WORLD ECONOMIC FORUM

Bridging the Divide: Private Markets and New Drivers of Value Creation

WHITE PAPER

NOVEMBER 2024

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Contents

Forewords

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The global economy is at a critical juncture, facing the urgent need to transition to a low-carbon and more sustainable economy. Scaling existing solutions, increasing the deployment of more sustainable products and services, transforming and repositioning business models and building enabling technologies and infrastructure all require significant capital, commercial acceleration and operating capabilities. Private market investors, with a steadfast focus on long-term value creation, are well positioned to execute towards these goals while the companies they successfully guide through this transition stand to reap the commercial rewards afforded by a more sustainable economy.

Private markets' unique investor governance model can be a significant engine for the transformation and the rapid scaling required throughout the economy to drive the energy transition. Private equity and infrastructure investors have decades of experience working with portfolio companies on commercial and operational excellence initiatives. They have deep expertise in realigning business models, launching new and more profitable products and services, capturing pricing premiums through better customer segmentation, expanding internationally, professionalizing management teams, improving procurement and achieving greater success from systematic mergers and acquisitions (M&A). These capabilities, among others, are fundamental to the industry's continuous search for value and, in that vein, should be further employed towards the objective of decarbonization.

Unlike many public equity investors, private market investors and their portfolio companies can afford to be more patient. They are more willing to transform businesses to capture industry-specific sustainability tailwinds while aggressively accelerating growth in new and existing sustainable product and service segments. They also support management teams in achieving these goals by aligning executive incentives in ways that are generally unavailable to publicly traded companies.

Private market investors are not passively waiting for opportunities to become obvious. They invest with impact at the earliest stages of transformative trends to achieve maximum benefit, and this proactive approach must now unlock the value embedded in sustainably focused themes such as energy transition, the circular economy and natural capital. In doing so, private market investors can leverage their prior experience with similar businesses while partnering with management teams to ensure that improved sustainability forms a core part of value creation plans.

We are encouraged to see the level of capital that has been allocated over the past few years to energy transition funds by limited partners (LPs). However, simply investing in new renewables capacity, while necessary, will not ultimately be sufficient to achieve the level of decarbonization that the planet requires and end markets increasingly demand. Thankfully, general partners (GPs) are leveraging their commercial and operational excellence across a broad array of sectors within private equity and real assets to address the diverse set of priorities from customers seeking more sustainable products and solutions. We have also seen a greater willingness among investors to "go where the emissions are" and decarbonize power generation and heavy industry, where the risk/return profile can be even more attractive.

Despite these positive trends, our industry still needs to go further in harnessing the operating capabilities that sit within GPs to deliver better sustainability and decarbonization outcomes. These teams' collective expertise and capacity represent one of the greatest collections of corporate value creators in the world. They can deliver growth and scale in ways that public markets typically cannot. This will not only drive greater success for existing funds but also give LPs greater confidence in allocating capital to ever larger energy transition funds, secure in the belief that their managers are taking a systematic approach to evaluating, sizing and capturing the commercial opportunities the energy transition is unlocking.

Lord John Browne of Madingley
Chairman and Co-Founder, BeyondNetZero, General Atlantic

Francesco Starace
Partner, EQT

We both joined the private markets sector having previously led large, publicly traded and diversified energy companies and with an ingrained understanding that the industrial transition pathway to net zero is a gradual process that takes time and requires significant investment.

Addressing the challenge of transitioning global economies to net zero will require close collaboration between the public sector and private businesses. Private markets, which are expected to continue to grow by 12% annually over the next decade,[1] are key to unlocking global growth and prosperity by addressing the vast investment needed to develop environmental, social and economic resilience for the benefit of all. In fact, most capital in global markets is formed through private markets.

It is worth reflecting on where private capital has potential strengths to drive a lower-carbon economy. Importantly, private markets' governance model has some clear advantages over investors in public equities when it comes to delivering a decarbonization agenda. Investors can bring resources, wide networks of advisers from industry and aligned incentives to management teams. The private markets ownership model, whereby firms typically exercise majority control of their portfolio companies, allows for a long-term perspective in supporting businesses to address environmental challenges by growing the businesses, improving their operations and offering relevant solutions through their products and services.

Having made our own career transitions into private markets, to firms with ambitious climate agendas spanning asset classes, our focus has now turned to applying our industry experience to help private capital advance the transition. This means making the most of the active ownership model that we believe to be private capital's strength. Practically, this involves harnessing the ability to ensure alignment and accountability around the sustainability agenda with portfolio company boards and leadership, setting ambitious but achievable and, importantly, quantifiable targets. Managers of large portfolios spanning hundreds of companies have the platform to pioneer sustainability initiatives, cross-pollinate their portfolios, apply key learnings and scale success.

Like other businesses, companies in transition-related industries can benefit from private capital investors' help in sourcing and executing complex M&A strategies. Investors can play an important role in supporting companies through the complex integration of an energy transition-focused transformative merger, the build-out of new platforms or developing entirely new product and service offerings. This helps companies grow faster, capture more market share and become early movers in the fast-evolving energy transition segment. Private equity and infrastructure investors have long track records of doing this successfully to help accelerate growth.

But while private markets have grown significantly, they still have a long way to go. BloombergNEF estimates that achieving net zero by 2050 is a $200 trillion investment opportunity.[2] The opportunity for private capital lies in understanding the trend at a granular level and having the competence to develop and operationally improve companies. Undertaking this work will benefit private capital firms and their companies' valuations, improve the availability of scaled investment opportunities and deliver on society's broader decarbonization goals.

The key risk is effectively the inverse of that: not fully understanding the dynamics and developing the operational capabilities but rather approaching the transition purely from a financial mindset.

In working towards net zero, managers need to refine their investment themes and ongoing commercial sustainability work with companies to appropriately address the investment gap and benefit from sustainability tailwinds. This requires meaningful efforts to build a quantified business case, develop operational proof points and have a robust point of view on how sustainability can support the future growth plans of their company, while remaining close to its core business. Investors have many hidden jewels in their portfolios on which they have yet to capitalize in a strategic way. This risks leaving value on the table.

Firms in the private markets sector can demonstrate why a particular growth strategy within the energy transition environment could drive outsized returns for a company and its investors. Forward-looking management teams can work with sponsors to build a new market segment, move into a new area of business that a future investor would view as highly attractive or develop a potential platform that will be a category leader. Firms such as ours look for deals with those characteristics and believe that the appetite for them will continue to increase in the coming years.

There should be no question that the transition to net zero is one of the most important issues for society in the decades to come and, if well understood by investors, can create significant opportunities for value creation. In this context, what will set successful managers apart is the ambition and ability to develop companies and position them to play a meaningful part in the future economy, during and beyond private capital ownership.

Executive summary

Private markets hold great potential for unlocking value linked to sustainability and the energy transition.

Private markets energy transition funds and quantified top- and bottom-line sustainability value creation levers in private equity and infrastructure general partner (GP) portfolios have both grown and matured rapidly. Dedicated vehicles are being raised more quickly, and portfolio operations and sustainability teams inside many GPs are working together more than ever before.

However, some GPs struggle to develop sustainability and energy transition-focused investment themes for their flagship funds. In addition, because many have not tried in the past, some GPs face challenges executing on sustainability value creation initiatives with robust and quantified business cases for companies and tracking their implementation. This has implications for the whole investment life cycle, including exits.

The good news is that the industry can learn from the playbooks and capabilities that the GPs profiled here – and others – have built. GP sector investment teams can develop themes around sustainability tailwinds in a similar manner to the way in which they would approach other themes. The market analysis and insights work are the same. Many GPs already have the operating partners and associated capabilities to operationalize this work. They know how to partner with management teams to scale companies rapidly, reposition business models, enhance sales and marketing, optimize pricing and drive operational effectiveness. Much like other successful initiatives to unlock value in private markets, the key is creating the most effective structure with the right focus, people and resources.

It will be crucial for more GPs to see portfolio companies generate quick and medium-term wins focused on revenue growth via their sustainability efforts. Also vital is for them to increasingly develop investable proof points that are communicated and quantified as part of the equity story and realized at exit to support the maturing of the market. The substantial capabilities for value creation that sit inside private market GPs will be key to unlocking greater capital flows, and even more growth, from sustainability value creation in the future.

Introduction

Businesses advancing sustainability, circularity and the energy transition will benefit from partnering with private market investors.

> Combining governance and operational capabilities with capital for organic growth and growth via M&A, along with extensive transaction expertise, has made private markets a fertile ground for rapidly scaling new business models.

The private markets governance model – aligned incentives, strong management partnerships, effective boards and long-term investment horizons – has driven rapid company growth around the world.[3] GP portfolios' focus on commercial excellence, operational effectiveness, performance tracking and investor alignment leads to faster, more informed decision-making.[4] Combining those governance and operational capabilities with capital for organic growth and growth via M&A, along with extensive transaction expertise, has made private markets a fertile ground for rapidly scaling new business models. These capabilities are especially valuable for companies advancing the energy transition, the circular economy and nature-focused solutions, or those that could do this through near adjacencies. Investment in the energy transition hit a record $1.8 trillion in 2023, climbing 17% from a year earlier.[5] Private capital is increasingly playing a larger role in that total.

