

Cleantech innovation, collaboration, and climate action



DYNAMO
ACCELERATING ENERGY INNOVATION



UBS





Contents

04

Introduction

07

Featured partners

- 09 Aspiration
- 10 Aspiring Materials
- 11 Checkerspot
- 12 Clarity AI
- 13 CleanCapital
- 15 CO-Z
- 16 Grain Ecosystem
- 17 Perennial
- 18 simuwatt
- 19 TURN

21

Acknowledgments

Introduction

In an age defined by technological innovation and environmental consciousness, the intersection of cleantech innovation, collaboration, and climate action has emerged as a pivotal point of both concern and opportunity.

As the world grapples with the urgent need to address climate change, cleantech themes have gained prominence as beacons of hope, offering solutions that transcend the traditional boundaries between science, technology, and sustainability. This paper delves into the concept of cleantech by profiling companies across several potential solutions, providing their thoughts on the transformative potential they hold for our planet's future.

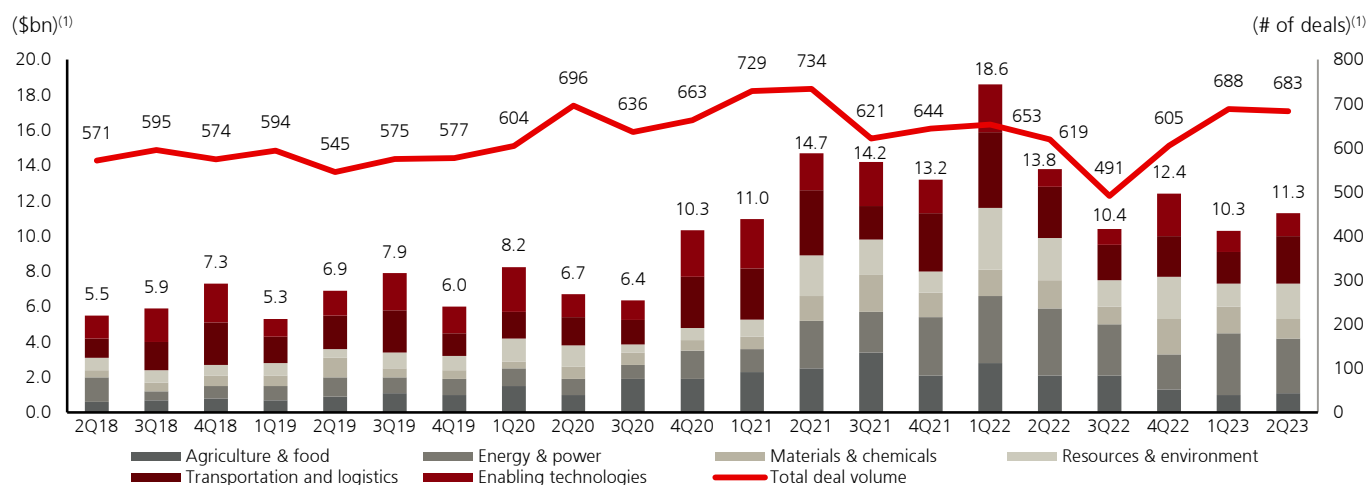
Rooted in innovation, cleantech provides technology-driven solutions that actively mitigate the effects of climate change, enhance resilience against its impacts, and facilitate the transition to a low-carbon economy. Development of more sustainable materials technologies, advanced circular economy solutions, resilient infrastructure, advanced lithium

supply chain, and sustainable technologies are among the array of innovations cleantech brings to the table. Through these advancements, societies can better prepare for the inevitable impacts of climate change and work to prevent its worst consequences.

As governments, businesses, and individuals awaken to the importance of combating climate change, investments in these fields have grown exponentially. Startups and established companies alike are channeling their efforts into developing groundbreaking solutions, driven not only by environmental stewardship but also by the economic opportunities presented by the green transition. Despite larger market headwinds, investment across cleantech has remained strong through the first half of 2023, with



Cleantech investments breakdown by sector



Source: Q1 2023 Cleantech Group, Investment Monitor.

(1) Excludes outlier deals above \$350 million.

\$11.3 billion invested across sectors, up from \$10.3 billion in 1Q23, with deal volume remaining in-line with 2021.

However, challenges remain. The transition to cleantech solutions requires overcoming barriers such as regulatory hurdles, technological scalability, and fundraising. Fundraising specifically within the realms of sustainability has become a dynamic and diverse landscape, reflecting the growing recognition of urgent environmental challenges and the need for innovative solutions. The evolution of climate-focused startup funding from 2021 to 2023 underscores the seismic shift in global consciousness regarding climate change. While startups once struggled to secure financing for their ambitious climate solutions, they now find themselves in a more favorable environment.

The heightened awareness of climate risks and the increasing alignment of financial interests with environmental goals have paved the way for a diverse array of funding avenues. As climate-focused startups continue to drive innovation and sustainable solutions, their ability to raise capital has become increasingly synonymous with addressing the pressing challenges of our time.

