

VC PERSPECTIVES 2025

INSIDE THE MINDS OF CLIMATE VCs – THE BETS THEY'RE MAKING

World leading climate tech venture funds on
spotting the next generation of startups

June 2025



PRESENTED BY ENDGAME CAPITAL

FOREWORD



The past few years have reshaped the climate tech landscape. We've seen once fringe technologies go mainstream. Policy tailwinds like the IRA and European Green Deal unlocked unprecedented capital - but also new complexities. And through it all, markets reminded us: only solutions that are economically and operationally viable will scale fast enough to matter.

Today, climate tech sits at a crossroads.

Global emissions remain stubbornly high. The climate crisis is no longer tomorrow's problem - it's today's cost centre. Floods, fires, droughts, and disrupted supply chains are writing that story across balance sheets and boardrooms.

Yet at the same time, the solutions are stronger than ever. Founders are building faster, smarter, and with a sharp eye on scale. Investors are more discerning. Corporates are actively seeking real decarbonization, not PR-friendly offsets. And governments - while imperfect — are starting to align regulation with industrial transformation.

What comes next will be decisive. We need climate solutions that win because they're better business - not just better for the planet.

That means faster, cheaper, more efficient alternatives to incumbent solutions. Scalable across sectors. Deployed within years, not decades. To get there, we need more than capital - we need a community.

That's why we created this report.

VC Perspectives 2025 brings together a diverse group of leading climate tech investors - each sharing where they're placing bets, and why. From industrial biotech and robotics, to climate-ready computing and novel grid infrastructure, these pages reflect the sharpest thinking in our field. They're also a call to action: for investors, policymakers, corporates, and the next generation of talent to lean in - together.

At Endgame Capital, we back startups that are ready to scale - solutions that even climate skeptics can't ignore because they make economic sense. But we know we're part of something bigger. This decade isn't just about capital allocation. It's about building an industrial system fit for a net-zero future.

The opportunity is massive.
The clock is ticking.
Let's get to work.

John Mairlot & Jinna Li, General Partners
Thomas Panton, Founding Associate



FEATURED VCs

This report brings together the voices of leading climate tech investors to share where they see the next wave of impact and opportunity. One page, one perspective - from those backing the future.

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Jinna Li
General Partner



MANUFACTURING

The textile industry contributes between 5% to 10% of global emissions - more than aviation and shipping combined - it is also a significant driver of water overconsumption, ecosystem degradation, chemical pollution and accounts for 35% of global microplastic pollution.

Polyester, a petroleum derived product, represents over half of global textile volumes. It dominates fast fashion for being cheap, easy to produce and versatile.

“End of life” treatment bottlenecks are also a major challenge - blended fabrics are hard to recycle, collection systems are under-built, and consumer return rates remain low.

But the opportunity is massive.

If we are serious about decarbonizing the fashion industry, we need to target the core: the materials.

The issue is that most “sustainable” alternatives aren’t fit for large scale adoption.

In an industry of “fast fashion”, to unlock mass market adoption, global brands demand a product that can integrate with existing supply chains and manufacturing processes, that beat traditional materials on economics, performance, and sustainability.

Founders who can crack this challenge won’t just clean up fashion.

They’ll redefine what it means to build a modern industrial material - circular, climate friendly, and built to scale fast.

PORTFOLIO SPOTLIGHT

Name

BloomLabs

Year invested

2024

Description

Bloom Labs transforms natural waste by-products into high-performance pellets using bio-manufacturing and protein engineering. These pellets can be spun into fibers that match the feel and function of wool, silk, and polyester - offering manufacturers a plug and play, scalable, cheaper and more environmentally friendly alternative to incumbent materials.



Zero Carbon

Pippa Gawley
Founding Partner



ENERGY

The race to decarbonise our planet hinges on a massive shift in how we generate and distribute energy. We need to switch to renewable energy sources like wind and solar, at the same time as we electrify everything from cars to heating to industrial processes, increasing overall electricity demand several fold.

And that's before we add in additional demands from the dramatic platform shift to AI that we are currently witnessing, increasing population levels, and rising temperatures meaning more A/C usage.

But, the foundation for this transition – our electrical grid – was designed in an era of centralised generation and lower demand, and is ill-equipped for the demands of today and tomorrow.

Without a fundamental upgrade and expansion to this core hardware, our other efforts to build a sustainable future will be severely hampered with increasing congestion, instability and inefficiency slowing down new connections.

One challenge lies in the grid's outdated, passive infrastructure. Traditional transformers and substations lack the dynamic control and real-time data capabilities needed to manage the variability of renewable power sources or the surge in demand from EVs and heat pumps.

Software and smart solutions play a role, but true modernisation requires innovation at the physical layer – the hardware that controls power flows.