Until recently, sustainability considerations were not key purchasing criteria for most large corporate purchasers. New regulations, heightened investor scrutiny and rising customer demand for transparency and responsibility in supply chains has changed that. Amazon's *2024 State of Procurement Report* highlights that, "Despite the fact that nearly six in 10 respondents have mandates for sellers that follow sustainable practices – and many more would like to purchase from these sellers even if not required – 85% of respondents say the difficulty of sourcing suppliers who follow sustainable practices prevents their company from setting or achieving sustainability goals for procurement."[6]

Similarly, a recent Bain and Company report of 500 business-to-business (B2B) buyers and sellers found that sustainability is "now one of corporate buyers' top three purchasing criteria, and 36% say they would leave suppliers that don't meet sustainability expectations. Nearly 60% say they will be willing to do so three years from now." In addition, the report found, "nearly 50% [of corporate buyers] said they would pay a sustainability premium of 5% or more today, and they expect their willingness to pay to increase in the future … while 85% of suppliers say they embed some degree of sustainability in their products and services, only 27% consider themselves very knowledgeable about their customers' sustainability needs".[7] Private markets portfolio companies, supported by their GPs, are well positioned to meet this demand by integrating sustainability into their go-to-market strategies. Many are doing exactly that today and, in doing so, are expanding portfolio companies' total addressable market, pricing realization and customer share-of-wallet.

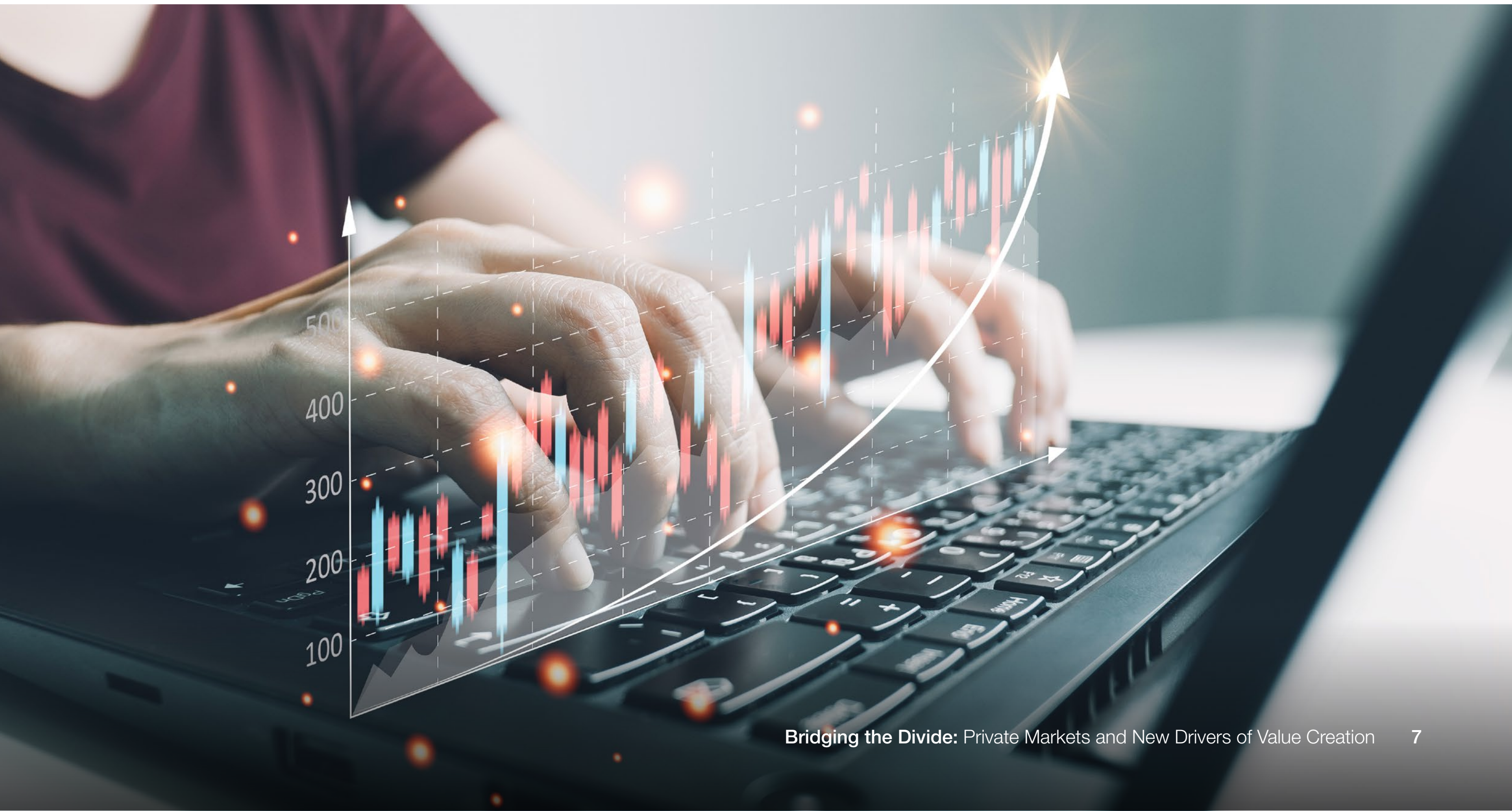
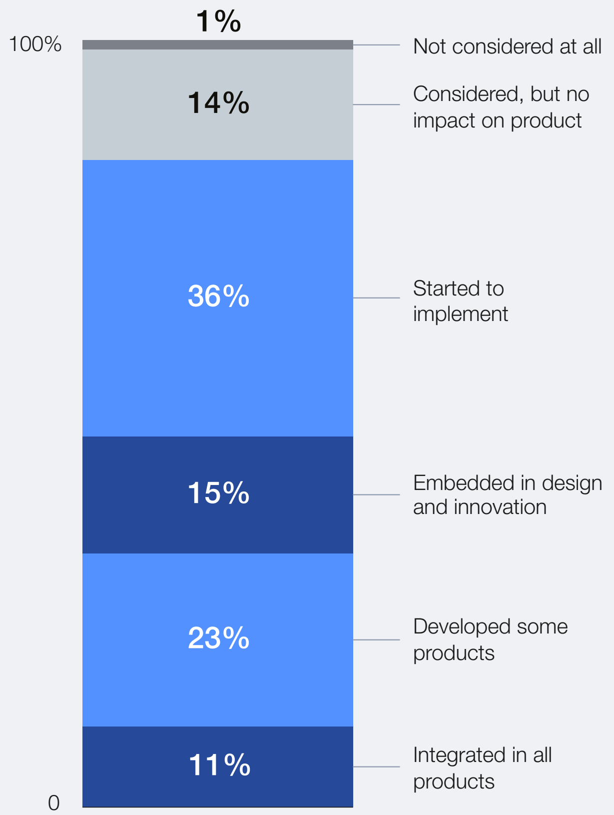
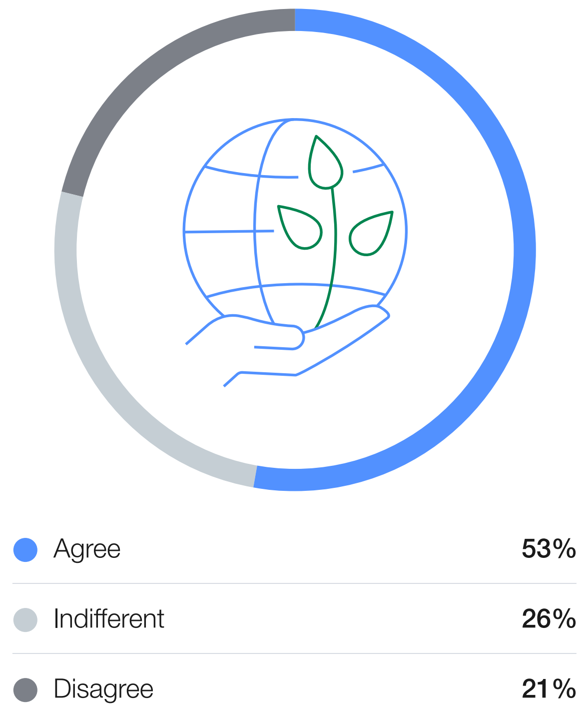


FIGURE 1 | **B2B suppliers are not consistently meeting their customers' sustainability needs**

85% of suppliers are embedding sustainability in their products and services to some extent ...



... but only about half of customers say sustainable options address all dimensions of their expectations



Note: Excludes "I don't know" responses.