For sustainable materials and circular economy products, investors are drawn to solutions that help reimagine

production cycles and offer viable alternatives to single-use plastics, paving the way for a more responsible and regenerative economy. The intersection of technology and sustainability is a hotbed of innovation, with AI-driven resource optimization and energy-efficient solutions, the promise of significant environmental impact coupled with the potential for market disruption fuels interest for capital raises. Fundraising for smart city and microgrid startups has gained momentum as urbanization and energy resilience become paramount.

In 2023, investors recognize the potential of innovative technologies to enhance urban sustainability and energy management. As global awareness of these issues continues to grow, investors are recognizing the potential for both financial returns and positive societal impact. From innovative materials to groundbreaking technologies and ecosystem preservation, the funds being raised today are instrumental in shaping a more sustainable and resilient tomorrow. These key cleantech fields collectively represent the aspirations of a global community committed to steering our planet away from the precipice of irreversible environmental degradation. Through innovative technologies and collaborative efforts, humanity has the potential to mitigate climate change's most dire impacts and forge a path toward a more sustainable and resilient world.



Featured partners

Aspiration

Aspiration

Accelerating the transition to a net-zero economy



Aspiring Materials

Accelerating Earth's processes to create sustainable products



Checkerspot

Designing new molecules for more sustainable materials



Clarity AI

Bringing societal impact to markets



CleanCapital

Accelerating investment in solar and energy storage



CO-Z

Smart energy storage that will change your life, forever



Grain Ecosystem

Addressing climate change by unlocking carbon removal credits



Perennial

Harnessing earth to heal the planet



simuwatt

Providing intelligent data to reduce commercial building emissions



TURN

Ridding the world of plastic waste through circular systems





Aspiration

Accelerating the transition to a net-zero economy

“Aspiration is a purpose-driven climate action company with over a decade of experience pioneering bold solutions to help turn the tide on climate change.”

Olivia Albrecht, CEO

Tell us about Aspiration.

Aspiration was founded in 2013 with a mission to empower individuals to take climate action in their daily lives. We developed industry-leading impact-driven financial products, and a climate action platform that uses the tools of finance to tackle our planet's most pressing challenge. Since then, we've witnessed a growing and critical need for carbon solutions at the enterprise level. To meet that growing demand, Aspiration Sustainable Impact Services LLC has expanded our platform of nature-based carbon solutions to help organizations mitigate the impacts of climate change. Today, we're well-positioned to expand and accelerate our role in helping enterprises, consumers and investors meet their climate goals.

What trends have accelerated growth in your space?

According to the IPCC, every pathway to preventing catastrophic climate change combines operational carbon reductions with the preservation and expansion of carbon sinks such as forests and other natural ecosystems. Currently, private capital accounts for only \$26B of annual funding for nature-based solutions (NbS). To meet the goals of the Paris Agreement, this needs to grow by 13x by 2050, to \$337B (UNEP, 2022). We believe Aspiration is a force for good in directing the flow of much needed capital toward these planet-protecting projects.

What are the main opportunities or challenges in your sector?

One of the biggest challenges is finding the highest-quality carbon sequestration and removal projects to deliver high volumes of quality credits to our enterprise customers. There are many good projects to be found — and there are some bad ones that have gotten a lot of attention. That's to be expected given the infancy of the voluntary carbon market and the acceleration of scale that's been happening. To ensure we invest only in high-quality projects for our large scale carbon-focused global restoration program, we use up to 20 criteria to evaluate carbon removal projects on key

metrics such as additionality, permanence, and leakage. We believe that level of rigor sets our portfolio of projects apart.

How can collaboration accelerate innovation?

Companies are moving beyond the principle of simply doing no harm, and looking for ways to make positive contributions and do more good for the benefit of the planet. A lot of that is driven by demand from customers and investors, and enhanced through cross-organizational collaboration. We're uniquely positioned at the center of key parties involved, helping to keep capital from investors flowing to carbon offset project developers so credits can be generated and ultimately utilized by the enterprises who need them.

How has the market impacted your access to capital?

We're very fortunate to work with several ambitious and bold investors who continue to help us push much needed capital towards carbon offset projects that our clients are seeking. While the current financial market landscape has been challenging to navigate across all sectors, we continue to use our rigorous standards to ensure that any funding we're distributing is going towards projects of the highest quality.



Aspiration's CEO,
Olivia Albrecht.

Photo courtesy of
Aspiration.

Aspiring Materials

Accelerating Earth's processes to create sustainable products

"By using Earth's processes to break down and reconfigure rock components into key industrial products, we offer a novel way to decarbonize industry."

Chris Oze, Co-Founder and Chief Geologist & Megan Danczyk, Chemical Process Engineer

Tell us about Aspiring Materials.

Aspiring Materials (AM), based in Christchurch, New Zealand, has developed a mineral refining process to extract materials that will directly mineralize CO₂ at zero cost as well as offset/reduce industrial CO₂ emissions. The AM process will play an important role in reducing global emissions, whilst providing the vital materials needed for a sustainable tomorrow.

What trends have accelerated growth in your space?

Temperature records are being broken and extreme weather events are becoming more regular. AM's novel mineralization process offers a very low-cost pathway to decarbonizing a range of heavy industries, in particular (i) carbon capture and storage, (ii) decarbonizing the supply of MgO, (iii) disrupting the EV market, (iv) changing the construction sector, and (v) generating hydrogen. Aspiring Materials sees accelerated demand for these products as industries struggle to come to terms with global demands to decarbonize and reduce atmospheric CO₂. AM's process can deliver both and provide improved, carbon-free products.

