

The Future of Private Equity:

Case Studies on Climate Progress

Research and text by the Sustainable Finance Institute (SFI)

SFI Future of Private Equity Series



The Future of Private Equity: Case Studies on Climate Progress

Research and text by Cary Krosinsky, Rongying Lin, Hiren Rana, Johnny Huang, and Ethan Rosenstein

Introduction

The Sustainable Finance Institute and its Future of Private Equity initiative proudly present our first case study report, showcasing how General Partners (GPs) are advancing climate-specific investments.

Previous discussions regarding the future of Private Equity have focused on two main areas:

- 1) how GPs can effectively collaborate with their portfolio companies, and
- 2) how to generate robust ESG data for these private entities. State-Owned Enterprises particularly in China, which operate similarly to privately held organizations are now mandated to report on ESG metrics, further emphasizing this trend.

Limited Partners (LPs) also have concentrated on

3) conducting due diligence on GPs they currently partner with or are considering for new capital injections.

Our primary focus is on implementing progress within private equity investment strategies and culture.

It is increasingly critical for LPs to understand whether their financial partners are adequately addressing climate risks, along with other significant environmental, social, and governance (ESG) concerns. For instance, Brad Lander, the New York City Comptroller, has recently criticized financial institutions for distancing themselves from the Climate Action 100+, despite its focus on publicly traded companies. The broader implications of neglecting ESG principles cannot be overlooked.

The so-called anti-ESG movement, particularly evident in Republican-led state governments in the U.S., overlooks the necessity of effective corporate governance.



Focusing on responsible management is essential to ensure that investments are not allocated to poorly managed companies at risk of underperformance or failure.

Such anti-ESG initiatives contradict best practice fiduciary duties from both prudence and loyalty perspectives. Moreover, considering that Asia accounts for nearly half of the global economy, it raises questions about the feasibility of ignoring governance issues in this region while fulfilling fiduciary responsibilities. Can investors genuinely uphold their duties when overlooking such a significant market? It is also crucial to ensure that private equity does not become a last resort for potentially stranded assets in a climate-constrained world. According to experts like Bloomberg New Energy Finance, significant capital is required for climate innovation and renewable energy deployment, yet trillions in dry powder remain unallocated.

Transforming Private Equity to support essential climate strategies is vital for LPs as they consider the interests of both current and future beneficiaries. A timely examination of how GPs are currently positioning themselves is warranted, particularly in September 2024.

In 2023, total assets under management (AUM) in private equity reached approximately US\$8.2 trillion (McKinsey), compared to a broader financial system valued at over US\$500 trillion (Krosinsky, 2020). Climate-specific assets are estimated at around US\$217 billion (CTVC), a figure that includes venture capital (VC), infrastructure, corporate VC, and growth equity. In China, the leading investor in the low-carbon transition, a significant portion of this investment is driven by State-Owned Enterprises, highlighting a crucial competitiveness issue within the private asset landscape.

Furthermore, a significant portion of privately owned assets is tied to coal, oil, and gas production. While these assets have not yet been deemed potential stranded assets, the risk remains, especially as the world reacts to accelerated climate change.

LPs are increasingly interested in investing in climate solutions and are often reaching out to their current partners. This presents a clear opportunity for LPs to facilitate a positive transformation in GPs towards climate strategies. GPs, in turn, can demonstrate their advancements, which will significantly contribute to bridging the climate investment gap.

The Sustainable Finance Institute is actively collaborating with leading LPs and GPs in an iterative process aimed at achieving mutually beneficial progress in qualitative areas, including strategy, culture, and financial performance. We anticipate publishing more case studies in the coming year and welcome opportunities to engage with additional LPs and GPs.

Below are examples of how ten leading GPs are beginning to establish new climate funds.



1. Blackstone

Blackstone Green Private Credit Fund III (BGREEN III)

In 2023, Blackstone launched its Green Private Credit Fund III, successfully closing with US\$7.1 billion—making it the largest private credit fund focused on energy transition to date. This fund aims to provide private credit for renewable energy transition projects and climate solutions, including solar, wind, hydropower, waste management, and ESG consulting.

Notably, BGREEN III will allocate a significant portion of its portfolio to liquefied natural gas (LNG), raising questions about the evolving stance of climate-oriented investors towards natural gas. Blackstone considers natural gas a critical component of the energy transition.