PORTFOLIO SPOTLIGHT

Name

Ionate

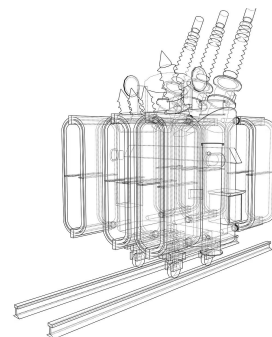
Year invested

2020

Description

Ionate has developed Hybrid Intelligent Transformers (HIT) which replace traditional transformers with a smart, controllable hardware-software solution, providing real-time data, precise millisecond voltage and power control, and enhanced power quality. This unlocks a smart self-balancing grid with more renewable energy, increased capacity, and improved grid resilience.

IONATE



[PT1]

Burhan Pisavadi
Head of UK



BUILT ENVIRONMENT

The built environment is responsible for a staggering percentage of global emissions. A lot of that is down to new construction - some estimates claim concrete construction is responsible for 8% of annual global emissions. This causes people to overlook retrofit.

Retrofitting our existing buildings has huge emissions reduction potential, and this includes basic things like insulation to reduce energy usage, adding solar panels for local generation, or electrifying heating which saves energy and reduces our reliance on burning hydrocarbons.

But, this is a complex problem with a lot of moving parts. Ownership is disaggregated. Who's responsible for funding, arranging and overseeing the retrofit of a flat?

The tenant who'll only be there for 12 months; the building manager who isn't an expert; or the foreign pension fund who owns it?

There are other challenges beyond this: a lack of capital, not enough electricians to install all those solar panels, and even the challenge of knowing how to retrofit more complex buildings.

Entire ecosystems are forming in this sector, each dedicated to a particular facet or element of retrofit.

We've made several investments in this space and plan to make more.

PORTFOLIO SPOTLIGHT

Name

Ecoworks

Year invested

2023

Description

Ecoworks retrofit multi-family buildings, faster and cheaper than traditional approaches by producing bespoke "second skin" facades which are manufactured off-site and quickly put onto the existing buildings. They've proven this model across several multi-family sites in Germany, and are laser focused on making their technology standardised and efficient: key to them becoming the retrofit solution of choice.

 **ecoworks**





ENERGY

The grid is entering a once in a generation investment cycle. Over €600 billion in Europe and \$700 billion in the US will be spent on grid infrastructure by 2030. Yet this remains one of the hardest markets to crack.

Long sales cycles, endless pilots, and procurement hurdles have killed many promising companies. Unfortunately, great technology alone is not enough.

Whilst grid operators are under pressure to modernise and in desperate need for new tech, they cannot afford to disrupt critical systems. Trusting startups with shaky balance sheets is therefore often seen as too much risk.

What they want are solutions solving urgent problems, within the infrastructure they already trust.

Companies that will win combine great technology with a deep understanding of grid operators' priorities, procurement processes and risk appetite, aligning with the way grid operators actually work.

Doing so, can unlock these enormous markets whilst building the critical piece to power growth.

Optics11 is a great example of exactly this: their unique technology protects critical assets with a high return on investment and is deployed by partnering with established players that have proven to be reliable, long-term partners to grid operators.

In short: big value, smart execution is how to tap into the coming grid investment wave and at SET we're excited to partner with companies doing that!

PORTFOLIO SPOTLIGHT

Name

Optics11

Year invested

2025

Description

Optics11 develops advanced fibre optic sensing technology that enhances the reliability and security of critical infrastructure for the energy and maritime sectors. Its solutions - OptiFender for high-voltage grid monitoring and OptiBarrier for subsea threat detection - enable real-time, high-precision fault localisation and early warning signals for potential sabotage.





Gabriel Scheer
Senior Director of Innovation



AI & ROBOTICS

Maritime decarbonization is a key hard-to-abate sector in need of significant investment. Maritime vessels last an estimated 25-50 years, and the sector contributes 3% of global GHG emissions.

Regulatory pressures are increasing; the IMO recently created the first global pricing mechanism and ETS implemented a timeline to reduce GHGs in shipping. Increased tariffs will force shippers to be more efficient with their fleets to reduce any unnecessary costs as shipments drop globally.

However, investment in clean shipping has been minimal and far behind other sectors, and drop-in low-carbon fuel replacements for the global fleet are not yet available at any meaningful scale.

As such, investment opportunities must focus on a variety of related technologies: on-ship GHG capture (as with our portfolio company, Seabound), hull cleaning (Fleet Robotics), and new approaches to propulsion such as modern sails, kites, and propeller and hull efficiency improvements.

Studies have shown biofouling can result in higher frictional drag, resulting in significantly increased fuel consumption and related greenhouse gas emissions.