Source: Bain & Company. (2024). *The visionary CEO's guide to sustainability 2024.* https://www.bain.com/globalassets/noindex/2024/bain_report_the_visionary_ceos_guide_to_sustainability-2024.pdf

The rise of large impact and energy transition funds has also introduced discerning new buyers with significant capital into the market. This has caught the attention of companies in traditional private equity and infrastructure portfolios looking to attract these investors and broaden their investor base.[8] In addition, GPs are increasingly investing in companies with sustainable business models, viewing this segment as attractive due to strong tailwinds and favourable exit dynamics. As a result, portfolio companies are collaborating with sponsors to build operational sustainability proof points, improve their marketing positioning and enhance their growth profiles at exit.

In response to these trends, many GPs have promoted collaboration between operating teams and sustainability professionals, developing playbooks to drive sustainability-driven value creation. They have created case studies and identified repeatable processes, showing that familiar value creation levers can be applied when working with a sustainability vision.

1 LP energy transition fund appetite and evolving value creation expectations

There is strong LP demand for funds focused on climate solutions and sustainability.

Significantly, a growing number of LPs are making their first or second commitments to energy transition funds, despite not yet forming dedicated sleeves, highlighting the industry's growth trajectory.

The continued need for collaboration among sustainability professionals and operating and investment teams is not only a market response but a response to clients as well. The surge in LP demand for energy transition funds is an accelerating trend. Since the 2023 World Economic Forum white paper *Private Markets Impact Investing: A Turning Point*, LPs have significantly increased their commitments to energy transition and climate solutions, marking a profound industry shift. The California Public Employees' Retirement System (CalPERS),[9] the New York State Common Retirement Fund,[10] the Oregon Public Employees Retirement Fund[11] and the Dutch pension fund APG[12] all announced significant new or increased commitments to sustainable investments in private markets in the past year. Other notable LPs that have publicly discussed climate investing allocations include the California State Teachers Retirement System (CalSTRS), the Canadian pension investment group CDPQ, the Border to Coast Pensions Partnership, the NN Group, PGGM, the Universities Superannuation Scheme (USS) and Public Sector Pension Investment (PSP), among many others.[13] Despite varying criteria among LPs for what constitutes an energy transition or climate solutions investment, demand for these fund products is clearly on the rise.

The industry is also seeing a meaningful increase in the number of LPs forming new energy transition and impact sleeves. More significant is the growing number of LPs making their first or second commitments to energy transition funds, despite not yet forming dedicated sleeves, highlighting the industry's growth trajectory. The most time-consuming step for LPs is making their first energy transition fund investment, due to extensive upfront research on the market, the wide range of fund offerings, risk/return profiles and other important criteria. After they cross that initial threshold, subsequent allocations become easier.

Active LPs in this space have also been seeing increased rigour and range of GP practices with regard to how they use portfolio operations teams to create value for companies with energy transition and climate offerings. According to Therése Lennehag, Head of ESG Advisory EMEA at the UBS Investment Bank, "The amount of capital and dedicated funds available in public and private markets for these kinds of investments has grown tremendously since 2021. The sophistication level of these investors, and their demands for transparency and quantified commercial impact business cases paired with the equity narrative, has also increased."[14]

Many LPs are observing how GPs use commercial acceleration and GTM capabilities to highlight companies' sustainability profiles. They are increasingly focusing on how GPs quantify the business case for sustainability in value creation plans, ensuring companies practise what they preach on sustainability and decarbonization. The Institutional Limited Partners Association also recently updated its GP ESG Assessment Framework, codifying many of these GP practices into the industry standard for how LPs assess GPs[15] and released a handbook for LPs that are newer to decarbonization-focused GP engagement and monitoring.[16]

As Lennehag of UBS observes, "Many impact and energy transition investors are not only selling superior risk-adjusted returns to their clients. They are also selling environmental and social outcomes alongside those returns, and they need to demonstrate this credibly to their clients. So companies need to be able to demonstrate that their offerings are not just making carbon reduction as an example; they need to have the life-cycle assessment and other data to support their claims and support alignment to sustainable finance taxonomies. Investors and their buy-side bankers engage with this data and evaluate it extensively when conducting due diligence. There needs to be substance."[17]

Sophisticated energy transition GPs are leading the way in driving sustainable revenue in key sectors, showing how the private markets governance model and portfolio operations teams can accelerate and scale companies' opportunity capture from the transition to a lower-carbon economy.

CASE STUDY 1

AP6

AP6 (the Sixth Swedish National Pension Fund) has taken note of the substantial development of private equity impact and energy transition investment opportunities over the past few years. This is the background to AP6's recent detailed study of the private equity impact market, which concluded that tailwinds in many different markets are apparent. As part of the study, AP6 spoke to many LPs around the world about their approaches and views of this market. While many of the LPs that have been investing in these funds for some time have firm views on metrics they like to see and definitions of different types of impacts and energy transition outcomes, at a market level there is still some confusion and a lack of clarity yet to be addressed on both the LP and GP sides.

Based on conversations with LPs, AP6 estimates that for every LP investing in these funds today there are 10 who are taking a "wait-and-see" approach. While many LPs may have investments in impact or energy transition funds today, their allocations to those funds may not have been made as part of a direct commitment to investing a certain amount of capital into funds with such specific characteristics. Most LPs favour an "opportunistic" investment strategy when it comes to impact, with inherent flexibility.

While some funds in the impact and energy transition space are on Fund II or Fund III, many are still at Fund I stage. Looking ahead, AP6 believes that as these funds build up track records over 10–20 years, there will be more fund capacity, and as GPs continue to raise and deploy capital, more LPs will begin allocating more to such strategies, whether as part of a dedicated allocation or through an opportunistic approach. In addition, as LPs begin to express more interest in these funds, ask difficult questions, scrutinize methodologies and results and ultimately develop conviction, the market will mature even further. These developments should lead to more impact and energy transition outcomes over the coming decade. Considering the underlying megatrend of sustainable transition, opportunities to create financial performance should be ample.

AP6 notes that the vast majority of GPs raising funds are highly committed to the quality of their impact and energy transition funds, and this shows in their investment processes. Impact and energy transition investing is complicated. It requires established GPs to have more of a commitment and to collect more data than any traditional buyout or growth equity fund to establish the requisite credibility and successfully raise capital. AP6 is less concerned about greenwashing in that context – although there is always a risk of greenwashing, just as there is a risk of overmarketing investment products in general. What is important for AP6 in relation to due diligence of impact and energy transition investment opportunities is to understand the impact proposition. This is in addition to standard commercial, financial, legal, operational and environmental, social and governance (ESG) due diligence – developing the conviction that the GP is going to drive impact and energy transition outcomes in a way that AP6 can understand and agree on in the future. In AP6's words, they should tinker with the concept of "impact quality", including clear methodology and process as well as measurable impact outcomes, and any investment in impact would have similar or higher return expectations as the primary objective of the state pension fund to create long-term high returns for the Swedish pension system.

In the past couple of years, AP6 has also observed that more traditional private equity GPs are investing every year in companies with impact and energy transition tailwinds associated with them in their fund platforms because they are attractive investments with strong secular benefits supporting them. As a result, LPs will gain more exposure to these types of investments and are increasingly likely to see the benefit of having this kind of exposure in the future, whether as part of their traditional flagship funds or through dedicated vehicles.

CASE STUDY 2

New York City pension funds

After setting and achieving an initial target for doubling climate solutions investments by 2021, the five New York City pension funds increased their ambition with an aim to invest $50 billion in climate solutions by 2035. Three of the pension funds (Teachers' Retirement System of the City of New York [TRS], the New York City Employees' Retirement System [NYCERS] and the Board of Education Retirement System [BERS], collectively "the systems") adopted goals in 2021 to achieve net-zero emissions throughout their portfolios by 2040 and formally incorporated their climate solutions investment goals in these plans. As part of the work they have been doing in private markets, the systems continue to explore prudent climate solution opportunities, including funds that involve exposure to climate solutions within their strategies as well as thematic energy transition funds. They have even begun to evaluate re-ups to GP energy transition funds where they had allocated to the first fund in the series.

In addition, the systems have set an aspirational goal for 100% of new private funds by 2025 (NYCERS and BERS) or 2026 (TRS) having net-zero goals, science-based targets or other appropriate decarbonization goals. The systems have begun monitoring progress of GPs in this area more closely over the past two years. They will be sharing with system trustees how each manager is continuing to increase their maturity and sophistication vis-à-vis climate change.

The systems will be conducting discrete ongoing engagement with GPs to ensure continued progress. While some North American GPs have not been making public statements of commitment, TRS, NYCERS and BERS have seen progress, willingness and work being done by US-based GPs to increase their integration of climate considerations into their investment process.