In 2022, Blackstone identified an estimated US\$100 billion investment opportunity in energy transition and climate change solutions over the coming decades. The fund's strategy emphasizes balancing financial risk with climate benefits by prioritizing investments in established hard assets and proven businesses rather than emerging climate technologies.

Sources:

https://www.blackstone.com/news/press/blackstone-closes-record-energy-transition-private-credit-fund-at-over-7-billion/

<u>https://www.newprivatemarkets.com/blackstone-closes-7-1bn-credit-fund-to-balance-transition-and-energy-access/</u>



2. BlackRock

BlackRock Global Renewable Power III (GRP III)

BlackRock's largest climate-focused fund, the Global Renewable Power III Fund (GRP III), has successfully raised US\$4.8 billion, positioning it among the largest climate infrastructure funds worldwide. GRP III aims to invest in renewable energy projects, including solar, wind, and battery storage, across the Americas, Europe, and Asia. This fund is integral to BlackRock's broader strategy to accelerate the transition to a low-carbon economy by financing large-scale renewable energy infrastructure, thereby reducing greenhouse gas emissions and fostering sustainable development.

Additionally, BlackRock has partnered with the New Zealand government to establish a NZ\$2 billion (US\$1.2 billion) climate infrastructure fund, with the goal of making New Zealand one of the first countries to achieve 100% renewable electricity. This fund will focus on green energy technologies, including solar, wind, green hydrogen, and battery storage, further underscoring BlackRock's commitment to driving global climate action through significant investments in sustainable infrastructure.

Sources:

https://pitchbook.com/profiles/fund/16707-88F#overview

 $\frac{https://www.beehive.govt.nz/release/first-its-kind-climate-fund-back-100-renewable-}{electricity\#:\sim:text=The\%20Government\%20has\%20worked\%20with,to\%20reach\%2010}{0\%25\%20renewable\%20electricity}$

https://www.infrastructureinvestor.com/blackrocks-global-renewable-power-fund-returns-to-market-with-7bn-target/



3. KKR

KKR Global Impact Fund II

KKR has successfully closed its Global Impact Fund II, raising US\$2.8 billion to invest in companies that contribute to the United Nations Sustainable Development Goals (SDGs). This fund focuses on four key investment themes: climate action, sustainable living, lifelong learning, and inclusive growth. By investing in companies that offer scalable, commercial solutions to global challenges, KKR aims to generate significant social and environmental impact while delivering strong financial returns.

The fund has garnered robust support from a diverse array of global investors, including public pensions, family offices, insurance companies, and other institutional backers. KKR itself has committed US\$250 million from its balance sheet, affiliates, and employee contributions, demonstrating strong internal alignment with the fund's objectives.

Sources:

https://media.kkr.com/news-details/?news_id=bc430238-8b94-4a4d-b993-daba85491cbb&download=1

https://media.kkr.com/news-details/?news_id=2cbf963d-a998-46fc-bcc7-fe1f3cce97a9&download=1



4. Generation Investment Management

Generation IM Global Equity Fund

Generation Investment Management is committed to integrating sustainability into every aspect of its investment strategy. Their long-standing approach emphasizes the business and management quality of large companies that are responding to identified impact themes, often leading systematic transitions within their industries. This strategy is now being applied to private equity as well.

Recently, Generation Investment Management launched Just Climate, a dedicated climate investment business, which successfully closed the Climate Assets Fund I, raising US\$1.5 billion. This fund focuses on high-impact solutions that can significantly reduce or remove emissions, supporting the transition to a net-zero economy. Climate Assets Fund I targets growth-stage, asset-heavy companies in high-emitting, hard-to-abate sectors such as energy, mobility, industry, and buildings. The fund aims to achieve substantial emissions abatement while delivering attractive risk-adjusted financial returns.

Just Climate utilizes a comprehensive ESG and impact measurement framework, aligning financial returns and performance fees with the achievement of ambitious greenhouse gas abatement goals. This ensures that financial incentives are directly linked to climate impact. The fund has already made significant investments in companies such as ABB Emobility, H2 Green Steel, and Meva Energy, which are leaders in electric vehicle charging, steel decarbonization, and renewable energy, respectively.

