

**GENDER
SMART**

Unlocking
Gender-Smart Capital
At Scale

**Unleashing
the power of
gender-smart
climate investing
in developed
markets**



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The opportunity of investing in gender and climate in developed markets

Climate change is set to cost the world trillions of dollars, with hundreds of millions of lives and livelihoods at stake. If left unchecked, climate change could cost the global economy some US\$178 trillion over the next 50 years.¹

In the last few years, investors have begun to recognise the vast financial risks that climate change poses. They have voted for shareholder climate resolutions, turned down or divested from investments due to environmental, social or governance (ESG) concerns, developed solutions for integrating climate reporting with other financial metrics, and sought out investment opportunities that mitigate climate risks.^{2,3,4,5} Over the last few decades, the role of investment in climate change mitigation, adaptation, building environmental and socioeconomic resilience, and developing frameworks for an equitable future has continued to evolve.

Few investors, however, fully recognise the potential from integrating gender and climate lenses together in investments for long-term climate solutions. Taking a gender lens alongside a climate one can be an important way to **mitigate climate risk, uncover opportunities, and drive long-term value** by driving climate mitigation, adaptation and resilience. Women's skills and expertise, leadership, purchasing power and lived experience contribute to developing novel climate solutions, mobilising adoption of solutions, and fostering a just transition.

Applying gender and climate lenses can help companies and investors meet the **evolving expectations** of regulators, stakeholders, suppliers, employees and customers that capital must deliver both financial and societal returns. It can help investors uncover **new investment opportunities** from accessing new markets, new lines of business, and new customers; strengthening relationships with customers, suppliers and distributors; and attracting and retaining talent. And finally, addressing gender equality (Sustainable Development Goal 5) and climate change (SDG 13) challenges together can help to **unlock impacts** on the other Sustainable Development Goals.

Why discuss developed markets separately?

However, examples of such integration of these lenses into investment processes are highlighted less often in developed market contexts and sectors than in emerging markets. For impact investors, the entry point to conversations about climate and gender lenses in investment, is often one of gendered vulnerabilities to climate change. Much of this data about vulnerability comes from emerging markets; while data exist around how socioeconomic status or race affect climate vulnerability in many developed markets, there is less data on gendered climate vulnerabilities in the same contexts.

Other developed market examples and investors focus their gender lens on surface-level measures of women's economic empowerment or women's corporate leadership, and do not link this lens to climate or other environmental objectives. Yet gender lens investment can be a powerful way of rethinking what we value as we invest, and who is at the investment table as an investor, to bring about the kind of systems-level change we need to address climate change – and this is as true in developed markets as emerging markets.

Because of developed markets' wealth, technological capacity, consumer power and global influence, gender-responsive climate solutions which include gender considerations and promote equitable outcomes have the potential to scale rapidly in developed contexts, reach new markets, and have outsize economic, climate, and societal impact.

- 1 <https://www2.deloitte.com/global/en/pages/about-deloitte/articles/global-turning-point.html>
- 2 <https://www.ceres.org/news-center/blog/climate-risks-skyrocket-largest-asset-managers-vote-more-climate-related>
- 3 <https://www.blackrock.com/corporate/newsroom/press-releases/article/corporate-one/press-releases/ninety-five-percent-of-global-insurers>
- 4 <https://corpgov.law.harvard.edu/2019/10/15/institutional-investors-views-and-preferences-on-climate-risk-disclosure/>
- 5 https://www.ey.com/en_gl/news/2021/11/three-quarters-of-institutional-investors-say-they-may-divest-from-companies-with-poor-environmental-track-records



About this report



The following case studies illustrate the 'what, why, why now and how' of gender and climate investing in developed markets, and the opportunities that can arise from integrating both lenses.

Photo by Toa Heftiba on Unsplash



The mission of GenderSmart is to mainstream the deployment of gender-smart capital at scale and at pace. The Gender and Climate Working Group aims to integrate gender and climate lenses into the investment process for better business, social, and investment outcomes in the green economy transition.

The following case studies illustrate the 'what, why, why now and how' of gender and climate investing in developed markets, and the opportunities that can arise from integrating both lenses. They represent a wide range of actors, sectors, investment types, and asset classes, from infrastructure to food and apparel.

They showcase new opportunities for climate mitigation, adaptation and resilience; and new ways of thinking about how to transform whole industries, sectors and communities to be more climate-resilient.

And they discuss the challenges that come with implementing a gender and climate lens in developed market contexts, and how investors and companies might overcome these challenges – from investment ticket sizes to ways of talking about gender.

They include a diverse range of gender and climate actions. For some funds, it begins with directing capital to women entrepreneurs with climate solutions; in other cases, it is about designing climate-smart solutions that also break down barriers for women or make a difference to women's lives.

These case studies are by no means perfect. In some cases, we would have liked to explore in more depth the specific actions that each of these funds and firms were taking, including a nuanced gender analysis. Many organisations, however, are in the early stages of their journeys and not yet able to share specifics – but we hope to build on these and revisit them as they mature.

We hope these case studies will help a wide range of investors reframe their thinking and connect climate and gender in developed markets investment decisions. And we hope to equip investors with the tools, the inspiration and the narratives to help them on their journey.



