



**Will US Venture Capital Rise to
the Challenge of Responsibility
Before It's Too Late?**



JULY 2023

Acknowledgements

We want to thank all of those who have inspired and supported the advancement of responsible investment practices in the venture capital ecosystem. ESG4VC would not have been created without the support of leadership at 500 Global and Alissa Black, Luminare. The leadership of venture firms, including The Westly Group (Shaun Chaudhuri), Energize VC (Lauren Densham), Wellington Management (Hillary Flynn), Tiger Global (Ali Hartman), and Coatue and those outside of the US including Pitango (Cecile Biliou), Antler (Rosalind Bazany), Kinnevik (Mathew Joseph), and Atomico. The thought partnership and leadership of UNPRI (Peter Dunbar), VentureESG (Hannah Leach and Dr. Johannes Lenhard), Startups and Society (Wilneda Negron and Lyel Resner), Elizabeth Meyer, DiversityVC, Susan Winterberg, Ravit Dohan, Gordon Meyers, Paula Goldman (Chief Ethical and Humane Use Officer at Salesforce), Mariah Lichtenstern (DiverseCity Ventures), Jennifer Poh (Orrick), Mike Stopka, Sophie Purdom (Climate Tech VC and Planeteer Capital), Jana Everett, Natalie Riso, Shu Dar Yao, Cecilia Young, and the companies and ESG and technology platforms dedicated to advancing responsible investment in private markets including Diversio, Bend.Green, Metric ESG and our partner Novata.

BACKGROUND

The research in this report was conducted in the first half of 2023 through 15 interviews, three working group sessions with six US venture capital firms, four workshops with 15 venture capital firms and desktop research.

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Introduction



From the collapse of FTX to the rapid rise of generative AI,¹ venture capital has demonstrated broad and exponential societal and economic impact. In 2021, VC-backed companies employed 4.7 million² people. They include the world's best-known brands, such as Microsoft, Apple, Alphabet, Meta, and Tesla. Their innovations have profoundly impacted our lives. However, a mere 10% of venture capitalists reported formally integrating environmental, social, and governance (ESG) considerations last year.³

At the same time, the lack of diversity in VC remains an issue, both for firms and, by extension, their portfolios. Equally concerning today, women and minorities in the tech sector⁴ are bearing the brunt of layoffs. After making strides with Diversity, Equity, and Inclusion efforts in the wake of George Floyd's death in 2020, several tech companies⁵ are now dismantling DEI programs.

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At large, partisan politics are threatening to derail ESG strategies, amid accusations of “woke capitalism.”

With the rise in interest rates and economic downturn, the venture capital industry is going through a reset, with funding declining for five consecutive quarters through Q1 2023, to hit its lowest level in over three years.

1. <https://pitchbook.com/news/articles/Amazon-Bedrock-generative-ai-q1-2023-vc-deals>

2. https://nvca.org/wp-content/uploads/2022/02/Employment-Dynamics-at-Venture-Backed-Companies_FINAL.pdf

3. <https://www.venturecapitaljournal.com/the-first-esg-report-card-is-in-and-it-isnt-great-for-most-vcs/>

4. <https://www.reuters.com/business/sustainable-business/big-tech-layoffs-may-further-disrupt-equity-diversity-efforts-2023-01-05/>

5. <https://www.shrm.org/executive/resources/articles/pages/tech-layoffs-hitting-hr-diversity-teams.aspx>

6. <https://www.nytimes.com/2023/02/28/climate/esg-climate-backlash.html>

7. https://www.cbinsights.com/research/report/venture-trends-q1-2023/?utm_source=CB+Insights+Newsletter&utm_campaign=ea4ed2256f-EMAIL_CAMPAIGN_2023_04_13_11_01&utm_medium=email&utm_term=0_9dc0513989-ea4ed2256f-99408021

Against this backdrop, venture capitalists in the U.S. have remained largely absent from the conversation around ESG, but the lack of action is not entirely deliberate. Firms mostly recognize the strategic importance of encouraging environmental stewardship, promoting social equity, and instilling principles of good governance. We're seeing this in public commitments to reduce emissions. And now, with generative AI poised to become the most impactful technology since the Internet, VCs and founders are increasingly aware of the potential for unintended consequences. But their role may not be as clear.

What is holding VCs back?

Some venture capitalists see their role as backing startups that advance innovation, democratize access to products and services, and create jobs. Others are starting to acknowledge the unintended consequences novel technology can trigger, and the unexpected investment risks. What if their portfolio companies unknowingly engage in harmful labor practices, neglect to diversify their leadership and board, and consume excessive energy? Shouldn't concerns be raised and actions recommended?"

The obstacles for most VCs start with whether they believe ESG-related initiatives are financially material to the firm or their portfolio. For those who recognize the benefits of ESG, translating measurement into actions is not that straightforward.

Pressing issues, including the explosion of AI and a heightened awareness of climate change, are creating a window for alignment among venture capitalists who are still processing the lessons from social media's role in disinformation and its impact on society.

