is a London-based technology company that builds reverse logistics solutions for reusable packaging for FMCG brands and retailers. Again's CleanCell system is an advanced micro packaging reconditioning facility designed to process 250,000 units of packaging per month.

Founder/s: Matt Kennedy

Country: **UK** Stage: **Pre-Seed**

Total Funding Raised: £2.55m



cylib

Born out of RWTH Aachen University, cylib has developed a pioneering way to recycle lithium-ion batteries. In February 2023, cylib raised a €8m Seed extension round to accelerate planning of its first battery recycling facility.

Founder/s: Gideon Schwich, Lilian Schwich, Paul Sabarny

Country: **Germany**

Stage: **Seed**

Total Funding Raised: **€11.6m**



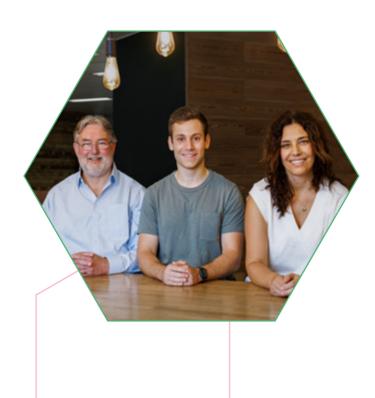
Epoch Biodesign

Epoch Biodesign is on a mission to scale biology to solve the biggest climate challenges. First up, it's using enzymes to transform plastics into circular chemicals.

Founder/s: Douglas Kell, Jacob Nathan

Country: **UK** Stage: **Seed**

Total Funding Raised: £15m



Puraffinity

Born out of Imperial College London, Puraffinity develops targeted materials to remove pollutants from water. Its first focus is to capture harmful PFAS chemicals, found in consumer products since the 1940s.

Founder/s: Gabriella Santosa, Henrik Hagemann

Country: **UK**Stage: **Seed**

Total Funding Raised: \$10.2m



tozero

Europe's first lithium-ion battery recycling startup! With its prototype plant in Munich, tozero's goal is to recover all the critical materials inside a battery – lithium, graphite, cobalt, manganese, and nickel – and bring lithium-ion battery waste to zero.

Founder/s: Ksenija Milicevic Neumann,

Sarah Fleischer Country: Germany Stage: Seed

Total Funding Raised: €3.5m



Energy

Custom Cells

Custom Cells is a leading supplier of customised, high-performance lithium-ion battery technologies serving the aerospace, automotive, maritime, and medical industries. Custom Cells raised €60m in Series A funding in December 2022.

Founder/s: Leopold König, Torge Thönnessen

Country: **Germany** Stage: **Series A**

Total Funding Raised: \$63m



Fever aims to accelerate the transition to renewable energy by providing a platform for energy partners to monetise their distributed energy resources and automate and optimise their flexibility and participation in the balancing markets.

Founder/s: Jonatan Raber, Klas Johansson,

Ron Stolero, Ruben Flam
Country: Sweden

Stage: **Seed**

Total Funding Raised: \$1.6m







Granular Energy

Granular Energy provides tools for energy companies to manage and trade energy certificates, enabling the next generation of enhanced transparency green energy offerings. Granular Energy's software is used by utility companies in six countries, and it's building the world's first spot market for timestamped energy certificates in partnership with NordPool..

Founder/s: Bruno Menu, Toby Ferenczi,

Samuel Cheptou Country: France Stage: **Seed**

Total Funding Raised: **€2m**



Gravitricity

Gravitricity uses the power of gravity, and a system of suspended weights and winches in disused mine shafts, to store energy underground and release it on demand. The company is now shortlisting sites for its first full-scale project in Central and Eastern Europe to deliver up to two megawatt hours of energy storage, and is also developing innovative underground hydrogen storage technology.

Founder/s: Charlie Blair, Martin Wright,

Peter Fraenkel Country: **UK** Stage: Series A

Total Funding Raised: £3.8m



Farming & Food

FreshFlow

FreshFlow is a plug-and-play Al platform that helps grocery retailers place the right orders, optimise their supply chains, and reduce food waste.

Founder/s: Avik Mukhija, Carmine Paolino

Country: **Germany** Stage: Seed

Total Funding Raised: \$1.8m



SoilWatch

SoilWatch uses remote sensing tech to provide reliable soil and forest carbon measurements for farmers, NGOs, and UN agencies working on natural climate solutions, and enables verified biodiversity and carbon removal projects in Africa and beyond.

Founder/s: David Morrison, Eero Wahlstedt, Joona Mikkola, William Ouellette

Country: Finland Stage: Seed

Total Funding Raised: Bootstrapped



In 2022, Umiami raised \$30m in the largest ever Series A funding round for a plant-based meat company in Europe. Umiami specialises in whole cuts and its first product, a 100% plant-based chicken breast, contains twice the protein of typical plant-based products.

Stage: Series A

Total Funding Raised: \$32.7m









Mobility

HVS

Hydrogen Vehicle Systems (HVS) builds zero emission hydrogen-electric trucks from the ground up. HVS is the hydrogen propulsion specialist transforming the trucking industry across Europe and won a UK Government grant of £30m in September 2022..

Founder/s: Abdul Waheed

Country: **UK**

Total Funding Raised: £50m



PARTNER WITH US

Want to get in front of our audience of top founders, investors, and corporate leaders?

<u>Founders Insights</u> is our digital content offering, delivering cutting-edge insights from the biggest names in tech.







Interested in sponsoring a report like this one? Contact our Editor, marco@ff.co.



Natalie Massenet Net-a-Porter





Average reach of our content campaigns.

500+

Downloads of our reports within one month of publication.

60%+

of the leads we generate are C-Suite leaders and

Our Newsletter

Founders News – FF's curated community newsletter – is our fortnightly roundup of the latest startup stories and insights from trailblazing entrepreneurs, top investors and corporate leaders.



Click here or scan the OR code to subscribe



Richard Branson Virgin Group