Definitions

Developed markets were defined based on an amalgamation of MSCI, S&P and FTSE criteria, and include Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Singapore, South Korea, Spain, Sweden, Switzerland, the United Kingdom and the United States. While these high-income economies share certain features, such as economic stability and high sovereign credit ratings, they represent a wide range of climate vulnerabilities and socio-political contexts.

This set of case studies is not fully representative of all developed markets, and what good looks like – a convincing investment case, successful business model or appropriate climate and gender impact – will differ by context. Investors must recognise this and adapt appropriately.

These case studies have also focused mainly on **private markets**: where investors are able to engage deeply with smaller or earlier-stage companies to analyse and strengthen climate and gender lenses. While it may be more challenging to combine climate and gender in public markets vehicles, it is already happening, and some asset managers are already going beyond divestment to engage portfolio companies on climate and gender themes.

Gender-smart investing integrates gender-based factors such as women's leadership, employment or consumption into investment strategy and analysis in order to increase returns and impact, and move towards a more equitable world for all. For these case studies, we used the [2X Challenge criteria](#) as a starting-point, but also sought to explore how these criteria were integrated into business models and investment strategies to amplify climate impact.

Climate-smart investing involves directing public, private or development sector finance into activities or companies/ organisations which directly support climate change mitigation (reducing greenhouse gas emissions), adaptation (adjusting to current or expected effects of climate change) and resilience (the ability to recover from climate impacts) alongside financial returns. For these case studies, we sought solutions with significant climate mitigation and adaptation/resilience potential, and/or approaches that were aligned with the Paris Agreement's goals of limiting warming to 1.5 degrees C.

Intersectionality is the idea that social categorisations such as race, class, and gender are interconnected and can create overlapping biases, inequalities and systems of discrimination or disadvantage that are more than the sum of their parts.

The case studies

Envisioning Partners

South Korean VC with an internal gender lens

Chi Impact Capital

Gender and multi-species impact in Europe

Mango Materials

Renewable, biodegradable plastic alternatives

Madison Park Development Corporation

Affordable housing with gender impacts

Re-Nuble

Food-waste solutions with a justice lens

Alante Capital

Systemic change solutions for the apparel industry



Shiok Meats

Cultivated alternative protein



Envisioning Climate Solutions Fund (managed by Envisioning Partners)

South Korean VC uncovers deep tech opportunities with an internal gender lens

Type of actor	Venture capital	 <p>Gender ambitions</p> <ul style="list-style-type: none"> ▶ Entrepreneurship ▶ Leadership
Investment type	Private, investing in deep tech in Asia and North America with a focus on series A to B. Ticket size ranges from \$1 million to \$5 million per investment.	
Operates in	South Korea, United States, Singapore	 <p>Climate ambitions</p> <ul style="list-style-type: none"> ▶ Mitigation
Sectors	Climate technology	

Scene set

Since their first investment in April 2017, Envisioning Partners has prioritised sustainable urban solutions that create the most environmental and social impact.

Through its investments, Envisioning Partners aims to address societal and environmental impacts including gender equity. Initially, they had a separate sub-fund investing 100% in women-founded startups. However, they faced difficulty convincing LPs (limited partners) to invest in funds with very specific restrictions; some LPs viewed investing only in women-owned companies as tokenism. Some women founders, too, were sceptical of taking investments from women-only funds, fearing a loss of credibility with other investors.

Approach

As a result of lessons learned from their first fund, Envisioning Partners decided to switch to an internal-only gender lens and invest in women entrepreneurs from non-gender-labelled funds like their Climate Solutions Fund. They found that they can best support women founders by simultaneously integrating gender lens principles in investment strategy while de-emphasising gender in their fund marketing.

Now, Envisioning Partners applies a gender lens across all of its funds instead of having one specific fund for women-founded companies. Envisioning focuses on directing capital towards women entrepreneurs and ensuring gender-balanced leadership in their portfolio companies. Today, Envisioning Partners' main gender lens investing ambitions include:



Envisioning Climate Solutions Fund

1. Setting a gender balance target for the companies they fund: 30% of portfolio companies or more must be founded by women entrepreneurs (women-owned) or have a woman CEO (women-led).
2. Increasing women's leadership and participation across all levels in portfolio companies. A secondary step for Envisioning Partners is to improve the quality of life of working women, on the basis that doing so creates both social and business value.

As for climate, the Envisioning Climate Solutions Fund sets specific climate impact criteria in cooperation with investee companies. The explicit mandate of the fund is to invest in companies with the highest climate change mitigation potential. These include climate tech solutions like energy transition solutions, sustainable foods, and carbon technology. Solutions need to:

1. Address a tangible emissions source
2. Have direct impact
3. Be scalable (market ready within five years), and
4. Not risk delaying net zero in the long run.

Impact

Out of the seven companies in the Envisioning Partners Climate Solutions Fund portfolio so far as of June 2022, three are founded by women entrepreneurs. Envisioning's internal target was for 30% of their investees to be women-owned or women-led businesses, which they have surpassed at this time.

The kinds of women-owned climate tech solutions companies they invest in include:

- ▶ [Novoloop](#), a plastic waste upcycling solution provider
- ▶ [Mango Materials](#), an advanced biodegradable plastics company (see case study on p.11).
- ▶ [KETOS](#), a real time water analytics solutions provider.



Envisioning Partners has uncovered for itself the social and business values created by women as entrepreneurs, as professionals advancing their careers, and as consumers.