Venture capital is entering a new era that will require an enhanced approach to managing risk and opportunity. In this report, we will examine challenges, recommend pathways, and explore what's ahead.



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ESG in US Venture Capital Today



While ESG has become mainstream in asset management and the corporate world, it has gained little traction in U.S. venture capital, in contrast with European VCs. Yet, perhaps more than any other asset class, venture capital plays an influential role in the formative years of a company, directly shaping its trajectory and potentially mitigating risks arising from environmental, social, and governance factors. Between 2001 and 2022, 70% of technology IPOs were VC-backed.

Venture capital has long been associated with rapid growth, sky-high valuations, and a fervent pursuit of unicorns, where profit maximization and short-term gains have traditionally taken precedence over long-term sustainability. This growth-at-all-costs myopic view, and the urgency for quick returns have hindered venture capital's ability to embrace responsible investment practices fully.

Yet, VC has a vital role to play when it comes to responsible innovation. 2022 proved to be a watershed year for venture-backed breakthroughs—as well as meltdowns. From massive swings in crypto markets and the collapse of FTX to the release of ChatGPT and the generative AI race, all were heavily linked to the venture community. This combination of forces underscores the importance of responsible investment practices for the venture capital asset class.

At the same time, quantifying the concrete financial impact of ESG activities, including mitigating reputational risks, legal fees, fines, and gaining a competitive edge, has proven challenging.

To date, only a handful of US venture capital firms have taken steps to integrate ESG practices into their investment decision-making process. Those pioneers include The Westley Group, Energize VC, Sapphire Ventures, Wellington Management, 500 Global, Coatue, Tiger Global, and Insight Partners.

But interest is growing. Organizations such as [VentureESG](#), and [ESG VC](#) are helping VCs integrate ESG policies and practices by providing frameworks, education, peer-based learning, and resources.

Throughout our discussions with venture capitalists during the first half of 2023, several themes emerged

Emerging Themes

Not more data, but the right kind of data. There has been an increase in the ESG data requested from LPs, but the alignment of metrics is critical. Equally important is being able to translate data into action. Starting small, aligning on a few metrics, analyze the findings, and iterating annually could be a good way to start - following a process similar to the ESG Data Convergence Initiative (EDCI) led by the private equity industry.

Technology is rising to meet the moment. Platform interoperability and predictive capabilities are the next frontier as they hold promise for helping investors and companies prioritize material ESG issues and streamline costs.

Generative AI has elevated discussions about the role of venture and the actions they can take to safeguard against unintended consequences, giving rise to responsible innovation frameworks.

The ESG backlash, greenwashing, green-hushing, and the upcoming 2024 presidential election all have the potential to slow down progress or halt it altogether.

This report highlights the impact of these themes as they relate to climate change, diversity, equity, inclusion, and responsible innovation. It is crucial to acknowledge that there are numerous other domains that warrant attention, including human rights and workforce development. Notably, organizations such as [WORC](#) and [UN B-Tech](#) are dedicated to these areas, actively conducting research and developing tools for investors.

Climate Change

A very powerful mix of incentives is coming together in the climate space: regulation, measurement standards, public commitments, and capital directed at emissions reduction and renewable energy. This makes climate change both a critical challenge and an extraordinary opportunity for venture capitalists.

In a monumental stride towards accelerating climate impact, the passage of the Inflation Reduction Act (IRA) in 2022 allocated an unprecedented nearly \$400 billion⁹ towards climate initiatives, marking the largest U.S. investment in climate action to date.

Evidencing a clear recognition of this opportunity, the venture capital industry has witnessed notable fundraising trends in recent years. Last year, venture firms poured nearly \$40 billion¹⁰ into climate tech startups, more than double the funding amount in 2019.

March 2022 brought forth proposed rules for climate-related disclosures by the Securities and Exchange Commission (SEC)¹¹. If implemented, these rules would mandate public companies to report on various climate-related aspects, including risk governance, financial metrics, targets and goals, physical and transition risks, and emissions.

9. <https://www.mckinsey.com/industries/public-sector/our-insights/the-inflation-reduction-act-heres-whats-in-it>

10. <https://pitchbook.com/news/articles/VC-climate-tech-drop-2023-startups-founders>

11. <https://www.sec.gov/news/press-release/2022-46>

Public commitments to sustainability made by large corporations, such as their Net Zero targets, bear significant implications for portfolio companies. Startups vying to engage with these major corporations must be prepared to comply with the sustainability requirements outlined in vendor agreements.

Moreover, acquisition targets will face heightened scrutiny as corporations seek companies that align with their sustainability strategies. As startups progress towards IPOs, they must be equipped to meet these disclosure requirements and any others that may arise.

Signs of progress are beginning to emerge. To avoid unnecessary costs later and raise the perception of their brands, some companies, even at the earliest stages, are committing to Net Zero from day one. They can achieve this by engaging companies such as Bend.Green that enable emissions tracking via their corporate credit cards. Startups can track everything from Amazon purchases to Uber rides for very little or no fees.