Generation stands out among these ten financial institutions as the only one fully embedding sustainability into all aspects of its operations, setting an ideal benchmark for larger financial institutions to aspire to.

Sources:

https://www.generationim.com

https://www.generationim.com/our-thinking/news/just-climate-announces-close-of-inaugural-1-5-billion-industrial-climate-solutions-fund/



5. PAI Partners

PAI Partners' Climate-Focused Initiatives

PAI Partners' largest climate-focused initiative is the PAI Europe VIII Fund, which successfully raised €7.1 billion from over 160 investors across 28 countries, including public and private pension funds, sovereign wealth funds, financial institutions, and family offices. PAI invests in traditional industry sectors that are central to economic activity, supported by solid fundamentals and sustainable growth prospects. Their Real Economy strategy emphasizes four key sectors: business services, food and consumer, healthcare, and manufacturing, with a strong commitment to responsible investment and the integration of ESG principles throughout their operations.

Dedicated to driving sustainable growth and enhancing ESG performance across its portfolio, PAI Partners collects over 1,800 ESG data points annually to monitor and improve performance at both the portfolio and company levels. Transparency and accountability are central to their ESG commitment, with regular reporting to the Principles for Responsible Investment and other governing bodies. PAI Partners actively promotes ESG standards within its portfolio companies and across the industry, advocating for responsible investment and contributing to initiatives like the Initiative Carbone 2020 to manage and reduce greenhouse gas emissions from its portfolio.

Sources:

https://www.paipartners.com/mediaitem/pai-partners-raises-e7-1-billion-for-eighth-flagship-fund/

https://www.paipartners.com/responsibility/our-commitments/



6. TPG

TPG's Impact Investing Initiatives

TPG manages a collection of funds focused on impact investing, targeting growth-stage companies that have the potential to create positive global change. With approximately US\$19 billion in assets across The Rise Funds, TPG Rise Climate, and the Evercare Health Fund, TPG is arguably the world's largest impact investor. Their investment strategy emphasizes collaboration with like-minded entrepreneurs who are committed to building profitable, long-term, and sustainable businesses.

A key component of TPG's efforts is the establishment of Y Analytics, a public benefit corporation dedicated to measuring impact and understanding the social and environmental effects of capital deployment. TPG's diverse portfolio includes several notable companies and partnerships, such as Little Leaf Farms, which focuses on sustainable farming; Monolith, which specializes in hydrogen and renewable materials; and Ohmium, a leader in green hydrogen technology, among others.

Sources:

https://therisefund.com/

https://www.tpg.com/news-and-insights/foodsmart-partners-with-tpgs-rise-fund-to-bring-the-sustained-health-impact-of-foodcare-to-people-of-all-incomes-nationwide/



7. Brookfield

Brookfield Global Transition Funds (BGTF)

Brookfield's Global Transition Fund 1 (BGTF 1) initially launched on July 27, 2021, after a \$7 billion close, the largest fund dedicated to reaching net zero at the time. A hard cap of \$12.5 billion was established but the fund ultimately closed at \$15 billion. Two and a half years later, BGTF 2 was announced on February 5, 2024, after a \$10 billion commitment. Both funds are dedicated to fostering the global transition to net zero, scaling clean energy, and reducing emissions for carbon-intensive businesses.

BGTF 1 has largely been deployed towards renewables, business transformation, carbon capture, and nuclear businesses. BGTF 2 has added investments of a similar nature, such as a UK-based onshore renewables developer and a solar development partnership in India.

Additionally, at COP28 on December 1, 2023, Brookfield announced the creation of the Brookfield Catalytic Transition Fund (CTF) in partnership with Altérra. This fund is part of Brookfield's ongoing efforts to accelerate the transition to sustainable energy and mitigate climate risks.

Sources:

https://www.investpsp.com/en/news/brookfield-announces-initial-us7-billion-closing-for-brookfield-global-transition-fund/

https://bam.brookfield.com/press-releases/brookfield-announces-10-billion-first-closing-second-brookfield-global-transition

https://bam.brookfield.com/press-releases/brookfield-launches-emerging-markets-transition-fund-anchor-commitment-alterra



8. Apollo

Apollo's Sustainable Investing Platform is dedicated to deploying capital in sectors that drive energy transition and decarbonization. The platform has already invested \$30 billion in renewables and sustainable technologies, aiming for a total of \$50 billion by 2027 and \$100 billion by 2030. Apollo's efforts extend beyond fostering new renewable technologies, as it also supports traditional energy companies in their transformation into sustainable, future-oriented businesses.