Key takeaways

As a result of steady investment in the impact space, Envisioning Partners has two key takeaways for others wanting to invest at the nexus of gender and climate:

1. First, gender equality, which Envisioning Partners designated as a key part of its agenda from inception, is not a separate investment domain. It must be a 'viewpoint' that penetrates and applies to all domains. Working a gender lens into their overarching investment strategy enables gender integration across all of their business activities.
2. Second, applying a gender lens to investment opportunities can offer new perspectives in investment – such as discovering implicit market biases and underutilised talent. Envisioning Partners has uncovered for itself, through measuring participation and leadership of women in the deep tech sector, the social and business values created by women as entrepreneurs, as professionals advancing their careers, and as consumers. Envisioning Partners reflects this understanding in its investment strategies.

What's next?

Envisioning Partners hopes to influence other investment companies to invest with gender mainstreaming in mind. In developed markets, they have found that convincing investors that women are still less privileged is a difficult conversation. While inclusivity is a focus for impact in developing markets, they have found it less prevalent in developed market contexts. They therefore hope to create a playbook with explicit details of their internal processes and principles so that other firms can follow in their lead.







CASE STUDY ▶

Chi Impact Capital

Women-founded, Zurich-based impact investing firm uses an integrated gender and climate impact methodology

Type of actor	Impact investment advisory firm	 <p>Gender ambitions</p> <ul style="list-style-type: none"> ▶ Entrepreneurship ▶ Leadership ▶ Employment ▶ Consumption
Investment type	Direct investment in mid-to-late ventures with existing revenue for a Luxembourg based impact VC fund (the 'Burning Issues Impact Fund', 'BIIF'). The typical ticket size ranges from €500,000 to €1 million.	
Operates in	Europe	 <p>Climate ambitions</p> <ul style="list-style-type: none"> ▶ Mitigation ▶ Adaptation ▶ Resilience
Sectors	Innovative technologies, food, conscious commerce, green innovation, smart cities, care and affordable healthcare	

Scene set

Chi's Burning Issues Impact Fund, or BIIF, invests with a gender lens and a multi-species lens encompassing climate action, responsible consumption and other Sustainable Development Goals (SDGs). In Chi's strategy, gender and climate impacts cross-fertilise each other.

Gender: Chi Impact Capital applies an explicit gender lens across all of its investments and defines its gender lens in an internal strategy and value creation document. It views gender equality as integral to companies' operations and interactions with stakeholders. In that regard Chi Impact Capital's mission is not to invest in women-led teams only but to assist companies to become

more conscious and gender balanced over time. Beyond assisting its investee companies to installing more gender-balanced teams, boards and leadership, it seeks to invest in companies with job opportunities for women, and whose products or services can help women in their everyday lives.

Climate: Chi Impact Capital invests in companies that aim to solve burning environmental and social issues. Portfolio companies have their impact element ingrained in their DNA (product or service) and must have the potential to transform the sector/s they are operating in.

Chi Impact Capital

Chi also applies a 'multi-species lens' across all of its investments to encompass biodiversity and all life on earth. This means analysing food chains, living conditions, animal rights, and climate justice to produce a broader and deeper understanding of how a portfolio company uses resources and contributes to a healthy planet. For example, Chi Impact Capital nudges the portfolio companies of the BIIIF to be conscious of its impacts throughout its value chain (i.e., assisting them to become more transparent, local and innovative along their value chains).



Chi focuses on developed markets to address issues "in front of our doorsteps" in order to achieve the SDGs by 2030.

In addition, Chi believes that these impact benefits can be achieved without financial concessions, and that the pursuit of impact enhances economic profitability.

While founder Dr Christin ter Braak-Forstinger believes investing in developing markets is critical, Chi focuses on developed markets to address issues "in front of our doorsteps" in order to achieve the SDGs by 2030. It harnesses a strong regional network to invest in Europe.

Approach

Chi seeks out companies that intentionally and intrinsically create positive social and/or environmental impact as part of their business model, products and/or services, and where additional investment would generate additional deep impact. In particular, it looks for companies whose products and services aid women in their daily lives.

Chi uses gender as a positive screening factor and includes gender and climate-specific due diligence questions. It works with companies to define and measure key performance indicators to determine companies' impact on the SDGs. To date, Chi has made four investments with one follow-on investment.

Its portfolio companies are for-profit, Europe-based enterprises that provide transformative, scalable and typically tech-heavy solutions across the following verticals: circular economy, energy efficiency and green innovation, food safety and security, smart mobility and transport, and affordable and climate-resilient healthcare.

Impact

To date, Chi has invested in the following types of companies:

- ▶ A cultured meat company (meat made from stem cells) that seeks to transform food systems by eliminating emissions from livestock and addressing animal welfare challenges.
- ▶ A company enabling reusable packaging for takeaway and delivery food and directly responding to eliminate single-use plastics.
- ▶ A company scaling vertical, circular farming to transform food systems by producing high quality locally grown produce and with fewer resources than traditional agriculture.
- ▶ A company advancing the decentralized and digital green energy-transition.

In applying a gender lens across all of its portfolio companies, Chi provides technical support to help portfolio companies' teams and boards become more gender-balanced and inclusive, with an eye to increasing job opportunities for women, improving incentive structures, and having a positive impact on women's lives.