Despite the immense potential for investment in climate and positive environmental impact, challenges persist. Investors may advise startups against prioritizing sustainability initiatives in their early years for various reasons, including resource allocation concerns and varying market demand for climate-friendly products.

Some argue that focusing on sustainability initiatives could divert valuable financial and operational resources away from activities directly related to revenue generation and market growth.

In certain industries, environmental initiatives may not be regarded as critical factors for early-stage success. This is especially true for capital-light software and consumer startups, which accounted for 49% of capital invested in the U.S. in 2021.¹²

Additionally, the market demand for climate-friendly products and services varies across industries and customer segments. Startups might perceive insufficient customer demand or willingness to pay for climate-conscious solutions, making it challenging to justify allocating resources for the development of such offerings.

12. <https://www.ft.com/content/f8f6144a-1901-4391-9abf-072224d132c7>

Growth-stage companies face similar challenges, albeit on a larger scale. As companies expand in size, the costs associated with implementing environmental policies and practices escalate, something proponents of integrating sustainability at early stage frequently point out. The need to track and monitor increases with more employees, suppliers, buildings, and distribution channels. Founders who have not established an organizational culture that values positive environmental impact must design policies, processes, and incentive structures. They may also need to enlist the expertise of external consultants, hire specialists, and invest in appropriate technology.

The convergence of regulations, financial commitments, and public pledges presents climate change as both a critical challenge and a remarkable opportunity for venture capitalists.

Actions VCs Can Take

- Venture capital firms that understand their exposure to climate risk will be best positioned to take action in the years to come. This includes—at a minimum—**insight into their scope 1 and scope 2 greenhouse gas (GHG) emissions at both the firm and portfolio levels.**
- **Offer strategic guidance by helping startups assess their current emissions** and energy usage, identifying areas of improvement, and setting clear targets for emission reduction and renewable energy adoption.
- **Connect startups with industry experts, consultants, and organizations** specializing in sustainability and renewable energy to provide tailored guidance and support.
- **Assist in sourcing and evaluating technology solutions** and service providers to help startups monitor, track, and reduce their emissions effectively and foster a sustainable and environmentally conscious approach from the early stages of a company's journey.
- **Ensure portfolio companies are equipped to respond to corporate sustainability disclosures** with a certain level of maturity. Examples of sustainability disclosures corporations may require:
 - Do you have public carbon reduction goals?
 - Does your company have a dedicated sustainability advisor, team member, or team?
 - Do you collaborate with your supply chain on sustainability?
 - How do you manage your sustainability data?
 - Does your company have formal sustainability reporting?

Actions VCs Can Take

Join the Venture Climate Alliance

A growing group of leading VCs launched the [Venture Climate Alliance](https://www.ventureclimatealliance.org) in April 2023, with the goal of achieving a rapid, global transition to net zero or negative greenhouse gas emissions by 2050 or earlier. The members will work to achieve net zero emissions for their firm operations by 2030 or sooner, and will encourage and support their portfolio companies in setting their own net zero targets.

Leading VCs, both climate-focused investors and generalist firms alike, created the VCA because the methodologies, tools, and data needed to track the climate impact of early-stage investments do not yet exist or are inaccessible to most venture firms and their portfolio companies. Black boxes won't cut it in the race to net zero. Our founding members represent decades of venture and climate tech expertise. As first movers, we are committed to collaborating and sharing our learnings as a roadmap for the industry more broadly.

For More Information

www.ventureclimatealliance.org

Diversity, Equity, and Inclusion

In venture capital, diversity remains a challenge. While progress has been made in recognizing the need for greater representation, the industry continues to struggle with the dearth of diversity in its ranks. The lack of diverse investment teams directly translates into less investment in underrepresented founders. Last year, all-women teams received only 2.1% of venture capital funds, compared to 2.3% in 2021,¹⁴ while Black¹⁵ and Latinx¹⁶ founders fared worse.

Investing in diverse founders can be a strategic advantage for VC firms. In fact, a 2018 study by BCG found that businesses founded by women ultimately deliver higher revenue: startups with a female founder generated 78 cents of revenue for every \$1 of funding, while male-founded startups generated 31 cents.¹⁷

The combination of a largely homogenous partner demographic and limited funding for diverse managers maintains the status-quo in venture capital firms. It creates a self-reinforcing cycle where established partners, often lacking diverse perspectives, continue to dominate decision-making processes and perpetuate biases. Studies have revealed that female VC partners are more than 3x as likely to invest in startups with female CEOs¹⁸ and Black GPs are 3x more likely to fund Black founders.¹⁹ The lack of diversity within venture firms means that promising diverse entrepreneurs and startups face significant barriers in accessing venture capital funding, limiting the range of perspectives and ideas that can thrive in the industry.