What are the main opportunities or challenges in your sector?

Our main challenge is that we have one process that creates many products. But all these products do allow us a unique advantage: we can mineralize/sequester CO₂ at no cost. We do this by selling our multitude of products to subsidize the one product (i.e., Mg(OH)₂) that can mineralize CO₂. Additionally, we have a pathway to sell high quality and verifiable carbon credits. With CO₂ captured as a carbonate (MgCO₃), we have a plan for this material to be used to regenerate landscapes and ecosystems. Other products will help decarbonize the cement, fertilizer, battery production, and steel industries.

How can collaboration accelerate innovation?

The team at Aspiring Materials collaborates over a range of fields that allows our process to be possible. Geology, chemical engineering, civil engineering, and mechanical

engineering blend together to provide a process that starts with a rock, provides many products, and ends with a rock. AM has been recognized by XPRIZE and Pepsico in which we can plan an important role in reducing global emissions.

How has the market impacted your access to capital?

Even amidst the market downturn, we have garnered a significant increase in interest. With record temperatures around the world, stakeholders are realizing that investing needs to be more than making a profit. New technologies such as ours are here to provide a future directly addressing climate change. We plan to expand internationally and are in search of partners who want to proactively engage in advancing current green and energy transitions.



Aspiring Materials's scientific approach breaks down and reconfigures rock components into key industrial products.

Photo courtesy of Aspiring Materials.

Checkerspot

Designing new molecules for more sustainable materials

“Checkerspot optimizes microbes to biomanufacture unique structural oils produced in nature, but not previously accessible at the commercial scale.”

Charles Dimmler, CEO and Co-Founder

Tell us about Checkerspot.

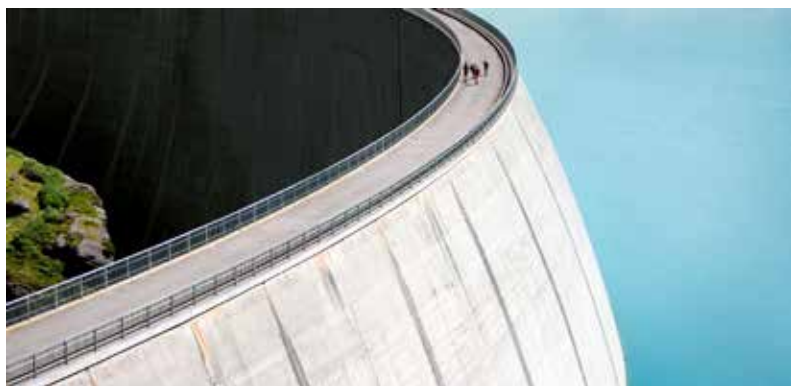
Checkerspot is a biomaterials company with products across industrial materials, food and nutrition, and personal care markets. Our products are derived from fermentation of microalgae to produce oils at commercial scale. In 2019, we launched WNDR Alpine, showcasing our innovation capabilities and proprietary materials. With the commercial progress of our outdoor recreation brand, we are accelerating broader adoption of our proprietary products. Checkerspot's bio-derived materials offer performance, affordability, and measurable carbon footprint benefits. This caters to large corporates seeking to meet carbon targets, while transitioning from fossil fuels and conventional vegetable oil sources.

What trends have you seen accelerate growth in your space?

As the cost of biotechnology tools has decreased, the opportunity-set in the materials, consumer products, human health & performance, agriculture and energy sectors becomes available. Meanwhile, the Climate Debate has moved from contested data forecast to lived experience. Consequently, the single biggest trend accelerating growth in this space is the Fortune 500 pursuing the opportunity to drive shareholder value as more biomanufactured use cases demonstrate performance, affordability, and measurable carbon footprint benefits.

What are the main opportunities or challenges in your sector?

The biggest opportunity is biotechnology enabling a broader “palette” of molecular building blocks than what is available from fossil fuels and other commodities. There are unique molecules produced by plants that have chemistries which remain unexplored for their physical and functional properties. Biotechnology enables the programming of genes for these molecules to be “plugged-into” microbial expression systems and produced at scale. This is enabling the creation of better products not possible from



conventional, commodity feedstocks. The main challenge is that every transformative technology has an adoption rate often set by the largest, most risk-averse companies.

How can collaboration accelerate innovation?

Accelerating innovation depends on the most efficient path to de-risking technology and demonstrating shareholder value growth. Collaboration is required along the value chain (ingredient suppliers, factories, brands) by deploying investment, human capital and infrastructure with shared risk-taking. Collaboration with government is also required to most thoughtfully “level the playing field” on subsidies, as well as coordinating a sensible strategy on carbon accounting and monetization.

How has the market impacted your access to capital?

A risk-off capital markets environment impacts access to capital for two primary reasons. First, because innovative companies by their very nature are a riskier asset class. Second, risk aversion in the capital markets has a direct impact on established incumbents, resulting in outcomes like longer sales cycles, greater price sensitivity, fewer joint development and collaboration projects. The consequence of this inertia potentially exacerbates the ability of emerging growth companies to deliver revenue and financial performance to attract meaningful growth equity.