Key takeaways

Chi's key insights can help other funds in the space:

1. Minority investors can have an influential role in a portfolio company's impact. Because the companies Chi – via the BIIIF – invests in already have impact ingrained in their business models, they are very open-minded in advancing their positions as pioneers and are willing to work towards developing gender and climate impact indicators.
2. Even in developed markets like Europe, it is still challenging to discuss gender impact integration with purely male-driven teams. Gender is not as easy to discuss as climate and takes more convincing arguments. Case studies of companies with both gender and climate impact will demonstrate to other investors that these kinds of projects exist and are valuable.

Mango Materials

Renewable, biodegradable plastic alternatives

Type of actor	Renewable bioproducts company	 Gender ambitions <ul style="list-style-type: none"> ▶ Entrepreneurship ▶ Leadership ▶ Innovation ▶ Employment
Investment type	Private	
Operates in	The San Francisco Bay Area, United States	 Climate ambitions <ul style="list-style-type: none"> ▶ Mitigation
Sectors	Bio manufacturing	

Scene set

Mango Materials converts abundant methane gas into biodegradable materials to be incorporated into the conventional plastics supply. Co-founders Allison Pieja and Molly Morse investigated the production of PHA biopolymers from methane and its biodegradation under anaerobic conditions as part of their Ph.D. research at Stanford University. After graduation, they started Mango Materials with fellow Ph.D. Anne Schauer-Gimenez as a renewable bioproducts company located in the San Francisco Bay Area that strives to be the global leader in the bio manufacturing revolution. They have now invested in a proprietary platform that delivers optimally-formulated, biodegradable polyhydroxyalkanoate (PHA) pellets that incorporate into any supply chain.

Approach

Methane is a potent greenhouse gas found all over the world. It is a by-product of many essential operations but has few economically beneficial uses besides electricity and fuel. Mango Materials believes that methane is a valuable and under-utilised resource. To source its feedstock, it builds factories next to existing methane production facilities and partners with landfills, wastewater treatment plants, and agricultural facilities.

Its factories use organisms called methanotrophs to produce PHA naturally. Under certain conditions, these organisms consume methane and convert it to PHA that is stored in their cell walls. Mango Materials harvests this PHA and delivers formulated pellets that are incorporated into conventional plastics supply chains.



Earrings made from biodegradable material produced by Mango Materials.

Mango Materials



Mango Materials uses organisms called methanotrophs to produce PHA naturally ... It harvests this PHA and delivers formulated pellets that are incorporated into conventional plastics supply chains.

Impact

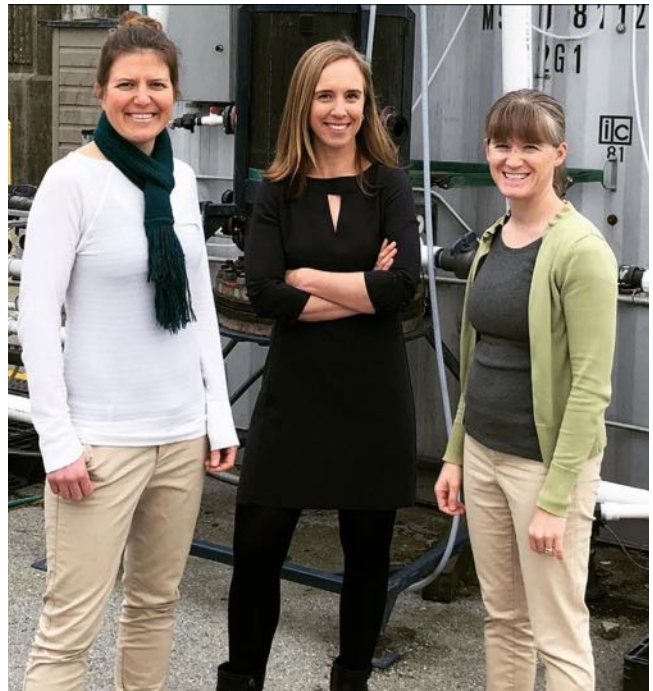
The use of methane as feedstock facilitates a low-cost, highly scalable process. The pellets can be used in a variety of uses, from fibres for apparel and textiles to rigid goods such as jars, caps, and moulded applications.

Mango Materials's closed-loop model has the potential to transform the plastics industry. If PHA products end their life in a modern waste facility where methane is produced, the gas can be recaptured to make more PHA. If PHA is disposed of in the natural environment, it becomes part of the naturally occurring carbon cycle as it is completely biodegradable and leaves no trace of microplastics or microfibres.

Mango Materials currently produces 100,000 pounds of pellets per year and works directly with brand owners for their specific applications. So far, it has one fully commercialised product – a soap dish produced by Natura&Co in Brazil.



Mango Materials' PHA pellets are custom-made for versatile end-of-life options, including marine biodegradability.



Mango Materials co-founders Allison Pieja, Molly Morse and Anne Schauer-Gimenez.

Key takeaways

Co-founders Molly, Allison and Anne did not start out to found a women-led company, but to change the plastics industry. After they started, they realised that it was a very male-dominated field and that there is actually a very powerful gender thread running through their work.

Mango Materials has three women co-founders, has 50% women in its workforce, and its board is over 50% women. Because there are so few women in the space, the Mango Materials founders are remembered and approached more. They also seek to shift the narrative and demonstrate that women can have children and a family and still run a very successful and innovative climate solutions business.



What's next?