13. <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/audit/us-audit-human-capital-survey-report.pdf>

14. <https://pitchbook.com/news/articles/the-vc-female-founders-dashboard>

15. <https://news.crunchbase.com/diversity/venture-funding-black-startups-2022/>

16. <https://news.crunchbase.com/diversity/us-based-latine-founded-companies-funding-falls/>

17. <https://www.bcg.com/publications/2018/why-women-owned-startups-are-better-bet>

18. <https://www.prnewswire.com/news-releases/babson-releases-new-study-on-venture-capital-funding-for-women-entrepreneurs-277665461.html>

19. <https://www.blckvc.org/sbvr2023>

In ESG terms, the lack of diversity has material impacts. A study published by Harvard Business Review analyzed the financial outcomes of homogeneous partnerships versus diverse collaborations. Along all dimensions measured, the more similar the investment partners were, the lower their investments' performance.²⁰

So why aren't venture firms doing more?

The Network Effect: Even among VCs who prioritize diversity in hiring and investment, traditional approaches to both processes rely on in-network connections, and “warm” introductions make it hard to branch out.²¹ Venture capitalists are 39.2% more likely to work with others from the same racial group, and having a degree from the same school increases that by 34.4%.²²

Unconscious, structural bias: Rigid definitions of “fit,” antiquated models and scorecards stand as structural barriers to diversifying venture capital.²³ In VC, success is all about having the right formula to find the unicorn, but reliance on old methods yields the same, monolithic results. VCs also cite “expansion risk” as the top type of risk they are willing to take to maximize returns, but they are less likely to explore how diverse businesses have opportunistic “expansion risks” compared to other new investment areas.²⁴

Uncertainty around where to start: There is a lack of consensus on the meaning and scope of DEI, leaving funds to develop their own patchwork solutions and tools.²⁵ McKinsey found that corporate leaders appreciate the business argument for diversity and inclusion but are unsure how to make it work for their firms and the extent to which investment in DEI can support their growth and value-creation goals.²⁶ As of 2022, less than half of venture firms reported having a diversity strategy.²⁷

Addressing these challenges requires concerted efforts from within the venture capital ecosystem. Venture firms must actively seek out and promote diverse voices, not only as employees but also as partners. Encouraging diversity in funding allocation and investing in programs that support and mentor diverse fund managers are crucial steps toward fostering a more inclusive and equitable venture capital landscape. Only by recognizing and rectifying the structural barriers can the industry unlock its full potential and ensure that all voices have an equal opportunity to shape the future of innovation and entrepreneurship.

20. <https://hbr.org/2018/07/the-other-diversity-dividend>

21. <https://www.morganstanley.com/ideas/venture-capital-funding-gap>

22. <https://www.hbs.edu/faculty/Pages/item.aspx?num=48330>

23. <https://www.morganstanley.com/ideas/venture-capitalist-funding-diversity-entrepreneur-gap>

24. <https://www.morganstanley.com/ideas/venture-capital-funding-gap>

25. https://rightscolab.org/wp-content/uploads/2022/08/FINAL-DEI-Mapping-Report_RightsCoLab-Final.pdf

26. https://www.mckinsey.com/~media/mckinsey/business%20functions/people%20and%20organizational%20performance/our%20insights/delivering%20through%20diversity/delivering-through-diversity_full-report.pdf?shouldIndex=false

27. <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/audit/us-audit-human-capital-survey-report.pdf>

Actions VCs Can Take

- **Develop a Plan:** Morgan Stanley has found that when VCs encounter underrepresented founders, they stick to what's familiar and are unlikely to stretch and educate themselves about the product, market segment or opportunity at hand.²⁸ A DEI plan or strategy can help firms overcome bias. The NVCA 2020 Human Capital in VC survey found that among firms who have a DEI strategy, 25% of their investment professionals were women, compared with 20% at firms with no strategies in place.²⁹ Women at firms with DEI strategies were also more likely to hold leadership positions and partner roles.
- **Measure Progress:** A key part of any good strategy is measurable metrics. By tracking DEI-specific metrics across deal flow, investment, leadership and hiring, venture capital firms can equip themselves with the data necessary to take action.
- **Network and Recruit Externally:** VCs should actively reach outside their existing social networks to gain exposure to diverse candidates and founders. Abraham Williamson, a venture capital attorney based in Nashville and creator of the Diverse Tech Founders podcast, thinks about the process of nurturing social capital for underrepresented founders according to three I's:
 - *Introductions:* Even when a diverse candidate or founder isn't the right fit for your firm, make a conscious effort to introduce them to funders and partners in your network.
 - *Invitations:* Help underrepresented founders get past gatekeepers by inviting them to events hosted within your network.
 - *Insights:* Lean into sharing insights and coaching underrepresented founders. Mentorship goes a long way.

28. <https://www.morganstanley.com/ideas/venture-capital-funding-gap>

29. <https://www.csis.org/analysis/addressing-gender-imbalance-venture-capital-and-entrepreneurship>

Actions VCs Can Take

Village Capital, an accelerator and venture capital firm) conducted a randomized control trial in eight of their accelerator programs in four geographies with 69 investors between 2020 and 2022. They tested the impact of using a standardized set of questions versus unstructured questions when evaluating women-led and men-led startups for investment.