Utilizing its Climate and Transition Framework, the platform identifies and evaluates investments in clean energy, resource management, mobility, sustainable real estate, and decarbonization. Additionally, Apollo's Global Climate Advisory Council enhances its initiatives by providing expertise in policy development, technological capabilities, and regulatory matters. Eligible investments must meet at least one of three key criteria: a majority of revenue aligned with sustainable economic activity, proceeds that contribute to sustainable initiatives, or certification as a leader in promoting sustainability within a specific sector.

Source:

 $\underline{https://www.apollo.com/strategies/asset-management/real-assets/sustainable-investing-platform}$



9. General Atlantic

BeyondNetZero (BNZ)

On December 20, 2022, General Atlantic announced the closure of its inaugural BeyondNetZero fund, successfully raising 3.5 billion for climate solutions. To date, the fund has invested \$826 million in five companies focused on various technologies and services that address climate change. BeyondNetZero collaborates with strategic investors, including sovereign wealth funds, family offices, corporations, and institutional investors, to support technology-driven solutions for climate change while seizing growth opportunities in the sector.

The decision to launch BeyondNetZero in July 2021 was driven by the increasing demand from investors seeking climate-focused opportunities. However, General Atlantic perceives this fund as more than just an investment vehicle; it aims to elevate impactful climate solutions. For example, investments in 80 Acres Farms' vertical farming, o9 Solutions' supply chain optimization, and Sun King's provision of solar energy for off-grid homes in Africa and Asia target underserved areas in sustainable climate solutions and technologies.

Sources:

https://www.generalatlantic.com/media-article/general-atlantic-closes-inaugural-climate-solutions-fund/

https://beyond-net-zero.com/80-acres-farms-secures-160-million-in-series-b-led-by-general-atlantic-to-accelerate-global-farm-expansion-product-development/

https://beyond-net-zero.com/o9-solutions-raises-295-million-from-strategic-investors-to-continue-its-growth-across-industry-verticals-market/

https://beyond-net-zero.com/sun-king-raises-260-million-led-by-general-atlantics-beyondnetzero-to-expand-global-access-to-affordable-solar-energy/



10. Carlyle

Carlyle Renewable & Sustainable Energy Fund

Carlyle Group's first renewables focused fund, the Carlyle Renewable & Sustainable Energy Fund I, closed in 2021 at over \$700 million, with its successor aiming to reach \$1.6 billion and capped at \$2 billion. In December of 2023, the New York State Common Retirement Fund invested \$200 million into Fund II, pushing the total committed capital over \$1 billion as of last year's end. Carlyle's investment approach for these funds is to deploy \$75-\$250 million in 10-15 companies across sustainable infrastructure, renewables, and facilitating the energy transition.

Fund I reportedly generated a 23.7% gross IRR and a 10.4% net IRR as of the end of March 2023. Of its total \$700 million, Fund I's capital was 78.5% invested and 94.4% committed as of the same time. Carlyle partnered with Alchemy Renewable Energy to commit \$100 million towards a then-newly-established solar generation company, Cardinal Renewables, in 2019. In 2021, Carlyle announced a \$374 million investment commitment to Amp Solar Group, another renewable infrastructure developer and owner focused on increasing availability of renewable and hybrid energy generation and battery storage technologies.

Sources:

https://www.buyoutsinsider.com/carlyle-sets-2bn-cap-for-sophomore-renewable-energy-fund/

 $\underline{https://www.buyoutsinsider.com/carlyles-second-renewables-fund-tops-1bn-with-help-of-new-york-common/}\\$

https://www.carlyle.com/esg/cardinal-renewables

https://www.carlyle.com/media-room/news-release-archive/carlyle-makes-commitment-to-amp-energy



Additional Resources:

 $\underline{https://www.mckinsey.com/industries/private-capital/our-insights/mckinseys-private-markets-annual-review}$

https://www.ctvc.co/stockpiling-the-dry-powder-for-climate/