The systems have seen first-hand how GPs are creating decarbonization playbooks and developing the internal capabilities to work systematically with portfolio companies on decarbonization roadmapping, target-setting and driving top- and bottom-line growth at company level. The systems have heard from GPs that portfolio company customers continue to drive more awareness and ambition from companies and that more companies are seeing the commercial benefits of decarbonization. The systems are also seeing GPs' efforts to drive additional value from company decarbonization work when they look to exit investments.

As the systems continue to act with their GPs to prudently increase their ambition related to climate, the systems expect to see GPs in their manager base as well as the broader market continue to mature in this area. The number of scaled climate solutions fund products with track records throughout private markets asset classes will also provide the systems with more opportunity to allocate capital as they work towards achieving their 2035 climate solutions investment goals.

CASE STUDY 3

The Washington State Investment Board

The Washington State Investment Board (WSIB)'s investment approach to the energy transition has evolved over the past few years. While the fund does not have a formal target allocation level that it needs to hit, it remains bullish on the tailwinds and associated risk/return profiles of many energy transition-focused funds. The fund is also observing an increase in opportunities to invest in companies that aid in global decarbonization through funds not specifically labelled as transition or impact funds. Private equity-backed energy transition funds have been growing in size and quality in recent years. In 2023, the fund committed more than $1 billion to impact and energy transition funds.

The fund has been particularly attracted to industrial decarbonization and broader brown-to-green strategies, driven by its strong belief in their potential. These opportunities allow the fund to allocate to funds that "go where the emissions are" and where the most attractive risk-adjusted returns can be achieved. The fund's confidence is further bolstered by the presence of GPs with strong portfolio operations and value creation capabilities, which are particularly well positioned to drive transformational change, given the benefits of the private markets business model. The WSIB believes that funds in these strategies are best positioned to capture higher multiples at exit.

The fund sees its GPs doing catalytic decarbonization work and making meaningful changes to the business models and revenue mixes of those brown-to-green assets while proactively managing negative ESG externalities. This level of transformation is far more challenging to achieve in public markets where the fund has less influence. This is part of the inherent attractiveness and value proposition that private market GPs bring to drive the scale and velocity needed to meet the challenge of the energy transition.

Rather than build out a separate team focused on climate-related investments, the WSIB has been focused on providing all investment staff with the education and training needed to assess GPs' and funds' approach to the energy transition, including which transition themes are most compelling from an investment perspective. Formal sustainability education sessions are offered quarterly and required for investment staff. The WSIB has also built out an ESG Learning Library with a resource section dedicated to climate.

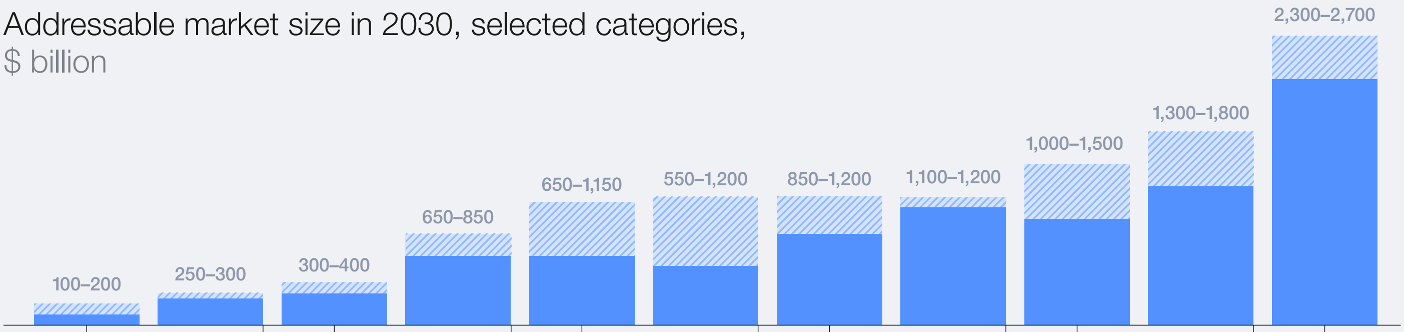
2 Financial and energy transition outcomes and value creation levers

Capital and operating capabilities are funding and accelerating sustainability-driven business transformations that deliver commercial success.

While energy transition investing via dedicated vehicles is still relatively new, it is rapidly gaining traction.[18] This also applies to theme development paired with sustainability and decarbonization value creation. A recent McKinsey analysis shows that "growing demand for net-zero offerings could generate more than $12 trillion of annual sales by 2030".[19]

FIGURE 2 **Eleven high-potential value pools that could have a yearly revenue of more than $12 trillion by 2030**

Addressable market size in 2030, selected categories, $ billion



Industrials
- Steel
- Aluminium
- Cement
- Mining
- Chemicals

Hydrogen
- Production
- Transmission
- End use

Agriculture and land use
- Land and forest management
- Agricultural production
- Alternative proteins
- Food waste reduction
- Sustainable agricultural inputs
- Sustainable agricultural equipment

Water
- Municipal water supply
- Industrial water supply

Buildings
- Sustainable design, engineering and construction advisory
- Green building materials
- High-efficiency equipment
- Green building tech/operations

Carbon management
- Carbon capture, utilization and storage
- Carbon-offset markets
- Carbon tracking and measurement

Waste
- Enablers of materials reuse
- Industrial- and mature-materials processing
- Materials-processing innovation

Oil, gas and fuels
- Electrification of upstream and downstream
- Efficiency improvements
- Direct emissions elimination
- Sustainable fuels

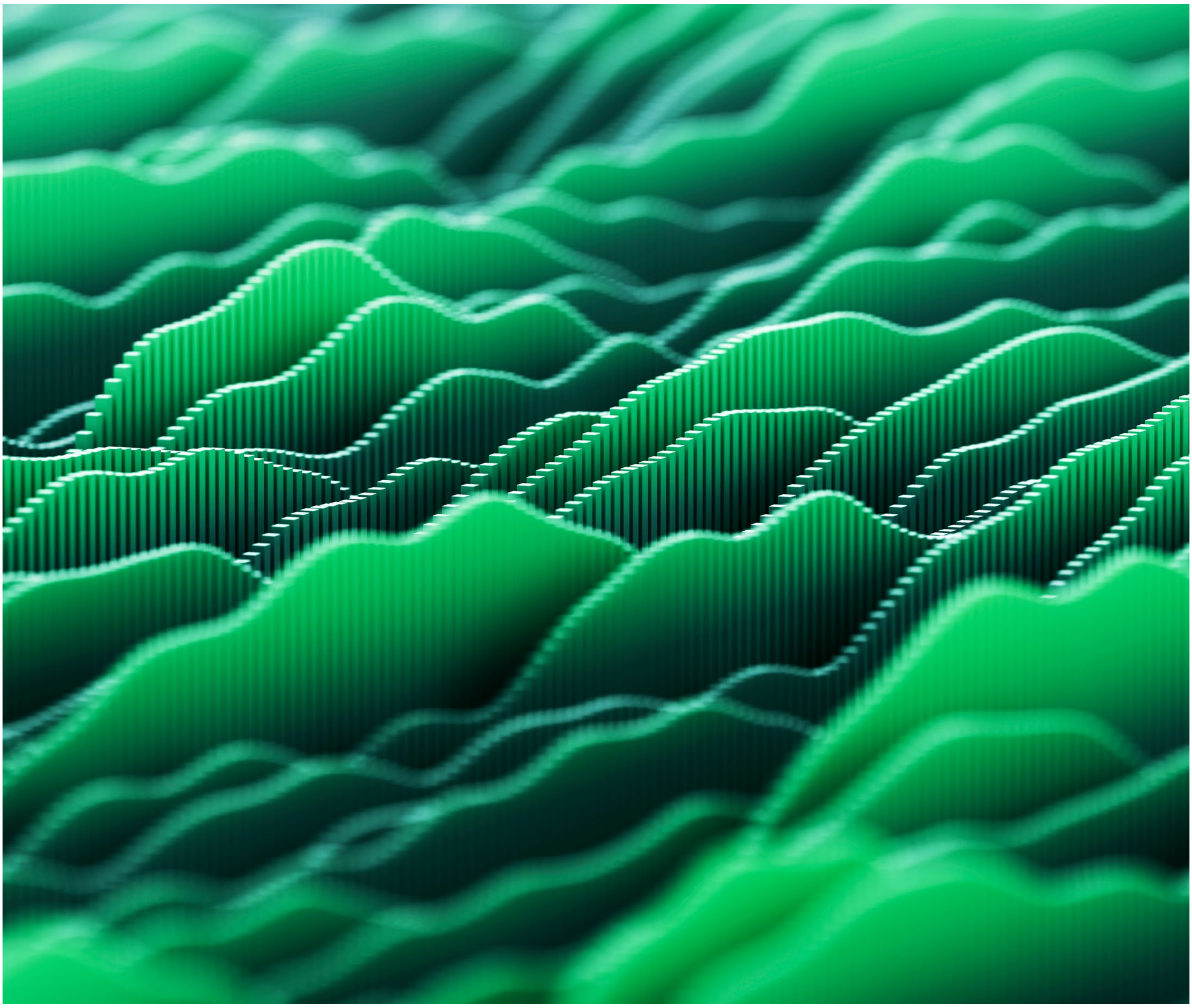
Consumer
- Consumer electronics
- Sustainable packaging
- Sustainable fashion

Power
- Renewable-power generation
- Grid modernization and resiliency
- Flexibility and energy storage
- Power system tech and analytics
- Decommissioning and thermal conversion

Transport
- Electrification
- Micromobility
- Infrastructure for electric vehicles
- Sustainable aviation

Note: Preliminary, not exhaustive.