Globally, PHA production is expected to increase tenfold by 2027.⁶ Mango Material's goal is to replace polluting plastics with their product and reach production of one billion pounds per year in the next ten years. It has several new projects in the works including creation of fibre for apparel, a piece of work sponsored by NASA to capture methane in the galaxy, and building a larger factory that can process 5 million pounds per year.

6 <https://www.bioplasticsmagazine.com/en/news/meldungen/20220308-PHA.php>

Madison Park Development Corporation

Climate and gender justice through affordable housing

Type of actor	Community development corporation	 <p>Gender ambitions</p> <ul style="list-style-type: none"> ▶ Leadership ▶ Consumers/end-users
Investment type	Public finance – receives US Low-Income Housing Tax Credit funding.	
Operates in	United States	 <p>Climate ambitions</p> <ul style="list-style-type: none"> ▶ Mitigation ▶ Adaptation ▶ Just transition

Scene set

Madison Park Development Corporation (Madison Park) is a community development corporation, a type of 501(c)(3) non-profit organisation. Based in Boston, Madison Park was created in 1966 in the wake of ‘urban renewal’ programmes, in which Black and lower-income neighbourhoods were demolished for redevelopment.

Madison Park is women-run and women-led. As a community development corporation, its board members are diverse and representative of the local community. Among other activities, it develops affordable low-income housing for low- and moderate-income families in the Roxbury neighbourhood. This helps serve a huge unmet need in affordable housing in Boston, where roughly 65% of residents are renters and more than half put over 30% of their income towards rent. To date, it has developed some 1,600 affordable housing units.

Ambitions

Madison Park’s housing projects and affordable units are often sited near public amenities such as playgrounds, schools and transit, meet LEED Silver standards or higher, and are energy efficient. From an environmental justice standpoint, the units have central heating and cooling to address residents’ needs in increasingly extreme climate conditions. Green space, amenities, accessibility and passive design are considered in the siting of projects.

Besides being women-run and -led, Madison Park’s affordable housing also serves residents in gendered ways. While there is no explicit gender lens criteria for selecting applicants, criteria include single-parent households and families leaving domestic violence situations. This leads to better outcomes for women: in practice, women-led households make up the majority of tenants and homeowners.



Madison Park Development Corporation

Approach

Madison Park oversees the process of acquiring, financing, construction and leasing of real estate. Its portfolio is financed by public federal, state and municipal programmes such as the US low-income housing tax credit scheme. It builds income-restricted housing units whose maximum rent is a percentage of local median income.



Such public financing often comes with conditions. For example, some of Madison Park's funding is to develop units that are leased to people experiencing homelessness, or who receive state mental health or rehabilitation services.

Funders' cost considerations can sometimes constrain Madison Park's climate and gender ambitions: for example, elements such as passive design or adherence to higher LEED standards may cost more. Or, funders may consider in-unit laundry a risk for leaks and more-frequent maintenance, even though laundry in each unit is a key gender consideration that benefits caregivers of young children.

To date, Madison Park has already installed 17 rooftop solar projects across its entire housing portfolio, providing energy to 430 households in Roxbury and cutting roughly 11,000 tons of greenhouse gas emissions. Utility cost savings were transmitted to residents, lowering their vulnerability to energy poverty. Dedicated public funding could help to scale renewable energy installation for such projects.

Impact and key takeaways

Madison Park's affordable housing projects have had some positive outcomes for gender and racial equity, though the city's affordable housing crisis remains. For example, the seven income-restricted units in one homeownership project were oversubscribed by a hundredfold; all seven units were ultimately purchased by women-led households or buyers of colour. In another programme for homeownership down payment assistance, all ten recipients to date are women; eight of the ten are African American and two are Hispanic. While there were no explicit racial or gender criteria for applicants, these outcomes resulted from a combination of other criteria, such as income levels and applicants leaving domestic violence situations.



Madison Park's affordable housing projects have had some positive outcomes for gender and racial equity, though the city's affordable housing crisis remains.

Key takeaways and what's next



Madison Park aims to apply its experience and gender and climate ambitions, in partnership with other developers and community organisations, to a large mixed-use development in Roxbury. In addition to some 308 affordable housing units, the development would also serve local community needs, such as with transit, bicycle and pedestrian connections, opportunities for women- and minority-owned businesses, and skills training for the life sciences and other growth industries.



CASE STUDY ►

Re-Nuble

Closing food loops for climate resilience

Type of actor	Start-up company	 Gender ambitions <ul style="list-style-type: none"> ▶ Entrepreneurship ▶ Leadership ▶ Employment
Investment type	Private	
Operates in	United States	 Climate ambitions <ul style="list-style-type: none"> ▶ Mitigation ▶ Adaptation ▶ Resilience

Scene set

Re-Nuble is a women-founded technology start-up that harvests food waste locally and turns it into usable, commercial-grade synthetic fertiliser at scale for the indoor farming industry. Its organic nutrients provide an alternative to conventionally mined mineral salts, enable indoor farms to contribute to food system resilience by improving the productivity of indoor growers, and lower food system carbon emissions by diverting food waste from landfill.

Re-Nuble has received investment from climate-focused impact investors, as well as those focusing on technology innovations brought to market by women of colour. Re-Nuble’s gender lens investors include The 22 Fund, WOCstar Fund, and She1K.