However, there are many challenges to the current approach to cleaning: in-water cleaning in ports is labor-intensive, expensive, polluting, and requires ships be taken out of service - costing owners money. Alternatively, repellent coatings are both expensive and not-long-term.

PORTFOLIO SPOTLIGHT

Name

Fleet Robotics

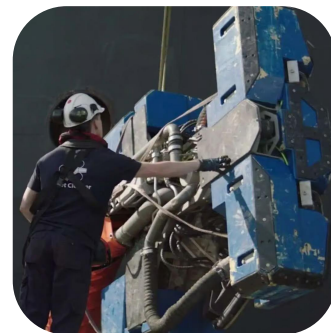
Year invested

2024

Description

Hull cleaning represents huge savings for vessel operators and significant GHG reductions. In 2024, we invested in Fleet Robotics, a startup building vessel-integrated robots that use AI to autonomously clean and inspect ship hulls while at sea. This exciting approach offers near-term efficiency gains, GHG reductions, and a great investment opportunity..

fleet
robotics





ÜBERMORGEN

Myke Näf
Founding Partner



COMPUTE

There is global warming, and then there is very, very local warming.

As more and more transistors are packed in smaller and smaller spaces, computing chips become hotter and hotter. (As most notebook users notice when playing a game or doing a video call.)

There are ways to manage that heat, but there is a lower limit to how energy-efficient we can get with today's computing paradigm, which is centered around electrons and irreversible computing.

This limit is called Landauer Limit and is derived from the principles of thermodynamics. It causes several laws in computing to break or slow down (Kooomey's law, Moore's law, Dennard scaling).

Which in essence boils (no pun intended) down to: Making chips denser will yield diminishing marginal utility over time.

This is maybe most evident today in data centres and their enormous need for energy and cooling, leading to water shortage in some communities. In order to break through the Landauer Limit, we'll likely need a new computing paradigm.

While all eyes are on quantum computing, there are other contenders:

One is Reversible Computing, where a different kind of logic gates is used to reduce energy dissipation.

PORTFOLIO SPOTLIGHT

Name

Vaire

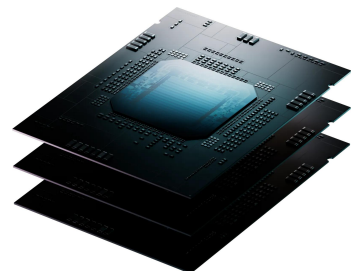
Year invested

2024

Description

Vaire is using Reversible Computing and related principles such as Adiabatic Computing to make computing at least an order of magnitude faster and/or more energy efficient and has assembled a team that is best positioned to execute on that ambition.

V.A.I.R.E





Jan Palasinski
Investment Partner



ENERGY

Advanced weather forecasting is the missing puzzle in the energy transition.

Why? Because, at the moment, nobody questions the fact that the energy transition needs an increasing reliance on weather-dependent renewable energy sources like wind and solar power.

But this growing dependency poses significant challenges, including intermittency and unexpected weather shifts, which can lead to volatile energy prices and costly imbalances for power producers or traders.

This is where accurate weather forecasts come in. This technology is key to making wind and solar energy production more predictable, ultimately accelerating the integration of renewables into the grid.

It is not only that improved forecasts enable renewable generators to better estimate generation, allowing them to bid more accurately in markets and reduce penalties for deviations.

From a grid operator's perspective, a good forecast can also significantly reduce the need to curtail renewables.

In these cases, artificial intelligence is set to play a crucial role, as it can significantly increase the accuracy of existing forecasting systems, massively reducing processing time and energy consumption compared to traditional numerical methods.

To put it simply: AI models can deliver forecasts in seconds rather than hours.

PORTFOLIO SPOTLIGHT

Name

Jua

Year invested

2025

Description

Jua is pioneering a new paradigm in weather forecasting by building a physically consistent world model that helps energy traders worldwide to better understand the Earth's physics. Sourced directly from raw data, this offers unprecedented accuracy, particularly for crucial variables like wind speed and solar radiation that are vital for renewable energy.

Jua





Elena Stark
Head of Impact



INDUSTRIAL DECARB

Industrial decarbonization is one of the most urgent and undercapitalized opportunities in climate tech. Industry is responsible for a quarter of global energy system CO₂ emissions, yet innovation and investment have historically lagged behind sectors like energy and mobility. Meanwhile, industrial producers are under growing economic pressure - from volatile input and energy costs to carbon pricing and regulatory scrutiny. This creates a powerful opening to back solutions that reduce emissions and improve economics.

Cement is a striking example. It's the second-most consumed material on Earth after water and underpins global infrastructure. Yet it contributes ~8% of global CO₂ emissions - primarily from the production of clinker.