Clarity AI

Bringing societal impact to markets

"Sustainability should be a fully integrated 'add-on' to existing platforms and user journeys—built in so that crucial data is immediately available to decision-makers."

Rebeca Minguela, CEO and Founder

Tell us about Clarity AI.

Clarity AI is the leading sustainability tech platform. For investors, companies, consumers and governments, the platform's capabilities add clarity so that you can choose sustainably by providing data, methodologies and tools when and where you need them to make more informed decisions. Clarity AI has a team of over 300 passionate individuals working in offices on three continents and is proud that its investor client network reaches over \$30 trillion in assets under management and that its sustainability metrics influence more than 150 million consumers at over 400,000 merchants worldwide.

What trends have accelerated growth in your space?

Growing demand from investors, consumers, companies and governments for more sustainable investment funds, products and brands and information about those things continues to be a heavy driver of growth for information and capabilities regarding sustainability. Additionally, increasing regulation across developed markets globally is contributing to growth.

What are the main opportunities or challenges in your space?

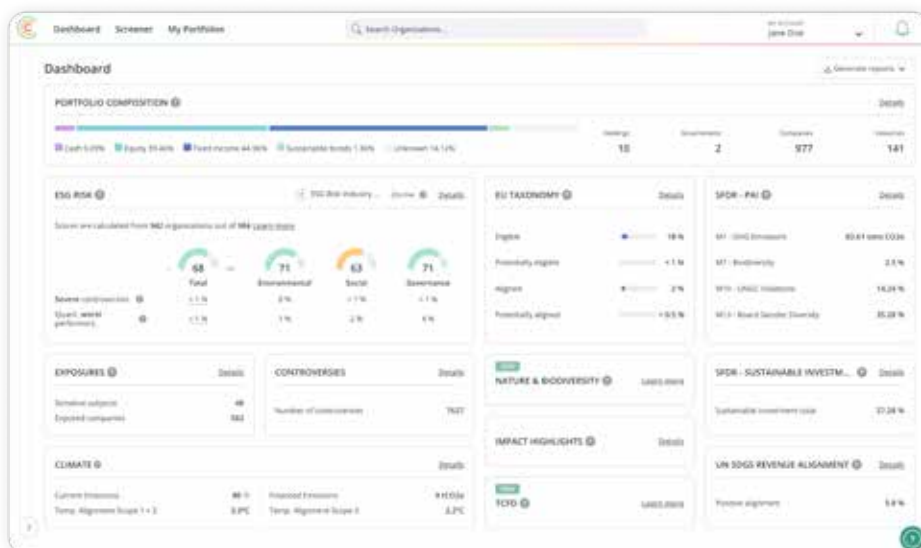
The opportunity to help put the world on a path to a more sustainable future is the key opportunity of the 21st century. The challenge is the exact same thing—especially the scale at which this opportunity presents itself to us. Only a tech-first and artificial intelligence-powered company, like Clarity AI, will be able to address this opportunity and challenge at scale.

How can collaboration accelerate innovation?

Collaboration between the public and private sector can help to fund and to lower barriers to innovation. Additionally, as regulation around sustainability increases, like regulation around ratings, regulators should carefully consider the size of the company which any regulation will impact in order to ensure that compliance costs do not stifle innovation.

How has the market impacted your access to capital?

Clarity AI is well placed in a hyper-growth market and in a market that has not only monetary benefits but also pulls on the human intrinsic desire to ensure the longevity of our planet and the people on it. Sustainability is synonymous with the long-term, and the long-term is a space that market capital is often very interested in.



Clarity AI's web-based app offers a one-stop-shop to cover sophisticated sustainability use cases.

Photo courtesy of Clarity AI.

CleanCapital

Accelerating investment in solar and energy storage

“CleanCapital has assembled one of the largest portfolios of operating solar assets in the country, helping lead the energy transition for the distributed solar space.”

Zoe Berkery, COO

Tell us about CleanCapital.

CleanCapital is a diversified clean energy company focused on the middle-market solar and storage industry. We invest in early-stage development, new construction, and operating solar and energy storage projects. Our partnerships with developers in emerging markets foster future pipeline opportunities and accelerate the deployment of renewables. CleanCapital has successfully acquired and managed over 230 operating and new construction projects in 26 states and one U.S. territory, totaling 460 MW. We believe that climate change is the greatest threat we face, and renewable energy is at an intersection of alignment between policy, finance, and technology.

What trends have accelerated growth in your space?

Thanks to the Inflation Reduction Act (IRA), we have seen major growth and development in the solar and storage space. There has also been a record amount of capital flooding the space. Developers are in a unique position to find the right partnerships to support their grid-critical solar and storage projects. As investors in clean energy, we recognize the importance of cross-functional partnerships to bring these projects online. For example, our partnership with Alaska-based Renewable-IPP (RIPP) has helped to drive forward the development of the largest solar farm ever built in the state of Alaska.

What are the main opportunities or challenges in your sector?