Source: McKinsey Sustainability. (2022, April 13). *Playing offense to create value in the net-zero transition*. https://www.mckinsey.com/capabilities/sustainability/our-insights/playing-offense-to-create-value-in-the-net-zero-transition



Leading energy transition investors support companies with new product launches, better customer segmentation, pricing optimization to capture sustainability premiums, market expansion, access to talent and brand repositioning.

Leading energy transition investors have seasoned portfolio operations teams with a strong track record in driving commercial excellence. They support companies with new product launches, better customer segmentation, pricing optimization to capture sustainability premiums, market expansion, access to talent and brand repositioning.[20] They have also supported environments in which operations teams and sustainability teams work hand in hand on these topics. According to Maximilian Meyer, Executive Director in J.P. Morgan's Sustainable Solutions Group, "The market analysis, pricing studies and customer insights work we have seen around customer willingness to pay a sustainability premium has been evolving rapidly over the last few years. The tide has been shifting. The market studies we have seen, within a growing list of sectors and customer end markets, have shifted as customer commitments take hold and get closer to 2030 targets."[21]

GP portfolio operations teams spearheading this work are also expected to continue to grow in size and importance in the coming years, with sustainability identified by GPs as a key area for growth and capacity-building.[22] Given how GPs scale companies via M&A, they can unlock opportunities that may be harder for strategic acquirers to execute. A recent BCG analysis found that green M&A creates incrementally more value than non-green M&A. "The median of environmental-related transactions is significantly higher than that of nongreen deals. And over the longer term, the median two-year Relative Total Shareholder Return of green deals exceeds that of nongreen deals."[23]

Many GPs proactively seek out companies for sustainability-driven transformations, presenting management teams with quantified business cases early in due diligence to enhance business models and drive revenue from sustainable, circular or nature-focused offerings. A number of large GPs in North America and Europe, via the Private Equity Sustainable Markets Initiative, recently released industry guidance on doing exactly that, entitled "Valuing Carbon Pre-Investment". It included information on how to assess the potential to enhance business models and offer more decarbonized products and services.[24]

FIGURE 3 **Building on the Private Equity Taskforce of the Sustainable Markets Initiative (PESMIT)'s existing carbon valuation framework with practical guidance**

Overview: Carbon valuation framework components

Carbon-adjusted cash flows	A	Regulated carbon costs	Costs imposed by regulation on a specific sector in a geography that result in actual cash outflow (e.g. via ETS, carbon tax)	Regulated price x Relevant asset-level emissions
Carbon-adjusted cash flows	B	Internal carbon costs	Self-imposed costs based on self-assessed view of carbon prices (e.g. price set by firm or portfolio company to achieve net-zero targets)	Internal carbon price x Relevant asset-level emissions
Carbon-adjusted cash flows	C	Indirect carbon impacts	Incremental costs or benefits incurred as a result of the relative carbon footprint, can be driven by revenue (e.g. higher/lower customer demand) or costs (e.g. higher/lower financing costs)	Revenue impact + Cost impact
Carbon-adjusted cash flows	D	Decarbonization value creation	Reduction in regulated and internal carbon costs and increase in indirect carbon benefits from pursuing decarbonization actions (e.g. adding solar to reduce footprint)	A + B + C
Carbon-adjusted multiple	E	Carbon-adjusted multiple	Self-imposed adjustment in valuation multiple at exit when exit EBITDA does not reflect carbon-related future growth and earnings risk (e.g. future carbon prices/decarbonization strategy not reflected), based on self-assessed view of the specific context of a given business and its environment	

Extended carbon valuation framework components

C1	Decarbonization costs/saving	CAPEX of reduction – OPEX reduction
C2	Voluntary carbon costs[1]	Price of carbon credit x Residual asset-level emissions
C3	Sustainability-linked financial instruments	Interest expense for traditional financial instruments – Interest expense for sustainability-linked financial instruments
C4	Sustainable growth	Consider impact of not meeting customer climate demands and review integration of sustainable growth options into value creation planning during the hold period

A–E: Existing PESMIT valuation components

C 1–4: Existing PESMIT valuation components

Note: 1. Costs to address the impact of a company's unabated emissions, by investing in high-quality carbon credit portfolios that are aligned with their short- and long-term mitigation strategies. Firms can decide whether, and the extent to which, they might participate in the voluntary carbon markets, i.e. non-regulated carbon markets, as part of their overall decarbonization approach.

Source: ERM. Sustainability Markets Initiative. (2024). *Valuing carbon pre-investment. Private Equity Sustainable Markets Initiative (PESMIT).* https://www.erm.com/globalassets/insights/pesmit-playbook-2024---v6.pdf

In addition, according to Meyer of J.P. Morgan, “The rise in fundraising for private markets climate and impact funds has been accelerating substantially. At the same time, there are also GPs who do not currently have dedicated vehicles but are nevertheless targeting and prioritizing investments in businesses with aligned business models or more sustainable products and services across different sector teams and themes. They are making those investments out of their flagship funds and are undertaking similar work during ownership and in the run-up to exit and other sell-side transactions. Those GPs are proactively targeting these types of companies given the powerful tailwinds behind sustainability and decarbonization.”[25]

CASE STUDY 4

TPG

When TPG was launching its TPG Rise Climate fund, the leadership deliberately structured a suite of value creation capabilities that would uniquely support Rise Climate companies. They carefully assessed the skills and initiatives that would be most beneficial for companies in the Rise Climate portfolio. On the basis of experience gained from pioneering private equity impact investing, TPG understood that these companies would share growth characteristics and company stage with those in their TPG Growth (growth equity) and TPG Capital (private equity/buyout) portfolios. However, it also recognized that many companies in which it would be investing would be more operationally complex, have even more robust capital needs in some cases and might not be profitable at entry.

TPG has had a portfolio operations group for more than three decades; it is one of the longest-tenured teams in the industry. The firm has a long track record and set of capabilities that it brings to portfolio companies in partnership with management teams across the TPG platform. Those capabilities help portfolio companies with GTM and salesforce effectiveness, pricing, customer insights and segmentation, digital transformation, brand and communications, human capital, operational effectiveness, international expansion, procurement, material ESG considerations and M&A and capital markets expertise, among other areas.

Companies are often attracted to Rise Climate’s capital because of the business-building capabilities that come along with it, as well as the expertise, guidance and support from the TPG Ops team to capture the green premiums customers are willing to pay for existing or new products and services they are taking to market. They may need support to shift their business models and understand customer pain points; to better map the entire customer journey from top-of-funnel through to cross-sells and renewals; and to enter new markets and deeply understand customer decarbonization-focused purchasing criteria so they can capture greater share-of-wallet from existing customers and win new customers. TPG works with its companies to undertake marketing, research and development (R&D), market and pricing studies, fast market experiments and articulation of the customer value proposition for these new climate solutions to ensure they can be successful in the market quickly and sustainably.

The firm has also brought its expertise to bear to accelerate and unlock more significant decarbonization across its Rise Climate portfolio through its experience with carve-outs and other complex transactions. It has a long track record of working with large corporates around the world to either carve out divisions completely or partner with those corporates to spin out and scale these standalone decarbonization companies jointly.

TPG can provide similar expertise in other complex transactions involving transformative M&A, take-privates or setting up and scaling of brand-new platforms. In those contexts, the firm looks to take advantage of, for example, the sustainability profiles and strengths of two merged businesses to drive synergies and make the most of the company’s new decarbonization value proposition in the market. They do this by driving cross-sells and up-sells throughout the new combined company’s existing customer base and capturing the white-space opportunities that these types of transactions can unlock.

As part of company exit preparations, TPG Rise Climate has already seen this play out in past exits. The firm and the management teams have made concerted efforts to ensure that sustainability is at the core of each company’s equity story. The firm plans to do the same for other businesses in the portfolio, whether the exits are via an initial public offering (IPO) or an auction process for strategic and financial buyers. It has seen the business environment mature and the capital available for these opportunities grow exponentially. Companies now need to go much further than they would have done five years ago to ensure they are optimally positioned to meet the investment criteria of this fast-growing pool of potential buyers. TPG’s capital markets team is working with companies to ensure their sustainability and decarbonization-focused equity stories are optimally positioned and communicated to those buyers with the quantified operational and commercial proof points front and centre.