What they learned

Women -led startups scored lower	Focus on risk vs growth with women	More favorable outcomes for men
Investors score women-led startups lower than men-led startups of equal quality 68.33% of the time - differentiated only by the gender of the voice narrating.	Women-led startups are asked more risk-related questions versus growth opportunities of their business.	When evaluating a founding team's potential, men-led teams receive more favorable outcomes than women-led teams.

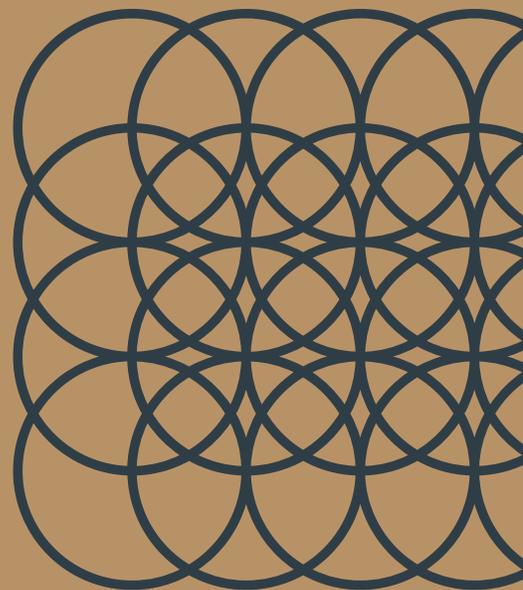
Recommendations

- **Standardize Due Diligence Questions:** Similar to DEI practices in hiring, implementing a standardized set of questions can ensure that investors accurately evaluate investment opportunities regardless of the founding teams' gender.
- **Leverage Technology:** The diversity, equity, inclusion, and belonging (DEIB) tech market has evolved significantly in recent years, making it easier for organizations to start. "Organizations are increasingly turning to digital tools aimed at improving DEI. These tools can help equalize pay, root out unconscious bias, level the playing field for promotions, give those in the majority culture a better understanding of the discrimination some of their co-workers face, and more".³¹

30. <https://newsandviews.vilcap.com/reports/smarter-systems-how-tweaking-your-diligence-process-can-unlock-overlooked-opportunities>

31. <https://www.computerworld.com/article/3685930/4-ways-dei-tools-can-drive-change-across-the-workplace.html>

Responsible Innovation



The venture industry now stands at the precipice of a new revolution in technology in the form of generative AI, which holds the promise of bringing efficiencies and boosting productivity. In response to prompts, generative AI produces texts, images, and video with seemingly limitless applications. According to PitchBook, VC investments in generative AI grew more than tenfold over the past four years to \$4.5 billion in 2022.³²

Without guardrails, AI also has the potential for societal harm. It can exacerbate systemic biases, dictate who gets hired, and invade privacy. A recent study, for example, found that Black applicants were 54% less likely than their white counterparts to get approval for a mortgage. That percentage jumped to 67%,³³ when AI underpinned the decision.

While regulations tend to lag the pace of innovation, AI is prompting lawmakers to move faster. In October 2022, White House Office of Science and Technology Policy published a Blueprint for an AI Bill of Rights,³⁴ a set of five principles to help guide the design, use and deployment of AI systems.

In June 2023, the European Parliament signed into law the EU AI Act,³⁵ the first significant regulation of AI in the West. Among other rules, the law limits the use of facial recognition software recognition, requires generative AI developers to disclose³⁶ the copyrighted material they harness to create their programs, and classifies as high-risk for discrimination AI tools deployed in hiring and other personnel decisions.

32. <https://techcrunch.com/2023/03/28/generative-ai-venture-capital/>

33. <https://link.springer.com/article/10.1007/s43681-022-00234-9>

34. <https://www.whitehouse.gov/wp-content/uploads/2022/10/Blueprint-for-an-AI-Bill-of-Rights.pdf>

35. <https://artificialintelligenceact.eu/the-act/>

36. <https://www.nytimes.com/2023/06/14/technology/europe-ai-regulation.html>

Other legislation shaping the latticework of regulation in the U.S. for the tech industry includes:

- The Algorithmic Accountability Act of 2022³⁷ requires companies to assess the impact of automating critical decision-making, and requires the FTC to create guidelines for reporting.³⁸
- The California Consumer Privacy Act (CCPA)³⁹, has been in effect since January 2020 and soon the law will become more strict.⁴⁰
- As of January 2023, all Automated Employment Decision Tools (AEDTs) must undergo an audit for bias before implementation in New York City.⁴¹
- The District of Columbia has proposed a Stop Discrimination by Algorithms Act⁴² to ensure organizations do not discriminate against individuals by using certain types of data in decision-making related to employment, housing, healthcare and financial lending.⁴³

This means that companies which plan to innovate with AI at the pace required to remain competitive need to have a strong grasp of their technology's risks. According to McKinsey, companies seeing highest returns from AI are far more likely to report they've engaged in active risk mitigation.⁴⁴

However, regulation may not be fast or sufficient enough to mitigate the myriad unintentional and intentional negative consequences that come from AI applications. This prompted venture capitalists, founders and key stakeholders to issue an open letter in March 2023 to "Pause Giant AI Experiments."⁴⁵ The letter has gained traction, garnering more than 31,000 signatures, urging a halt to research on AI systems more powerful than GPT-4. As the AI landscape evolves, investors in companies aiming to innovate with AI must prioritize risk mitigation and remain vigilant about the potential negative impacts of their technology.