Many asset owners overlook the importance of long-term management of a site. Neglecting this or failing to think strategically about the maintenance plan over the life of the assets can crush returns and diminish investor trust. That's why engaging the right partnership from the outset matters. We pride ourselves on the relationships we build and maintain along with the projects we manage. We have an incredibly diversified portfolio of solar sites: ground-mounted, rooftop, and carport assets to which we add projects as often as every few weeks.



How can collaboration accelerate innovation?

Collaboration is what will bring the clean energy transition to its next stage. We have found there are opportunities for collaboration with other industry experts at every stage of the solar and storage investment lifecycle: from upfront natural disaster modeling on our development sites with our insurance broker, CAC, to long term relationships to ensure optimal performance of the sites. We've taken risks and partnered with RIPP in Alaska to bring solar to a place many thought impossible. We've also embarked on agrivoltaics and sheep grazing partnerships on a number of our sites to make our sites as sustainably managed as possible.

How has the market impacted your access to capital?

We have experienced continued interest in the solar and storage market. In June 2023, CleanCapital received an additional commitment of up to \$500 million from Manulife Investment Management. Despite the recent tightening of debt markets there is more capital than ever ready to be deployed into the renewable energy sector. CleanCapital is looking forward to deploying its next billion into solar and storage projects across the U.S.



CO-Z

Smart energy storage that will change your life, forever

“CO-Z is accelerating the transition to power generation from cleaner renewable sources and empowering customers to reduce and optimize energy they use.”

Caleb Tristan, CEO and Founder

Tell us about CO-Z.

CO-Z offers energy resilience and sustainability through plug-and-play energy storage, amplified by software that integrates energy IoT devices. We optimize electricity usage, ensure power during outages, and adapt to individual energy goals. Our user-friendly, affordable solutions make energy resilience accessible for both renters and homeowners.

What trends have accelerated growth in your space?

Homeowners' awareness of energy resilience is spurring the adoption of connected energy products and participation in reward programs. Government and industry investments are up, fueling a much-needed grid makeover, and paving the way to a more flexible, and sometimes virtual, power grid. The rise of AI for needed features like outage protection and consumer rewards will make residential energy storage an accessible necessity.

What are the main opportunities or challenges in your sector?

The projected increase in US electricity demand of 100%-200% by 2050, alongside the shift from fossil fuels, offers opportunities and challenges for renewable generation, grid infrastructure, and energy efficiency. Startups often gravitate to solve such mega-challenges. However, they also face obstacles in funding which result in their being squeezed out of hiring top talent, protecting their full IP portfolio, or overcoming regulatory hurdles. In retrospect, startups are squeezed into a micro-solution.

How can collaboration accelerate innovation?

Strategic collaborations with tech companies, research institutions, and utilities has allowed us to create a product tailored to today's electrification demands and unique households needs. This innovation was achieved by combining resources, partner and investor insights, customer feedback, and technical expertise from various stakeholders.

How has the market impacted your access to capital?

With the market performing well this year, expectations for ROI in companies like ours has risen. The growth in investors' existing portfolios means that selling appreciated securities to invest in startups incurs higher taxes, making new investments less appealing. In terms of debt, increased interest rates coupled with stricter bank regulations have made securing financing for innovative startups like CO-Z both more costly and challenging. These dynamics underscore the need to stay innovative and focused on customer needs.



CO-Z's power insights allow customers to optimize their power usage and reduce costs.

Photo courtesy of CO-Z.

Grain Ecosystem

Addressing climate change by unlocking carbon removal credits

“Grain’s platform streamlines the long, complex and, expensive certification process for carbon offsets, helping to empower project developers and accelerate decarbonization.”

Jason Dodier, COO and Co-Founder

Tell us about Grain Ecosystem.

Grain Ecosystem accelerates carbon removal efforts by making carbon projects more accessible, efficient, and profitable. Grain streamlines the complex world of carbon markets, providing software tools that simplify eligibility testing, GHG calculation, and access to global carbon markets. The true north for Grain is to sequester as much carbon as possible, creating high-quality, permanent carbon removal credits that not only combat global warming but also enhance economic viability for developers and communities.

What trends have accelerated growth in your space?

The critical axes of acceleration include the development and adoption of transparent ESG practices, government mandates, incentives such as the IRA here in the U.S. and of course, an urgent need to move fast to limit global warming. As we assess the decarbonization effort required to achieve our goals and evaluate the existing technology, the pivotal role of carbon removals as a critical tool for reaching our targets becomes increasingly evident. The carbon removal market is rapidly expanding with new project methodologies developed by registries, certification programs, and innovative financing solutions to avoid tragedy of the commons, specifically around technology development, scale, and driving solution prices down the cost curve.

What are the main opportunities or challenges in your sector?

Carbon removal markets are still quite nascent and there is a feeling of uncertainty around market pricing equilibrium for carbon removal credits. As a first mover, Grain Ecosystem acts to demystify the project process, prioritizing digitization, speed, and transparency which is necessary given the scale of demand for quality removal projects. Grain's journey begins with biochar, a solution with numerous incentives and co-benefits, making it the fastest in terms of sequestration delivery.

How can collaboration accelerate innovation?