As the firm raises its second Rise Climate fund and its new Transition Infrastructure fund – which will take advantage of and add to the same portfolio operation’s business-building capabilities – and more of the initial Rise Climate Fund I companies approach the end of their hold periods, TPG sees these trends continuing to accelerate in the coming years as the energy transition sector evolves and matures.

CASE STUDY 5

EQT

Climate-related opportunities are an important investment theme at EQT, ranging from early-stage ventures to scale-up and large buyouts through its infrastructure and private capital strategies.

EQT aims to help strong companies address environmental challenges by growing them, improving their operations and offering relevant solutions through portfolio companies' products and services. The firm has validated science-based targets for 44 portfolio companies, corresponding to 57% of its invested equity, and its infrastructure business has invested more than €12 billion ($13.4 billion) in the energy transition to date, including in the energy and environmental sectors, as well as transport investments with a significant decarbonization angle.

Owing to its industrial heritage, since its inception EQT has focused on investing in businesses that it can develop from a commercial and operational perspective. Across its infrastructure and private capital strategies, it has focused on commercial excellence, high-quality procurement, digital transformation, capital expenditure (capex) efficiency, talent management, cost management and other critical asset management functional disciplines.

As part of its objective to future-proof companies and help them achieve overall commercial and operational excellence, operational sustainability has proven to be a successful strategy. Companies with a strong sustainability value proposition have the potential to attract premium valuations, create fundamentally stronger equity stories and drive more successful exits. Over the past years, EQT has continued to build its sustainability capabilities – the firm's extensive front-end work in developing sustainability themes and value drivers within its investment segments has allowed it to be on the front foot, identifying potential winners and disruptors within specific industry subsegments. EQT programmatically assesses its portfolio companies to identify, quantify the potential and accelerate the maturity and performance of its sustainable operations, as well as to target growth of sustainable revenue streams throughout its entire portfolio, seeking to ensure a robust future growth trajectory.

EQT aims to bring quantified commercial insights and capabilities to management teams at the outset of the due diligence process of a potential acquisition. When a company is acquired, EQT works with the management team to develop full potential plans (FPPs), in which it aims to integrate sustainability workstreams and transformational key performance indicators (KPIs) alongside the other key commercial or operational value creation opportunities.

The firm will evaluate the upside of sustainability to improve the business model and outlook of its portfolio companies. For example, many cases in the infrastructure portfolio see the FPP anchored on a sustainable transformation of the entire company as a core part of the business model.

This frequently means building high-quality capabilities to win tenders or contracts where there is customer willingness to pay for more decarbonized or sustainable products or services. The firm works with the management teams to build world-class sales, pricing and marketing and bids teams to work alongside technical and procurement teams.

The work can also take the form of improving broader GTM efforts, repositioning companies from a brand and communications perspective, running sustainability marketing campaigns to raise greater awareness or refining their approach to community and government relations.

In other instances, EQT's work will be more specific to one or more products and services within a broader suite of offerings that could be made more sustainable or decarbonized. There are also instances in which a company has a strong sustainability or decarbonization programme but needs support to commercialize it with its customers.

A great deal of change management is associated with these sustainability transformations and commercial and operational accelerations. That is why EQT brings advisers from its 600+ network with relevant industry backgrounds from C-suite positions onto its companies' boards. These advisers understand the most important end markets, given their prior operating experiences, how customers are evolving their purchasing criteria with regard to key sustainability preferences and what it takes to implement the initiatives necessary to drive that change.

Lastly, EQT has been refining its process for preparing companies for exit from a sustainability perspective. It spends more time framing up the sustainability opportunity for each business, including how the new owner can build on the progress made during the company's next phase of growth. Businesses with further potential in sustainable value creation are better positioned to attract a wider pool of potential buyers.

It is this ambition to develop companies and position them to play a meaningful part in the future economy, during and beyond its ownership, that EQT believes will continue to set it apart.

CASE STUDY 6

Permira

Permira has a history of around 40 years of backing secular growth trends. In line with this, the firm has increased its climate investing activities within climate and built a team to invest throughout the climate transition value chain. While the need to deliver global net zero by 2050 goals equates to annual spending of around $3.5 trillion,[26] climate transition as an industry is still relatively nascent. As such, climate-focused companies require both capital and value creation expertise to aid in accelerating this transition.

Much of what companies in this industry need aligns with Permira's reputation for being growth investors at scale. The firm's history of making the most of its resources and the expertise of its senior advisers, operating partners and dedicated value creation team to help its portfolio companies' management teams drive growth, positions the firm well to be a partner of choice for many climate transition businesses. As with each investment the firm's funds make, a detailed and expansive value creation plan for these businesses would be a key driver of growth. For climate more specifically, several important value creation levers can be drawn upon.

First, investing in operations to enhance product offerings and drive efficiencies for these climate transition businesses is key. This includes implementing new systems and processes, further technical enablement and digital transformation, maturing GTM approaches, refining customer segmentation and pricing, marketing effectiveness initiatives and enhancing/growing a company's sales and marketing functions. These measures, deployed in partnership with management teams, are critical foundations for investments that Permira seeks to back in the climate sector.

Second is to globalize portfolio companies. With a global presence, Permira is a proven partner in helping businesses bring their innovative products and services to more markets worldwide. Many businesses in climate transition industries rely on global value chains and need to expand internationally. For example, if a company is based in Europe and wants to expand into North America, Permira can make use of its global platform and network to help with go-to-market initiatives, enabling revenue growth in markets where a company might be underpenetrated.

Third is a critical focus on access to talent. Some climate transition sub-industries are facing acute talent shortages. Permira can help its portfolio companies access and create incentives for talent in a more strategic way, allowing them to establish themselves as employers of choice. Attracting and retaining top talent ensures that employees can be part of a company that is contributing meaningfully to the climate transition.

These value creation levers, and others, need to be sequenced and considered in the context of the typical private equity investment period. The first year of an investment is one of the most important in setting the new trajectory of these businesses. Permira works closely with its management teams pre-investment and in the first few months post-investment to determine what is achievable before putting the value creation plan into action over the long term.

As Permira partners with climate transition businesses, the value creation capabilities and resources that the firm can deploy will be crucial for delivering outperformance and ensuring those companies will help accelerate the energy transition in the years ahead.

3 Private equity: A detailed study

Private equity plays an important role in refashioning and scaling companies to meet the decarbonization and climate change challenge.

By aligning business models with climate transition and decarbonization goals, GPs help portfolio companies achieve rapid growth, maximizing returns and accelerating the energy transition.

From the initial stages of an investment, many energy transition GPs align portfolio companies' strategies with commercial sustainability and decarbonization objectives, working with management to identify growth opportunities and develop aligned value creation plans. In carve-out transactions or transformative M&A, they can transform under-resourced divisions into decarbonization-first companies and scale new energy platforms quickly. They can also use their network of operating partners and senior advisers, including former CEOs and functional experts in areas such as commercial excellence, operations, supply chains, human capital and sales and marketing.[27]

By aligning business models with climate transition and decarbonization goals, GPs help portfolio companies achieve rapid growth, maximizing returns and accelerating the energy transition.

Through dedicated vehicles as well as theme development within flagship funds, they gain an edge compared to peers in sourcing transactions and seizing opportunities that their competitors may miss. Important value creation levers include professionalizing companies for growth through digital transformation, refined customer segmentation and ideal customer profiles, pricing strategies for capturing sustainability premiums and better structuring sales organizations.[28] These measures lay a strong foundation for growth and decarbonization, helping portfolio companies capture more customer share-of-wallet. Additionally, bringing in operating experts also allows for better human capital management at portfolio company level, enabling businesses to scale their commercial and support functions with the right talent to drive profitable growth and attract future investment.[29]

According to Oracle, "70% of people would be willing to cancel their relationship with a brand that does not take sustainability and social initiatives seriously."