37. <https://www.congress.gov/bill/117th-congress/house-bill/6580/text>

38. <https://www.wyden.senate.gov/imo/media/doc/2022-02-03%20Algorithmic%20Accountability%20Act%20of%202022%20One-pager.pdf>

39. <https://oag.ca.gov/privacy/ccpa>

40. https://www.cnn.com/2022/12/22/data-privacy-rules-are-sweeping-across-the-globe-and-getting-stricter.html?utm_content=232748325&utm_medium=social&utm_source=linkedin&hss_channel=lcp-37182591

41. <https://www.lexology.com/library/detail.aspx?g=0b1854bf-0fb2-4056-924a-fe263d8d0096>

42. <https://dcchamber.org/algorithms-act/>

43. <https://datainnovation.org/2022/09/dcs-proposed-stop-discrimination-by-algorithms-act-would-discriminate-against-algorithms/>

44. <https://www.mckinsey.com/capabilities/quantumblack/our-insights/what-the-draft-european-union-ai-regulations-mean-for-business>

45. <https://futureoflife.org/open-letter/pause-giant-ai-experiments/>

Actions VCs Can Take

- **Advocate for diversity:** In addition to pushing for more diversity in tech companies, ensure companies are creating datasets that are representative of the populations tech⁴⁶ is applied to, through improved collection or development of synthetic data.
- **Engage stakeholders, particularly end users:** When tech is used in high-risk or sensitive situations, work to engage vulnerable groups in the decision-making process at each stage of design. In sensitive or public sector domains, individuals impacted by tech should have access to redress following a negative outcome.⁴⁷
- **Audits:** A 2019 study by Inioluwa Deborah Raji and Joy Buolamwini⁴⁸ analyzed the commercial impact of Buolamwini's Gender Shades⁴⁹ project, the first algorithmic audit of gender and skin color in commercial facial analysis models. After adjusting their APIs following algorithmic auditing, IBM, Microsoft, and Megvii reduced accuracy disparities between males and females and darker and lighter-skinned subgroups.⁵⁰
- For investors developing an approach to AI risk mitigation, AI ethics expert Ravit Dotan⁵¹ recommends getting started by examining four key risk areas:
 - **Bias and Fairness:** Where is there potential for bias in the AI training data? Is there a process in place for regularly auditing for bias? Are stakeholders from vulnerable groups being engaged?
 - **Data Protection:** How is data being stored, and what processes are in place to ensure data security? How is data being protected from attacks, and have there been any in the past? Can the company demonstrate compliance with global data regulations?

46. <https://omidyar.com/wp-content/uploads/2022/09/Our-Vision-for-a-Responsible-Tech-Future-Final-4-compressed.pdf> & <https://alltechishuman.org/ai-human-rights-report>

47. <https://www.ajl.org/learn-more> & <https://alltechishuman.org/ai-human-rights-report>

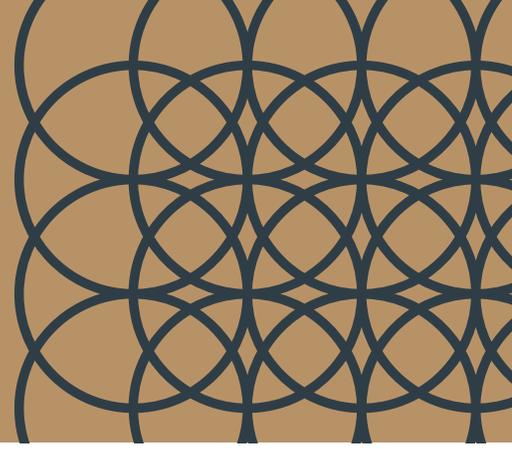
48. <https://www.media.mit.edu/publications/actionable-auditing-investigating-the-impact-of-publicly-naming-biased-performance-results-of-commercial-ai-products/>

49. <http://gendershades.org/>

50. <https://www.media.mit.edu/publications/actionable-auditing-investigating-the-impact-of-publicly-naming-biased-performance-results-of-commercial-ai-products/>

51. <https://www.ravitdotan.com/>

Actions VCs Can Take



- **Explainability and Transparency:** Do users clearly understand when they are engaging with AI? Is there a process in place for users to challenge outcomes?
- **Human Autonomy and Control:** How can this AI conceivably affect human behavior or decision-making?