Ambitions

Re-Nuble was founded by Tinia Pina in New York City, where the city spends over \$180 million each year to deal with food waste. Pina observed the opportunity to both divert food waste from landfill and boost climate resilience by meeting the needs of soilless farms in ways that reduced emissions.

Re-Nuble

Approach

The company has developed on-site waste upcycling for farms. These plug-and-play systems of tanks, valves and sensors capture soilless farms' production waste, turn it into fertiliser, and discharge this fertiliser into a farm's water system. Re-Nuble also makes fertilisers from vegetable waste sourced from food manufacturers, distributors and processors, as well as growing media that provides an alternative to peat.

Its distributed waste upcycling model has expanded to a manufacturing facility in Rochester and a vertical farm in Glens Falls, both in northern New York State.

Re-Nuble's team is gender-balanced and comprises roughly 55% men and 45% women. It is diverse in age, race and ethnicity. It works with non-profits and the educational sector to boost agricultural skills in under-represented groups and thus expand the talent pipeline for agriculture technology. And it has a mandate from one investor, the 22 Fund, to expand manufacturing and job creation in under-served communities.

Impact

Re-Nuble's fertiliser has a quantifiable impact on emissions: a one-acre farm that uses the fertiliser eliminates 1.62 metric tons of carbon emissions from the atmosphere each year. Each gallon of fertiliser avoids 18.75 pounds of carbon emissions that would otherwise have been released from food waste sent to landfills.

In addition, its solutions serving indoor growers potentially have a climate justice impact by increasing the productivity of food systems and urban access to fresh food, and abating carbon emissions and air pollution that disproportionately affect under-served communities.

Finally, producing fertiliser from food system waste reduces the need for conventionally mined mineral salts that are mined and processed in ways disruptive to rural areas. By averting such disruptions, which disproportionately affect women, fertiliser from food waste has an additional, indirect gender and social impact.

Key takeaways

The diversity and job creation mandates from some of Re-Nuble's impact investors are well aligned with the company's purpose and practices. "Knowing that those investors have due diligence looking for that to be filled, we need to be consistent in knowing that we hire with those lenses," Pina says. In Re-Nuble's view, diversity and job creation are a means of growing its talent pipeline rather than a compliance burden.



In Re-Nuble's view, diversity and job creation are a means of growing its talent pipeline rather than a compliance burden.

What's next?

Commercially, Re-Nuble is expanding its range of products with a peat-alternative growth medium launched in June 2022. It also seeks to replicate its distributed waste upcycling model in other US states, Canada, and developing markets, and adapt this model for regional agricultural needs. Particularly in emerging markets, it seeks to introduce new agricultural models and serve women farmers and employees, says Pina: "If we don't encourage women to think differently in terms of how they do agriculture, there's a big loss in productivity."







CASE STUDY ▶

Alante Capital

Systemic change for the fashion industry

Type of actor	Venture capital	 Gender ambitions <ul style="list-style-type: none"> ▶ Entrepreneurship ▶ Leadership ▶ Employment
Investment type	Private; one \$12 million fund with a typical ticket size of \$150,000 to \$1 million in pre-seed, seed, and series A investments. In 2022, raising a second fund with a target of \$50 million with a \$100 million cap.	
Operates in	United States, Europe, with plans to expand to Asia and South America	 Climate ambitions <ul style="list-style-type: none"> ▶ Mitigation

Basic scene set

Alante Capital invests in levers for systemic change in the fashion industry: in B2B companies that develop tools and innovations to make the apparel industry more sustainable and circular and address climate-related risks for apparel companies. It seeks solutions that have high climate change mitigation potential.

Ambitions

Alante Capital was started in 2017 to address social and climate risks across the fashion industry, such as the use of fossil-fuel-based materials, the unsustainable production of plant-based ones, microfibre pollution, or the scale of consumption and waste. In Alante Capital’s view, addressing climate change presents new opportunities for innovation and above-market returns.

Alante Capital

Approach

Alante invests in deep tech, cleantech, consumer tech and software-as-a-service (SaaS) companies that have potential to serve the entire industry with tools and innovations such as biodegradable alternatives to polyester and plastic, novel reuse and resale platforms, and garment or materials recycling solutions.

It tracks carbon emissions, waste, energy use, water use, employment, inclusivity and other impact metrics from its investee companies.



Alante's view is that diverse teams especially mitigate business risks for companies in the fashion industry, as women are significant consumers and innovators of fashion and other retail goods.

The existence of a fund addressing fashion's sustainability is, implicitly, gendered: women make up roughly 80% of workers in the global garment industry, and women are significant consumers and innovators of fashion and other retail goods. Alante Capital is women-founded and -led, and tracks gender and other diversity metrics in investee companies' leadership, including in the C-suite and at board level. Alante's view is that diverse teams especially mitigate business risks for companies in the fashion industry. Its investments include the women-founded and women-led Novoloop, Mango Materials, and Sway. Eventually, says co-founder Karla Mora, the fund



Through its investments, Alante seeks to transform the way fashion is produced, sold, used, and recycled.



Alante Capital managing partners Leslie Harwell and Karla Mora.

aims to have an impact on labour: through circular solutions that also expand economic opportunities for women in the informal workforce, for example, or by upskilling and reskilling women garment workers to ready them for greater automation in production. Ultimately, through its investments, Alante seeks to transform the way fashion is produced, sold, used, and recycled.