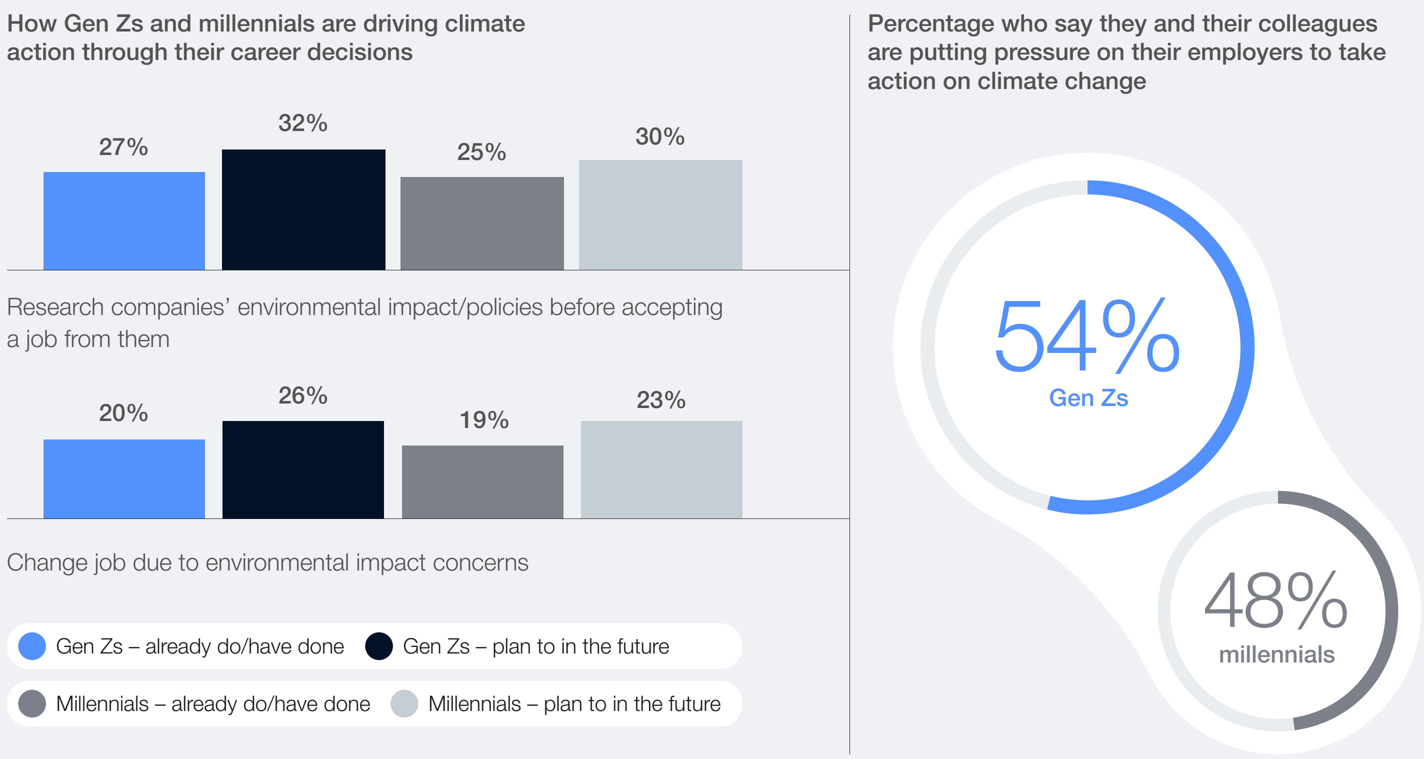
A well-structured GTM strategy is essential for success. GPs work closely with companies to ensure they are recognized for meeting and addressing customer pain points. This includes upskilling sales, marketing and customer success teams to better sell their company's sustainability value proposition and make use of data for insights that can be put into practice and then inform product roadmaps. These insights can unlock additional operational and supply-chain opportunities and investment, further driving sales of more sustainable offerings. GPs can support with upskilling different business function leads, from sales and marketing to procurement to engineering and R&D.

As Lennehag of UBS points out, "When we and our GP clients evaluate the results of commercial market studies on the buy-side or prepare for the sell-side, we seek to understand the customer personas and groups surveyed – are these buying behaviours that are likely to shift as new product information comes to fore? How is this likely to affect the sustainability premiums implied? If companies can come to their bankers with the commercial insights, quantified business case and revenue and EBITDA growth plans paired with compelling use of proceeds to make that connection for buy-side investors to get them excited, they can more credibly earn that sustainability market premium."[30] By tackling the focus on decarbonizing operations and driving environmental and social improvements in the supply chain, while simultaneously refining a company's GTM motion, GPs are able to help a portfolio company better communicate the value of its sustainable solutions to current and potential customers and future investors.

These efforts are often paired with brand positioning work to highlight each company's sustainability value proposition, increasing customer loyalty and preference. According to Oracle, "70% of people would be willing to cancel their relationship with a brand that does not take sustainability and social initiatives seriously and 69% would even leave their current company to work for a brand that places a greater focus on these efforts."[31] Aligning business models and GTM strategies with customers' decarbonization needs positions these companies to thrive in a market with growing demand for sustainable solutions.

Talent acquisition is also crucial as companies grow. GPs help companies attract top talent by using their senior executive networks between industries. A recent Deloitte survey found that, "Two in 10 Gen Zs and millennials have already changed jobs or industries due to environmental concerns, and another 26% of Gen Zs and 23% of millennials plan to in the future … And 72% of Gen Zs and 71% of millennials say environmental credentials and policies are important when considering a potential employer."[32] To that end, GP human capital operating partners are increasingly working with company talent teams to harness sustainability stories to boost employee engagement and attract and retain talent.

FIGURE 4 **How Gen Zs' and millennials' career decisions drive climate action**



Source: Deloitte. (2024). *2024 Gen Z and millennial survey*. https://www.deloitte.com/content/dam/assets-shared/docs/campaigns/2024/deloitte-2024-genz-millennial-survey.pdf?dlva=1

Lastly, exit planning is a priority for GPs, with theses developed early in due diligence. GPs with energy transition funds continually assess and prepare portfolio companies for exit by building strong sustainability equity stories and ensuring market-ready quantification of sustainability outcomes. They provide operational proof points to support the product benefits communicated to customers and potential investors. As Meyer of J.P. Morgan notes, "Many GPs are now proactively working with companies 12–18 months or more ahead of an exit to develop the commercial, brand and operational proof points around the sustainability characteristics of their companies to attract impact and energy transition funds and discerning traditional funds targeting these investments. For companies that need to do more robust work around their business model or launch new or more sustainable products and services, this work needs to start even earlier for it to be meaningful and to attract this wider universe of buyers."[33] By positioning companies to appeal to a broad range of buyers, including impact and energy transition-focused GPs, sponsors can maximize interest and attract higher bids.[34]

FIGURE 5 **Drivers of impact**

Source: Harvard Law School Forum on Corporate Governance. (2023, June 20). *Alpha in impact: Strengthening outcomes.* https://corpgov.law.harvard.edu/2023/06/20/alpha-in-impact-strengthening-outcomes/

Lennehag of UBS also makes the point that "When GP portfolio companies are preparing for an exit, whether in the run-up to an IPO or getting ready for an auction, they should prepare for the next generation of capital that is seeking to invest in more sustainable, circular, energy transition and nature-focused products and services. Companies should look to attract the widest pool of buyers, whether that is private markets impact and energy transition funds, strategics looking to bolster the sustainability profile or public equity investors."[35] Careful exit planning can help maximize returns and demonstrate to future investors how a company's sustainability features can drive its next phase of growth.

CASE STUDY 7

General Atlantic/BeyondNetZero

BeyondNetZero (GA BnZ), is General Atlantic (GA)'s climate growth equity strategy, which sees it partnering with businesses that are accelerating solutions for the net-zero transition. Launched in 2021, GA BnZ targets the funding gap that climate and decarbonization technology start-ups face when scaling up. Venture capital (VC) cannot always take proven technologies to scale, since these often need growth capital to bolster commercialization. This funding gap for companies, from climate technology to infrastructure, means GA BnZ has wide-ranging opportunities to help businesses make progress in the climate transition.

With GA's experience in rapidly scaling growth companies for four and a half decades, GA BnZ has the platform, capabilities and resources to enable its portfolio companies to achieve global scale and, ultimately, realize a global impact.

Every company in which the fund invests requires different value creation triggers and engagements for durable growth. GA BnZ companies can access to the full range of value creation resources and tools developed by GA's growth acceleration, capital markets, human capital and sustainability teams, comprising more than 70 dedicated professionals globally. These teams hold more than 1,000 meetings annually to support growth companies as they scale in areas including pricing strategy, GTM, talent acquisition, carbon footprinting and sustainability governance.

Commercial acceleration capabilities for the portfolio, and how to optimize them, are of particular important for GA and critical to the growth of its energy transition-focused businesses. The company uses its expertise in digital and online marketing to aid in areas such as accessing new customers, sales and client success, and providing data-driven insights that help companies to expand their business models. The firm also works with management teams in this context to conduct market studies, analyse the voice of the customer and customer insights, conduct pricing studies, refine personas and ideal customer profiles, and understand how companies can leverage those insights for customer success and to drive marketing strategies.

In terms of the energy transition, GA evaluates decarbonization goals, product functionalities and the existing or target customer segments' willingness to pay for more sustainable or decarbonized products and services.

Identifying and bringing in the right talent is also critical for a company's efficiencies and scale. As it progresses through rapid growth earlier in its life cycle, an organization can become misaligned. GA supports the build-out of mid- to senior-level positions at a company through its human capital capabilities. Drawing on a global talent bank of nearly 10,000 people – including a network of successful entrepreneurs, senior leaders, operating partners and board members – GA takes a global talent perspective to identify candidates who bring the right expertise to support growth companies.