While AI risks may be the most talked about topic, there are other technology related risks that venture capitalists should also advise companies on such as data privacy.

Data Privacy

Here are some best practices in data protection that can and should be implemented at the startup stage:

- **Make a conscious effort to collect only necessary data.**⁵²
- **Aim for affirmative consent when collecting data.** The White House Blueprint for an AI Bill of Rights dictates that affirmative consent can only be given when users understand exactly how their data will be used and have a guarantee that it will only be used for that express purpose.⁵³ Users who elect not to opt-in should not be denied access to a platform, service, or opportunity as a result.⁵⁴
- **Delete unused data regularly and effectively.** Allow users to access, revise, and erase their data.⁵⁵
- **Minimize the use and generation of personal data in training algorithms.**⁵⁶

52. https://ethicalos.org/wp-content/uploads/2018/08/EthicalOS_Check-List_080618.pdf

53. <https://www.whitehouse.gov/wp-content/uploads/2022/10/Blueprint-for-an-AI-Bill-of-Rights.pdf>

54. <https://www.ajl.org/learn-more>

55. Ravit Dotan's guidebook

56. <https://alltechishuman.org/ai-human-rights-report>

What's Ahead

Emerging Frameworks

The concept of responsible investment in innovation recognizes that technological progress can have both positive and negative consequences for individuals, communities, and the environment. It calls for a proactive, inclusive, and transparent approach involving stakeholders from various backgrounds, including industry experts, policymakers, and civil society organizations, to collectively assess, anticipate, and address innovations' potential risks and ethical concerns. This is done throughout the innovation lifecycle, from research and development to commercialization and adoption. In comparison, ESG looks at the policies and practices of an organization and focuses on measuring outputs, such as the number of women employees or the amount of greenhouse gas production. ESG, as a framework, misses an opportunity to explore questions or develop policies to mitigate the unintended negative consequences of technology-driven products and services.

Last year, a group of venture investors and tech companies came together to form Responsible Innovation Labs to encourage founders and their backers to mitigate the potentially negative impacts of technology and offer resources. Their charter outlines core beliefs, which include innovating intentionally, operating with accountability and transparency, valuing inclusive prosperity, building sustainably, respecting privacy, the security and safety of users, championing diversity, and building healthy societies.

While another framework may add confusion, the AI revolution that is already underway can provide an opportunity to bring more venture capitalists to the table to finalize a framework that can integrate ESG considerations and responsible investment practices across stages of a company's growth, as well as help to mitigate future risks as they grow.

Data Standardization

Hamilton Lane reported that RFPs featuring ESG-related questions have crossed over the 50% threshold, and in the 12 months ended June 30, 2022, the firm responded to more than 2,000 ESG-related questions in RFPs and DDQs.⁵⁷ Similarly, Novata, an ESG data platform, reported that GPs are requesting, on average, 30 ESG-related metrics.⁵⁸

In our view, an initiative similar to the ESG Data Convergence Initiative (EDCI) for venture capital is needed to streamline data collection, develop a shared understanding of what the data means and benchmarks are, and can be adapted over time.

EDCI was started by a group of private equity GPs and LPs, organized by CalPERS and Carlyle, who were concerned that “despite the proliferation of ESG frameworks and ratings providers,⁵⁹ there was still no standardization or meaningful benchmarks for private companies.” Through a process coordinated by Boston Consulting Group (BCG), the group defined 15 metrics to serve as a baseline and be iterated over time. EDCI now includes 275+ GPs and LPs representing about \$25 trillion in assets under management and benchmarks data for over 2000 portfolio companies.

According to Julia Jaskolska, Lead of Co-Investments and ESG at CalPERS Private Equity, the EDCI’s designers initially assumed that non-majority ownership would make it too difficult for venture capital firms to obtain metrics from their portfolio companies. However, they were pleasantly surprised that many VC managers joined EDCI because they found it valuable and a standardized framework specific to venture capital was unavailable.⁶⁰ ESG4VC seeks to build upon this foundation and continue to tailor an easily-integrated and widely-accepted framework for US VC.

57. <https://explore.hamiltonlane.com/2023-market-overview/esg>

58. <https://www.esgdc.org/>

59. <https://explore.hamiltonlane.com/2023-market-overview/esg>

60. <https://www.keyesg.com/article/edci:-an-interview-with-julia-jaskolska>

Actions VCs Can Take

Engage with an ESG Platform That Understands the Needs of Venture

ESG4VC partnered with Novata and a group of U.S. GPs to develop a set of metrics for GPs to use with growth-stage companies at Series A and above. The Novata module uses EDCI as a foundation but is adjusted for the unique characteristics of venture capital, including metrics that specifically address technology risks.

Metrics for Growth-Stage Companies

Environmental

- Scope 1 & 2 emissions
- Scope 3 (optional)
- Do you have any initiatives to reduce energy usage or improve energy efficiency?