We believe that solving the climate crisis requires collaboration of actors from all corners of the globe. Carbon removal is an ecosystem and Grain is the meeting place for collaboration. Grain accelerates the carbon removal flywheel through partnership, transparency, and aligning incentives to shield against blind spots and false confidence that could hinder our progress to sequester carbon. The industry must embrace an all hands on deck approach, focusing on incubation, ingenuity, and carbon removal solutions.



How has the market impacted your access to capital?

To rein in post COVID inflation we have been in an environment of increasing short term interest rates which has a serious knock-on effect across the economy, particularly the start-up community and project finance, with opportunity costs being carefully assessed in ways we have not seen in quite some time. What’s most encouraging about our space is early-stage investing is increasing steadily as the emphasis on climate change and federal support for carbon technologies is at an all-time high. Additionally, Grain exists to ensure projects are de-risked and well aligned with existing project finance requirements, seeking to rapidly unlock capital and IRA dollars whose benefit will accrue to the U.S. short term and long-term driving activities down the experience curve that will benefit the rest of the world.

Perennial

Harnessing earth to heal the planet

“Perennial is building the world’s leading verification platform for soil-based carbon removal, helping growers reduce carbon and increase their bottom line.”

Alex Zhuk, Founder

Tell us about Perennial.

Perennial verifies the carbon sequestration and broader positive environmental impact of farmers' transition to regenerative agriculture, inspiring confidence for companies and sovereign states to invest in low GHG emission food supply chains. By tapping into capital allocated toward carbon credits and supply chain emissions reductions, farmers around the globe are empowered to transition to a form of food production that is less energy-intensive and promotes an active soil microbiome for successful yields across future generations.

What trends have accelerated growth in your space?

We have seen substantial investment from a broader set of stakeholders. In addition to traditional investors interested in material returns, the recent increased interest of corporations and sovereign states prioritizing the transition to sustainable operations has contributed to a more active ecosystem.

What are the main opportunities or challenges in your sector?

Agricultural soils represent one of the world's largest untapped carbon sinks. Given the sustainability ambitions set forth, there is ample opportunity for companies to play a major role in reducing the industry's energy consumption and greenhouse gas emissions. There remains a need for greater standardization within the carbon markets, including the quantification of the environmental impact of one asset versus another, as well as the value placed on said environmental impacts within the context of financial markets.

How can collaboration accelerate innovation?

As the carbon markets continue to grow and evolve, collaboration between regulators and solution providers will be essential to ensure innovation is not stifled. Furthermore, cooperation between sovereign states will be necessary given the cross-border nature of exchanging environmental assets.

How has the market impacted your access to capital?

We have observed that decarbonization and energy resilience remain top priorities within venture capital and other capital markets.



simuwatt

Providing intelligent data to reduce commercial building emissions

“simuwatt is the developer of buildee®, a cloud-based mobile SaaS platform providing a holistic portfolio-wide view that coordinates energy efficiency and carbon reduction.”

Bryan Conklin, CEO and President

Tell us about simuwatt.

simuwatt® produces the buildee® software platform, a SaaS-based energy efficiency platform used to easily analyze, benchmark, and prioritize energy saving and decarbonization opportunities more quickly, less expensively, and with better results for commercial and multi-family portfolio owners. buildee® makes ESG actionable by streamlining data collection of energy consuming equipment and identifying the highest impact opportunities.

What trends have accelerated growth in your space

A few key trends have accelerated growth in our space. Climate change and the fact that ~40% of carbon emissions come from the built environment has driven more utilities, municipalities, and property owners to begin taking action on the emissions from buildings and facilities. Tied to this is the trend of new policies that are increasing the benchmarking of buildings as a requirement by cities and municipalities—and Building Performance Standard programs setting target reductions on carbon and energy use intensity, and associated fines for missing those targets. Finally, equity markets that support the acquisition of buildings have earmarked their capital with sustainability requirements. This too is accelerating attention to reduce energy consumption and carbon emissions from buildings.

What are the main opportunities or challenges in your sector?

The opportunity is quite expansive—whether helping utilities support their customers in reducing energy consumption or in supporting municipalities and building owners. Energy efficiency is not executed overnight and as government support increases we will see a tsunami of demand seeking help in identifying and executing these opportunities. The challenge on the other side of the coin is that some have “kicked the can down the road” on capturing the benefits of energy efficiency. Overcoming building owner’s reluctance to beneficially invest in their properties requires some inspiration.



How can collaboration accelerate innovation?

We are leveraging buildee®’s innovations to rapidly accelerate collaboration and the speed of business to produce the outcomes desired by customers. For instance, utilities can now connect seamlessly with customers, contractors, and other participants in the energy efficiency process all in one place. Similarly, customers in the energy trades have fully digitized their business through buildee®. That fundamentally and dramatically changes a business—it accelerates the speed of projects, but is also expanding the capacity of the business to identify, sell, and execute energy efficiency projects thereby creating a financial impact to the business, for its customers, and for the environment.

How has the market impacted your access to capital?

While the market seems to have pulled back, there is still devoted interest in making progress on the climate change issue and climate-focused VC’s seem keenly interested in our value proposition and the traction we continue to make. In general, I think it now takes a bit longer to find a capital partner; however, it also has forced business focus and for us very close ties with our investors who continue to be bullish and financially supportive of our progress.