Impact

Many of Alante's investments are at an early stage, but its portfolio has risen in value, with no failures or down rounds to date. Alante is now in the early process of raising a much larger second early-stage fund and an additional opportunity fund. It has observed inbound interest from investors committed to investing to address climate change, or with a focus on sustainability and a circular economy for the apparel industry.

Key takeaways

Alante was initially positioned as an impact fund, but found this positioning was slow to raise capital. When it repositioned as a conventional fund investing in climate technologies with above-market returns, fundraising was faster. "Figure out who your company relates to, and who it is solving a problem for, and go to those investors," says Mora.

What's next?



Alante's next fund will retain its focus on climate mitigation impacts, but expand its sector focus to companies serving other related consumer sectors, such as home goods. It seeks to transform the way consumers interact with everyday products by funding innovations that address labour and social challenges alongside climate ones.



CASE STUDY ▶

Shiok Meats

Cultivated alternative protein

Type of actor	Cultivated crustacean meat company	 Gender ambitions <ul style="list-style-type: none"> ▶ Leadership ▶ Entrepreneurship ▶ Employment ▶ Training
Investment type	Private and public (endorsed and supported by the Singaporean government).	
Operates in	Singapore (headquarters), Thailand and Australia	 Climate ambitions <ul style="list-style-type: none"> ▶ Mitigation ▶ Adaptation ▶ Resilience
Sectors	Food technology	

Scene set

Shiok Meats Group CEO, Chairman and co-founder Dr Sandhya Sriram and Group CTO and co-founder Ka Yi Ling founded the company in 2018. Both are scientists by training and education and leveraged their background in biotechnology and stem cell biology to develop climate-resilient, sustainable, and scalable biotech-based foods and ingredients.

The company uses technology to grow slaughter-free seafood from cells instead of animals. Currently, the company produces crustaceans like shrimps, crabs, and lobsters and is the first in the world to do so using cellular agriculture technology. As a result, their real seafood and meat products have the same flavours without irreversible harm to the environment.

Approach

Shiok Meats uses its cellular agriculture technology to grow the cells of select seafood and meat in nutrient-rich environments and controlled conditions. By growing cultivated seafood, Shiok Meats provides an alternative to conventional seafood farming. In doing so it curbs blue carbon emissions from mangrove deforestation.

As an innovative food solution, Shiok Meats aims to strengthen food supply and security and help conserve mangroves while reducing blue carbon (carbon stored in coastal and marine ecosystems) emissions from mangrove deforestation.

Shiok Meats



By growing cultivated seafood, Shiok Meats provides an alternative to conventional seafood farming. In doing so it curbs blue carbon emissions from mangrove deforestation.

As novel food is a relatively new industry, Shiok Meats works with various educational organisations, schools and colleges, library boards, non-government organisations, and university career centres to draw attention to the urgency of producing food sustainably and encouraging men and women alike to become a part of the mission. Talent supply in STEM remains a challenge, and Shiok Meats is committed to continue its outreach to bring in more talent. Additionally, Shiok Meats has an all-women C-suite and gender-balanced representation in its workforce. Shiok Meats' gender lens investors include AiiM Partners, Envisioning Partners and Mindshift Capital Fund.

Impact

Shiok Meats showcased the world's first cultivated shrimp prototype in 2019, lobster prototype in 2020, and crab prototype in 2021. They are working towards feeding the expected 10 billion population by 2050 as their wider impact ambitions include future-proofing our food supply and strengthening global food security through their products.

They are also mentoring new start-ups and individuals committed to growth and sustainability in the cultivated seafoods and meats space.



Shiok Meats founder Ka Yi Ling and a scientist at work.



The founders and scientist of Shiok Meats use technology to grow seafood from cells instead of animals.

Key takeaways

Co-founder Ka Yi has observed a preponderance of women's leadership in the cultivated meat space, with no lack of women's representation, and has met many women founders in the alternative protein space which is not so common in other sectors. For both founders, it is important to invest in and advise others in the cultivated meat production space in order to share best practices and help to grow the industry.



What's next?

Shiok Meats is now working on various animal-free growth factors, food grade media, and plant-based alternatives that have the potential to yield at scale and at lower price points. Some of these products are being developed in-house while others leverage strategic partnerships. Shiok Meats is also exploring the upcycling of by-products and cell media for flavouring mixes and essences.

Currently, it is ramping up the construction of its pilot production facility in Singapore to speed up large-scale manufacturing and launch in at least one premium restaurant in 2023. The pilot plant will enable Shiok Meats to get a full view of the product lifecycle and more accurately assess the cost of production and other raw materials, readying it for commercialisation. The pilot plant will also demonstrate to regulators the comprehensiveness of safety and quality adherence to produce for a wider market.

A selection of other developed markets companies on the GenderSmart radar



Novoloop

 Gender ambitions <ul style="list-style-type: none"> ▶ Entrepreneurship ▶ Leadership 	 Climate ambitions <ul style="list-style-type: none"> ▶ Mitigation
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Novoloop is a women-founded and women-led advanced upcycling company that converts end-of-life plastic into specialty materials.



Their technology upcycles polyethylene (the type of plastic used for grocery bags, packaging and containers) using their patented chemical process technology called ATOD (accelerated thermal oxidative decomposition) to create monomers that produce recycled materials. Novoloop's overarching mission is to invent and provide the most useful and sustainable polymers in the market. They are on a path to mitigate up to 685 million tonnes of CO₂e annually.