Social

- % of women on the board
- % of women in the C-suite
- % of underrepresented groups in the C-suite (optional for non-U.S. and non-European companies)
- Net new hires (organic and total)
- Turnover
- Employee survey (yes/no)

Governance

- % of LGBTQ+ board members (optional for non U.S. and non European companies)
- % of board members from underrepresented groups (optional for non US and non European companies)
- Does the lead investor have a board seat?
- Is there a designated data privacy officer or a cybersecurity function?
- Is the company SOC 2 compliant?
- Is the company ISO 27001 certified?
- Has the company experienced any data breaches?

For more information

<https://www.novata.com/esg-reporting-framework-esg4vc/>

Technology

Vertical software solutions play a vital role in consolidating and centralizing diverse ESG-related information. By providing a unified platform for managing DEI initiatives, carbon accounting, AI model ethics, and ESG data, these solutions streamline workflows and increase operational efficiency. Startups and venture capitalists can now access a comprehensive overview of their ESG performance, facilitating better resource allocation, and identification of areas requiring improvement.

One of the most significant advantages of vertical software solutions is their ability to harness advanced analytics and predictive modeling. By leveraging machine learning algorithms and big data analysis, these tools can uncover valuable insights from complex ESG datasets. Startups and venture capitalists can use these insights to proactively identify material ESG risks and opportunities. Predictive capabilities enable scenario modeling and risk assessment, empowering decision-makers to implement strategies that align with sustainable practices and maximize returns.

The growth and development of these solutions can also enable a paradigm shift in how venture capitalists and startups approach ESG risks and opportunities. These solutions not only reduce costs and increase efficiency of data collection but also empower decision-makers with improved predictive capabilities that can help startups to identify material risk factors geared toward their business model and stage of development. As the venture capital and startup ecosystem apply these tools, a new era of ESG and responsible investment practices will emerge.

ESG software solutions are experiencing exponential growth due in large part to venture funding. Examples include:

Ethical AI Tech

Responsible innovation, deployment, and governance of AI is quickly becoming one of the most pressing matters we face as a society. The Ethical AI Database (EAIDB), hosted on the The Ethical AI Governance Group (EAIGG) website, has identified and mapped more than 200 startups that provide ethical services, including data for AI, AI Audits and MLOps Monitoring.⁶¹

61. <https://www.eaidb.org/companies.html>

Carbon Accounting

Carbon accounting software helps organizations measure, report, and take action to reduce carbon emissions. Some companies, such as Persefoni and Watershed, have scaled quickly and become well-known names in the venture community. Some are also creating offerings that are priced for startups.

According to Straits Research, the global carbon footprint management software market size is set to grow from \$9.1 billion in 2022 to an estimated \$16.9 billion by 2031.⁶²

ESG Platforms

We are encouraged to see ESG platforms, such as Metric, PulsESG, and Novata that are tailored to venture capital firms and the stage of their portfolio companies. These platforms help investors get started by tracking company data to establish baselines, compare performance across sectors over time, and identify hot-button areas where they can provide support.

DEI

DEIB tech gives companies actionable insights at the individual or organizational level around diversity, equity, inclusion and belonging efforts so they can monitor and continue to improve. Ideally, DEIB tech provides the data to alter processes or practices and enable organizations to become more diverse, equitable, inclusive and enable belonging.

A report by RedThread Research called DEIB Tech 2021 Overview estimates that the global market for DEI assessment software tripled between 2019 and 2021 to reach \$313 million.⁶³

62. <https://redthreadresearch.com/deib-tech-2021/>

63. <https://www.globenewswire.com/en/news-release/2022/11/28/2563432/0/en/Carbon-Footprint-Management-Software-Market-Size-is-projected-to-reach-USD-16-92-billion-by-2031-growing-at-a-CAGR-of-6-4-Straits-Research.html>

Conclusion



A new era of technological innovation—and accompanying regulation and public scrutiny—creates the need for new approaches to managing risks and opportunities. A number of factors are at play: AI—due to its transformation potential (good and bad); lessons from the unintended consequences of social media, when it comes to misinformation, mental health and trust; the increasing awareness of climate change as a global issue and an investment and innovation opportunity; and the outsized impact of venture capital on society. By deciding which innovations get funded, VCs can influence access to things like healthcare, education, and employment, contribute towards bank failures, and enable bad actors (Theranos, FTX).

While the pace of funding may have slowed, old habits still persist. The question of venture capital's ability to change is looming. It holds the potential to chart our course towards a secure and sustainable future, with the ability to steer us in the right direction.

However, merely relying on venture capitalists will not be sufficient to effectively implement ESG practices. This will require a collaborative effort and active engagement from founders, limited partners, employees, and consumers to truly succeed.

2024 will be a crucial juncture for ESG considerations due to unfortunate politicization and backlash. This presents an opportunity to reevaluate and possibly rebrand ESG to find the right fit within the venture capital landscape. A flexible framework that can adapt to the varying stages of companies and the venture capital business model is essential. As we embark on an era of unprecedented innovation, venture capitalists possess the power to shape a secure and sustainable future. The question that remains is whether they will seize the moment.



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