TURN

Ridding the world of plastic waste through circular systems

“TURN is the world’s leading scalable reuse system, using a sustainable solution comprised of four smart components: packaging, collection bins, IoT, and washing technology.”

Ryan Everton, CEO and Founder

Tell us about TURN.

TURN is a reuse platform designed for scale. We help some of the world’s largest brands, including Starbucks, Pepsi, Live Nation, and Delta transition from single-use to reuse. Our rewards technology incentivizes consumers to return to our smart bins while our mobile washing technology can work almost anywhere at scale.

What trends have accelerated growth in your space?

Legislation and corporate goals have been the biggest driver in this space.

How can collaboration accelerate innovation?

There are a lot of pieces to the puzzle including washing infrastructure, investment and legislation that all need to be brought together to accelerate this space. TURN has capitalized on collaboration opportunities, including its current partnership with Starbucks.

How has the market impacted your access to capital?

Capital has slowed down and there is less of it or more indecisiveness on where to invest. However, TURN has seen strong appetite for investment through partnerships with Live Nation, PepsiCo, Starbucks, and Delta Airlines.

Spotlight: Partnership with Starbucks



TURN's reusable cup pilot at Starbucks

In several test markets, TURN's proprietary systems help Starbucks work toward its commitments to reduce landfill waste. Photo courtesy of TURN.

Beginning in August 2023 and running through October, 12 Starbucks stores in Napa and Petaluma, California have teamed up with TURN Systems to test TURN's high-tech collection bins and understand cup return behavior. Customers who bring in their own clean personal cup will receive \$0.10 off their purchase with an additional 25 Bonus Stars for Starbucks Rewards members. When a customer returns a borrowed cup, they also have the option to register online with TURN for a chance to win prizes.

As part of the collaboration, Starbucks is using TURN's high-tech collection bins and mobile washing unit, utilizing TURN's proprietary washing system that cleans cups. Also as part of the pilot program, TURN has integrated Starbucks' technology into its smart bins. The program is part of Starbucks' 100% reusables test, in support of the company's reuse goals by 2025.



Acknowledgments

Authors

UBS

Erik Beresford
Aneliya Crawford
Mike Dye
Alex Hearne
Henry Lee
Angelica Nikolausson
Nick Regas
Design: Tommy Minnix

Dynamo Energy Hub

Kristin Barbato
Kacy Cox
Meade Harris
Desean Taber
Madeline Zerbey

Contributors

Olivia Albrecht

CEO
Aspiration

Chris Oze

Co-Founder and Chief Geologist

Megan Danczyk

Chemical Process Engineer
Aspiring Materials

Charles Dimmler

CEO and Co-Founder
Checkerspot

Rebeca Minguela

CEO and Founder
Clarity AI

Zoe Berkery

COO
CleanCapital

Caleb Tristan

CEO
CO-Z

Jason Dodier

CCO and Co-Founder
Grain Ecosystem

Alex Zhuk

Founder
Perennial

Bryan Conklin

CEO and President
simuwatt

Ryan Everton

CEO and Founder
TURN



Disclaimer

By accepting these materials, the recipient agrees to be bound by the following obligations and limitations.

Purpose. These materials have been prepared by UBS Securities LLC ("UBS") for the exclusive use of the party to whom UBS delivers these materials (together with its subsidiaries and affiliates, hereinafter the "Recipient").

No independent verification. The information in these materials have been obtained from the Recipient and/or other publicly available sources and has not been independently verified by UBS Group AG and/or its subsidiaries, branches or affiliates (together, the "UBS Group") or any of their respective directors, officers, employees, agents, representatives or advisors (the "Representatives") or any other person.

No representation or warranty. No representation, warranty, or undertaking, either express or implied, is or will be given by UBS Group or its Representatives as to or in relation to the accuracy, completeness, reliability or sufficiency of the information contained in these materials or as to the reasonableness of any assumption contained in these materials.

No liability. By accepting receipt of these materials, the Recipient acknowledges and agrees that to the maximum extent permitted by law and except in the case of fraud, each of UBS Group and its Representatives expressly disclaims any and all liability that may arise from these materials, or any other written or oral information provided in connection with these materials, and any errors contained therein and/or omissions therefrom, or from relying on or any use of the contents of these materials or otherwise in connection with these materials.

Forecasts. The valuations, projections, estimates, forecasts, targets, prospects, returns and/or opinions (including, without limitation, projections of revenue, expense, net income and stock performance) contained herein involve elements of subjective judgment and analysis. Any opinions expressed in these materials are subject to change without notice and may differ from or be contrary to opinions expressed by other business areas or groups of UBS Group as a result of using different assumptions and criteria. These materials may contain forward-looking statements. UBS Group gives no undertaking and is under no obligation to update these forward-looking statements for events or circumstances that occur subsequent to the date of these materials. Nothing contained herein is, or shall be relied upon as, a promise or representation as to the past or future, or that any of the estimates or projections contained herein will be achieved.

No duty to update. These materials speak as at the date hereof (unless an earlier date is otherwise indicated in these materials) and in furnishing these materials, no obligation is undertaken nor is any representation or undertaking given by UBS Group or its Representatives to provide the Recipient with additional information or to update, revise or reaffirm the information in these materials or to correct any inaccuracies therein which may become apparent.