LooWatt

 Gender ambitions <ul style="list-style-type: none"> ▶ Leadership ▶ Consumption 	 Climate ambitions <ul style="list-style-type: none"> ▶ Mitigation ▶ Just transition
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LooWatt is a women-led company offering a hygienic, waterless and sustainable solution for essential sanitation infrastructure in both developed and emerging markets. The LooWatt toilet can be flushed without any water and feeds waste to energy-generating systems, offering a circular economy waste management solution.

GroIntelligence

 Gender ambitions <ul style="list-style-type: none"> ▶ Leadership ▶ Entrepreneurship 	 Climate ambitions <ul style="list-style-type: none"> ▶ Adaptation ▶ Resilience
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Led by its female founder and CEO, Sara Menker, agri-tech platform Gro Intelligence has a nearly gender-equal and diverse workforce in Nairobi and New York driving rapid collation, aggregation, and modelling of complex and divergent data. By getting data into the hands of customers, including women farmers, the Gro Platform helps drive business performance and growth while addressing critical global challenges.

ChargerHelp!

 Gender ambitions <ul style="list-style-type: none"> ▶ Employment ▶ Leadership 	 Climate ambitions <ul style="list-style-type: none"> ▶ Adaptation
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ChargerHelp! trains technicians to maintain electric vehicle charging stations, enabling them to earn a middle-class income while providing EV charging networks with on-demand repairs and maintenance support. A portfolio company of both the Los Angeles Cleantech incubator and Elemental Excelsator, ChargerHelp! has a diverse, female-led founding team. As of April 2021, ChargerHelp! had raised some US\$2.8 million in seed funding from Kapor Capital, JFF, Trucks VC and other climate and impact investors.

LEARN MORE ▶

LooWatt, GroIntelligence and ChargerHelp! were highlighted in the 2021 report, [Gender and Climate Investment: A strategy for unlocking a sustainable future.](#)

Examples of gender and climate investors in developed markets



AiiM Partners

A women-led, US-based technology fund of over \$100 million that addresses environment and equity at the intersection of land, water, air and energy. AiiM's ambition is to offset at least 1 gigaton of emissions. The fund targets underinvested sectors that could have a tangible impact on oceans and climate, and has an intentional focus on the diversity of the teams they invest in including ensuring that at least half its investments are in companies led by women or people of colour.



PGIM Real Estate

PGIM is a real estate company which has launched one of the first institutionally managed, women-led private equity real estate funds built on an impact investment thesis that market-rate financial returns can be enhanced by creating environmentally sustainable, safe and affordable communities for people with moderate and low incomes.

PGIM are also working with colleges and universities to introduce undergraduate women and other underrepresented groups to careers in real estate, providing training, mentorship, and networking opportunities.



Supply Change Capital

Supply Change Capital is a women-led venture firm focused on the intersection of food, culture, and technology. They catalyse change by investing in diverse founders across the supply chain in technology, sustainable ingredients, and high-integrity brands. Supply Change Capital seeks to onboard diverse LPs, fund diverse GPs, invest in women and underrepresented founders and inspire them to employ a diverse employee and supplier base.



The 22 Fund

The 22 Fund, based in the United States, invests in tech-based manufacturing companies to facilitate their international exports, creating high-quality, skilled jobs and resilient businesses to grow the economy. To redress the 'equity gap' and deliver returns, it especially focuses on women founders of colour and Black & Indigenous founders.



WOCStar

WOCstar Fund, founded in 2018, is a venture capital investment firm based in New York. The firm focuses on women of colour founders of tech startups. Its portfolio companies include sustainable agriculture company Re-Nuble, smart-city data platform Uncharted, and zero-waste grocery platform Zero.



Chloe Capital

Chloe Capital is a venture capital firm based in the US that invests in women-led, seed-stage, tech and tech-enabled companies, particularly with underrepresented founders and diverse leadership teams. Its ClimateTech accelerator programme with Cornell University and the New York Energy, Research & Development Authority (NYSERDA) supports women founders in the climate-tech space.

Conclusion

There are many rich, untapped sources of opportunities for simultaneous gender and climate investment and impact – in private market funds, public market funds, real estate, infrastructure, and directly into entrepreneurial ventures. A gender lens can be an effective way to transform climate outcomes for an industry through novel women-developed solutions and decisions that are informed by diverse leadership (Envisioning Partners, ShioK Meats). And the inverse is true: seeking ways to boost climate resilience, for example, can lead to better outcomes and new entrepreneurship opportunities for women business owners and workers (Re-Nuble).

When investors have held firm to their principles and invested according to climate and gender mandates and metrics, they have contributed to system-wide change and achieved strong results, from portfolio markups amid economic headwinds, to inbound interest in funds. And as sustainability concepts such as systemic change and circular economy models become more well understood and accepted by stakeholders like investors, limited partners, or funding agencies, companies and investors may find it easier to explain the power of a gender lens to accelerate impact.

While most of these cases are at too early a stage to discuss returns and scale, together they hold tremendous potential to accelerate impacts. Just 1.5 years have elapsed since our initial overview report on the power of gender and climate investment, but the range of tools, information, and understanding of gender and climate has expanded since then. We hope these case studies will contribute to the existing body of knowledge, and provide guidance and inspiration to help you get started.