While demand is expected to remain strong, the industry faces tight margins, energy cost volatility, and increasing exposure to policy mechanisms like the EU's Carbon Border Adjustment Mechanism (CBAM).

These dynamics make cost-efficient decarbonization and reducing energy demand not just a climate priority, but a business imperative.

Reducing clinker content remains the most effective lever to cut emissions today. However, this often introduces quality variability - an unacceptable risk in construction. That's where software and process control systems come in, enabling emissions reduction while enhancing quality consistency and production efficiency.

PORTFOLIO SPOTLIGHT

Name

Alcemy

Year invested

2022

Description

With Alcemy's AI software, production quality can be controlled predictively. This increases the consistency of cement and concrete, simplifies the work of the laboratory and control room, and reduces production costs. This sets the stage for a progressive reduction of the CO₂ footprint and significantly simplifies the handling of even the most complex mixtures.

a|cemy





Farieha Altaf
Investment Associate



MANUFACTURING

AI and digital twins can reshape industrial manufacturing by giving factories a learning virtual copy that can be experimented on without risking real-world downtime. Existing modelling tools have been generic and not tailored to the needs of plant operators. AI can develop a digital twin of a plant by analysing data already streaming out of sensors, controllers and databases. This is proving crucial for optimising process targets, automating repetitive tasks and freeing up engineers to focus on more impactful work. Plant operators can maximise efficiencies and adapt to evolving plant conditions.

Complex manufacturing processes such as cement production entail balancing a myriad of input parameters which are directly correlated to cost, quality and reliability.

Traditional software solutions can maintain plant operations within set limits, but they struggle to adapt with changing plant parameters or improving performance with broader optimisation. Digital twins analyse patterns in real time and suggest improvements that balance throughput, energy use, and quality - while keeping operators in control to set boundaries and approve actions.

A key challenge for such startups is go-to-market: escaping pilot purgatory and moving beyond the innovation budget. Founders should define clear KPIs and rollout criteria ahead of launching pilots and secure higher-level approvals to ensure alignment with strategic agendas. The payoff has to be tangible to the PnL and founders must be hands-on during implementation to ensure success and iterate on learnings.

PORTFOLIO SPOTLIGHT

Name

CarbonRe

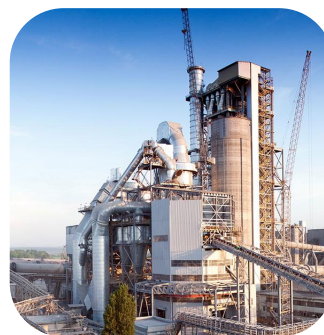
Year invested

2022

Description

CarbonRe uses foundational AI to reduce energy consumption and carbon emissions by optimizing production control parameters in energy intensive industries, such as cement, steel and glass.

Carbon^{Re}





Shaun Abrahamson
Managing Partner



ADAPTATION

Resilience and adaptation is one of the most overlooked investment opportunities. It's increasing at least in proportion to shrinking insurance coverage and surging premiums. And that's before we comprehend the 2nd and 3rd order impacts. There is lost income during rebuilding and recovery and a new type of inflation resulting from increasing costs just to keep services like electricity distribution online.

Over the last decade, we've converged on a relatively simple framework: work with teams that intervene in the physical world using a combination of hardware and software to automate in areas like emergency response, inspection, repair, retrofits or upgrades. Mostly this means working with old infrastructure or assets that haven't received much attention in decades.

The problems are usually ideal candidates to revisit with robots and AI.

We see a direct connection between climate and impact and revenue. So we prefer better, faster and cheaper solutions that might not appeal directly to climate benefits at all. And modular hardware is preferred because it usually means faster time to revenue, which in turn unlocks additional non-dilutive capital.

We've so far invested in risk and climate modeling, hard infrastructure, community coordination, nature-based solutions, supply chains, finance health and distributed architecture and have an open call for startups.

PORTFOLIO SPOTLIGHT

Name

Pallon

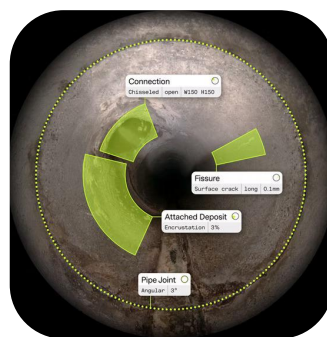
Year invested

2020

Description

Pallon exemplifies this framework perfectly. Third Sphere invested in 2020, Pallon automates inspection of water and sewer infrastructure, delivering lower cost, more frequent, and higher quality inspections that reduce catastrophic failure risk. This infrastructure exists under nearly every paved road, representing a massive addressable market hiding in plain sight.

Pallon



THANK YOU FOR READING.



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