

Why is everyone so excited about climatetech?

Climate change mitigation is turning into a mainstream strategy as the urgency to reach net-zero is real. Governments, countries, cities and businesses are developing new strategies to reach net zero commitments in efforts to achieve the Paris Agreement's goals.

While there is a growing global momentum to tackle climate change, with \$130T in assets committed to net-zero by 2050, increasing government green subsidies, and some COP26 tailwinds, mature and existing technologies can only help achieve ~65% of these goals. We need investments into new technologies to help close the gap across sectors from the energy sector, the transportation sector, buildings, food systems, and industrial processes.

As discussed in a post on [*why we're excited about climatetech moonshots as VC investments*](#) following a panel for Founders Forum Climate Tech 2021, at firstminute we believe venture capital is well positioned to play a major role in helping us to get to net zero. And we're not alone: Larry Fink, CEO of BlackRock, believes the next 1000 unicorns will be involved in climatetech. In the first half of 2021 alone, \$60B was invested in climatetech.

We are very excited about this rapidly growing space and deeply believe that investments in ClimateTech at the early stage can help the fight against climate change. So far, we've invested in six companies: [*Fork & Goode*](#) (lab grown meat, cofounded by [*Niya Gupta*](#) & [*Gabor Forgacs*](#)), [*VitroLabs*](#) (lab grown

leather, co-founded by Ingvar Helgason & Dr. Dusko Ilic), Airly (air quality data monitoring, co-founded by Wiktor Warchlowsky and Aleksander Konior), True Circle (building automated recycling facilities, co-founded by Rishi Stocker & Eamon Jubbawy), Alcemy (software for predictive quality control in cement and concrete production, co-founded by Leopold Spenner and Robert Meyer), and Diferente (subscription box service for organically sourced produce from wasted foods, co-founded by Eduardo Petrelli and Saulo Marti).

And this is only the beginning. Every couple of months, we want to do deep dives into a few key sub-sectors in the climate space. This month, we looked at fintech, construction and buildings, and food systems.

Climate fintech

Climate fintech is a cross-cutting sector covering the intersection of climate, finance and digital technology. It includes a range of financial product innovations, applications and platforms that serve as mediums between all stakeholders to catalyse decarbonisation. Incumbents in banking, insurance and finance tend to be slow to innovate, since their legacy technology infrastructure and business models don't lend themselves to iteration and innovation.

Innovation in the climate transition requires financial sector innovation in areas from facilitating the shift of investment dollars toward renewable energy, tools for tracking emissions and changing business & customer behaviour, financing of new infrastructure, to management and mitigation of climate risks.

A wide range of business models across multiple verticals are emerging, including payments, banking, lending, investing, trading, risk analysis, insurtech, and regtech. Key players in this space include Wunder (raised \$217M), Aspiration (raised \$250M), EcoVadis (raised \$236M), Jupiter Intelligence (raised \$88M), Enfuze (raised €62M), Tomorrow (raised \$29M), Powerhive (raised \$44M), and accelerators and investors in the likes of New Energy Nexus, Sustaintech Xcelerator, Barclays Rise, CommerzVentures, Core Innovation capital, Union Square Ventures.

Read also

A deep dive into the world of climate fintech with firstminute Capital

Construction and buildings

The building and construction sector accounts for nearly 40% of global energy-related greenhouse gas emissions; almost two-thirds of this amount can be attributed to operational emissions from heating and cooling buildings. Despite this, the built environment segment is relatively small, only accounting for 2% of total climatetech VC investment in 2021 YTD (\$525.7M in VC investments across 44 deals through Q3 2021 per Pitchbook).

Efforts to contribute to greener built environments largely involve developments in higher-efficiency technologies; heating and cooling for residential and commercial buildings; and green construction technology, including carbon-friendly materials. The latter category includes many companies focused on low-carbon concrete and investments into construction technology represent almost half of total VC investment into the overall sector.

Key players in this space include funds like Kompas Ventures, which launched a \$160M sustainability-focused fund aimed at start-ups in the real estate, construction, and manufacturing sectors, and companies like Canadian unicorn Nexii, Fortera, Carbix, Carbon Cure, and our own portfolio company Alcemy.

Food and agritech

As our global population has climbed to nearly 8B, we are applying pressure to our food systems, exploiting both our land and livestock. Currently, agriculture is responsibly for 11% of greenhouse gas emissions. Thus, the need to increase our food production and also innovate on our farming methods has opened a unique opportunity across two key verticals: foodtech and agtech.

Innovation in food tech has been booming, including the likes of alternative meats and dairy-substitutes, lab-grown meat and fish, and new animal sources such as insects. We've seen increasing activity in this space, with accelerators such as The Kitchen Foodtech Hub and Katapult Ocean among others, and new ventures such as Impossible Foods (valued at \$4B), Beyond Meat (\$4.4B market cap), our portfolio company Fork & Goode, Aleph Farms, Finless Foods and Mosa Meat gaining increasing traction.

Within the agtech space, we've seen developments towards greener farming, boosting farmer productivity, and precision farming. Key technologies in this space include aerial photography, temperature and moisture sensors, and robotics. Key players here include accelerators such as Katapult Climate and Carbon13 and companies such as Indigo Ag (valued at \$3.5B) and Farmers Business Network.

We'll be publishing deep dives in each of the three verticals mentioned above, covering key challenges, trends, verticals, and players in the space. The first one will be on Climate Fintech and is available [here](#).

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