Information only. These materials have been prepared solely for informational or educational purposes and do not suggest taking or refraining from any action. They do not constitute or contain an invitation, solicitation or an offer to buy or sell any securities or related financial instruments or any of the assets, business, or undertakings described herein, and they do not constitute, and should not be construed as, a proposal, a commitment or an offer to arrange, underwrite, syndicate or otherwise provide any financing or any other transaction.

No advice given. The Recipient should not construe the contents of these materials as legal, tax, accounting or investment advice or a recommendation. The Recipient should consult its own counsel, tax and financial advisors as to legal and related matters concerning any transaction described herein. These materials do not purport to be all-inclusive or to contain all of the information that the Recipient may require or request upon due diligence if it wishes to proceed further. By providing these materials, none of UBS or its Representatives has the responsibility or authority to provide or has provided investment advice to the Recipient in a fiduciary capacity or otherwise with regard to the matters contained herein. These materials do not express an opinion as to whether any Recipient should enter into any swap or swap trading strategy that has been described herein by UBS. UBS is not undertaking to act in the best interests of the Recipient or to act as the advisor to any Recipient that is a Special Entity as defined under Section 23.440(a) of the Commodity Exchange Act. No investment, divestment or other financial decisions or actions should be based on the information in these materials. These materials should not be viewed as an investment recommendation because it is provided as part of the general marketing and advertising activities of UBS.

No distribution. These materials have been prepared on a confidential basis solely for your use and benefit; provided that you and any of your employees, representatives, or other agents may disclose to any and all persons, without limitation of any kind, the tax treatment and tax structure of the transaction and all materials of any kind (including opinions or other tax analyses) that are provided to you relating to such tax treatment and tax structure. Distribution of these materials to any person other than you and those persons retained to advise you, who

agree to maintain the confidentiality of these materials and be bound by the limitations outlined herein, is unauthorized. UBS Group and suppliers ("Content Providers") do not guarantee the accuracy, adequacy, completeness, timeliness or availability of the content of these materials and are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such content in these materials. In no event shall Content Providers be liable for any damages, costs, expenses, legal fees, or losses (including lost income or lost profit and opportunity costs) in connection with any use of the content of these materials. A reference to a particular investment or security, a rating or any observation concerning an investment that is part of the content is not a recommendation to buy, sell or hold such investment or security, does not address the suitability of an investment or security and should not be relied on as investment advice. Note: Insert correct UBS legal entity.

Role of UBS. By accepting these materials, the Recipient acknowledges and agrees that UBS is acting, and will at all times act, as an independent contractor on an arm's length basis and is not acting, and will not act, in any other capacity, including in a fiduciary capacity, with respect to the Recipient. UBS may only be regarded by the Recipient as acting on Recipient's behalf as financial adviser or otherwise following the execution of appropriate documentation between us on mutually satisfactory terms.

Conflicts of Interest. UBS Group may from time to time, as principal or agent, be involved in a wide range of commercial banking and investment banking activities globally (including investment advisory, asset management, research, securities issuance, trading (customer and proprietary) and brokerage), have long or short positions in, or may trade or make a market in any securities, currencies, financial instruments or other assets underlying the transaction to which these materials relate. UBS Group's banking, trading and/or hedging activities may have an impact on the price of the underlying asset and may give rise to conflicting interests or duties. UBS Group may provide services to any member of the same group as the Recipient or any other entity or person (a "Third Party"), engage in any transaction (on its own account or otherwise) with respect to the Recipient or a Third Party, or act in relation to any matter for itself or any Third Party, notwithstanding that such services, transactions or actions may be adverse to the Recipient or any member of its group, and UBS Group may retain for its own benefit any related remuneration or profit.

Research. These materials may contain references to research produced by UBS Group. Research is produced for the benefit of the firm's investing clients. The primary objectives of each analyst in the research department are: to analyze the securities, companies, industries and

countries they cover and forecast their financial and economic performance; as a result, to form opinions on the value and future behavior of securities issued by the companies they cover; and to convey that information to UBS Group's investing clients. Each issuer is covered by the Research Department at its sole discretion. The Research Department produces research independently of other business areas and groups of UBS Group.

Integration. UBS Group AG and Credit Suisse Group AG recently completed a merger with UBS AG Group as the surviving entity. All pre-existing UBS and Credit Suisse entities, which remain as separate legal entities, now have UBS Group AG as their ultimate parent. As a result, UBS Group AG will be comprised of two principal subsidiaries, UBS AG and Credit Suisse AG and their subsidiaries and affiliates. As we start to integrate, as part of our banking business, the principal subsidiaries may provide services using different members of the UBS Group acting alone or jointly, and certain services may be transferred between and provided by different members of the UBS Group.

UBS specifically prohibits the redistribution or reproduction of these materials in whole or in part without the prior written permission of UBS and UBS accepts no liability whatsoever for the actions of third parties in this respect.

© UBS 2023. The key symbol and UBS are among the registered and unregistered trademarks of UBS. All rights reserved.

UBS Securities LLC
New York, NY 10019
ubs.com/IB

UBS Securities LLC is a subsidiary of UBS AG