GA also brings systematic M&A capabilities to its portfolio companies. The firm's capital markets team is dedicated to exploring how GA BnZ companies can use inorganic growth to scale their business models. GA helps companies consolidate assets in their market and anticipates how business models might evolve. In many cases, this involves horizon scanning to assess nascent technologies that will be essential to the energy transition down the line. This capability is also applied when companies enter new markets and geographies. GA's experience and resources around the world can enable that expansion, bringing more decarbonization solutions to more customers in different regions.

GA BnZ partners with its companies to optimize them ahead of an eventual exit. As a growth equity strategy, GA BnZ's long-term partnership and patient capital model helps companies realize their potential ahead of important liquidity events.

IPOs have historically been an important exit path for GA portfolio companies given their growth orientation, and the firm brings its capital markets experience to build a strong equity story and meet the broader sustainability expectations of public market investors. GA BnZ also looks to attract the widest pool of sponsors and strategic investors, including impact and energy transition GPs. It has seen that investors can be willing to pay a premium for companies with proven green technologies and profitable business models. One of the main benefits of tying the sustainability and energy transition features to the company's broader equity story is that it tends to attract investors interested in supporting that story, keeping the company focused on its early goals even when it transitions to a public company.

The GA BnZ team sees an unprecedented market opportunity in the global energy transition. Market studies have shown that 80% of the technologies the world needs to reach net zero by 2050 already exist, but only around 10% are currently commercially available.[36] If private markets investors such as GA BnZ can successfully and rapidly scale businesses in their portfolios, they will have an outsized impact on driving emissions reductions.

CASE STUDY 8

Tikehau Capital

Tikehau Capital launched its first private equity decarbonization strategy in 2018. Since then, it has developed a deep understanding of the field through in-depth market analysis and theme development work with decarbonization industry subsegments. In that time, the attractiveness of many of the investment themes the firm began considering in 2018 has grown substantially. Because the firm took a longer-term view, it was an earlier mover than others investing in decarbonization in private markets.

In areas such as electric mobility, building materials or energy efficiency-focused companies, Tikehau was able to reshape business models and use its GTM capabilities. The firm provides market insights and business cases to management teams to launch or reposition products and services, allowing these companies to capture new revenue streams and position themselves to take advantage of the substantial tailwinds associated with the energy transition. In the first vintage of its decarbonization strategy, the firm has partnered with company senior leadership teams to bring new product offerings, such as electric engines or more energy-efficient doors and windows, into new customer segments and geographies on which those companies had not previously been focused.

The work has involved introducing subscription-based revenue models that allow for greater scale and decarbonization potential; branding and rebranding work to ensure customers and future buyers understand the decarbonization value proposition of each company; and marketing and salesforce effectiveness work to support companies in pursuing more attractive and profitable customer segments with sustainability tailwinds. International expansion is often a core part of the growth plans for these businesses, and Tikehau has used its decades of work in internationalizing many of its companies into markets where they have not traditionally had the confidence to operate to allow these companies to grow their business as well as their decarbonization impact. This kind of decarbonization-first commercial work often requires significant mindset shifts and realignment of the entire portfolio company commercial organization to generate these outcomes.

The firm also works closely with management teams to continually assess the optimal exit paths for each company. As early as possible, it outlines the actions companies need to take if they are to attract the broadest pool of potential buyers, including accessing other impact and decarbonization vehicles and focusing on going public via an IPO with a strong sustainability story that is inextricably linked to each company's broader equity story.

In most cases, in the investments that the firm's private equity decarbonization strategy has made to date, Tikehau Capital has proactively brought commercial decarbonization insights to the portfolio companies as a core part of the investment case. This is done at the earliest stages of their due diligence process and as part of the conversations with management teams about how the business can grow in the next three to five years. Tikehau Capital then drives that alignment with management teams with quantified insights to support the development of the value creation plan for the business.

In investments involving carve-outs or transformative M&A, Tikehau has identified the potential to accelerate the growth of under-resourced and non-core divisions of larger companies. These divisions could be carved out or divested by prior buyers and, with Tikehau's support, transformed into standalone decarbonization-first companies. Tikehau's involvement and execution of these transactions have made these opportunities possible and realized the associated decarbonization.

Over the past six years, Tikehau has developed and refined this approach and continues to deploy it as it raises and invests from the second vintage of its private equity decarbonization strategy. In the firm's view, the opportunity set presented by decarbonization is enormous, and the need for capital-aligned governance and commercial and operational excellence to drive the transition at the speed and scale required will continue to grow.

CASE STUDY 9

Paine Schwartz Partners

Paine Schwartz Partners (PSP)'s 20-plus-year track record in the food and agriculture sector demonstrates its ability to identify historically underinvested areas throughout the food supply chain. Through its investment activities, the firm seeks to feed better food to a growing population with more efficient use of resources.

During its due diligence, PSP ensures that the business models of potential targets are aligned with its two core themes: productivity and sustainability; and health and wellness. Beginning in earnest after companies enter the portfolio, the firm brings its in-house expertise and large group of seasoned operating directors and senior advisers to drive value and sustainability. PSP focuses on commercial excellence, R&D, human capital and operating effectiveness to drive revenues and improve margins at its portfolio companies. The repeatable processes and programmes designed by the firm were created to ensure that these critical value creation efforts can happen systematically throughout the portfolio at scale.

To build accountability, PSP partners closely with CEOs and board chairs of its majority-owned portfolio companies to develop annual financial, strategic and sustainability goals linked to CEO compensation. These goals help PSP portfolio companies rapidly scale, create efficiencies and develop more sustainable products and services, with the goal of driving commercial success and more profitable impact.

PSP believes that starting the sustainability-focused value creation planning and positioning process early during its ownership gives its portfolio companies more time to develop their commercial and operational initiatives. The firm has exited investments to impact funds in the past and, given the acceleration of capital available from impact funds and strategic buyers looking to scale their sustainable offerings, PSP expects to do so with more regularity in the future.

CASE STUDY 10

Partners Group

Partners Group is an active investor in both infrastructure and impact investing through its PG LIFE platform. Over the years, the firm has observed a transition in impact investing from smaller, niche funds to mainstream funds for a broad range of investors, including institutional investors, private wealth clients and sovereign wealth funds. This evolution is based on a desire to invest at scale through larger ticket sizes and a broader geographical scope, encompassing both developed and developing markets. A focus area for investors is to ensure there is no trade-off between impact and financial returns.

Partners Group approaches its thematic investment sourcing through several criteria and parameters. Its three overarching themes are decarbonization, digitalization and new living (changing consumption patterns), and the firm focuses on market segments with double-digit growth in the next decades. Within infrastructure, the firm identifies significant capital needs in these sectors, recognizing that, for example, investments in carbon management (e.g. carbon capture, utilization and storage), clean power, low-carbon fuels and the circular economy can yield substantial environmental benefits while addressing multitrillion-dollar market demands. In PG LIFE specifically, Partners Group goes one step further by assessing and identifying companies and infrastructure assets where there is a direct link between the commercial operations of the business, such as its product or service, and the United Nations Sustainable Development Goals (SDGs).

The firm's value creation includes platform-building (e.g. accretive add-on acquisitions and success-based capex), operational improvements (top-line growth, profitability and efficiency increases) and sustainability initiatives. Prior to investment, investment teams focus on ensuring that the management team and assets can drive the performance the firm expects in both financial and sustainability aspects. All investments at Partners Group are assessed through its global investment committee; for investments that are part of PG LIFE, the Partners Groups' LIFE committee, which is a dedicated forum focusing purely on the impact side, reviews the opportunity, focusing only on the impact aspects, including KPIs to track progress and contributions to the SDGs. Financial performance and impact are additive.

Post-acquisition, PG LIFE is integrated into the overall investment life cycle with, for example, dedicated onboarding sessions and impact monitoring processes. During ownership, impact and sustainability criteria are owned by a designated investment team member, board member and C-suite member at each portfolio company.

By establishing clear governance structures, often including a sustainability committee that oversees initiatives and sets KPIs for impact measurement, Partners Group ensures that the investment will not only meet the financial objectives but also contribute positively to the environmental and social outcomes.

CASE STUDY 11

GIC

GIC began investing in climate solutions after several years' work on market analysis, theme development, market sizing and industry segmentation. Over the years, the fund has increased efforts to capture sustainability-related investment opportunities throughout the portfolio, from infrastructure investments to stimulate the energy transition to cross-asset initiatives such as the Sustainable Investment Fund (SIF), launched in 2020. GIC has since evolved these efforts into bigger portfolios in public and private markets, with dedicated teams and capital to deploy.

In private equity, after investing in early-stage energy transition opportunities through its Electron Innoport portfolio, the fund decided to form a dedicated private equity investment team to increase GIC's engagement with decarbonization opportunities. The Sustainability Solutions Group (SSG) has initially focused on minority growth and late-stage venture deals in climate solutions such as renewables, batteries, electric vehicle (EV) charging, e-mobility, the circular economy, carbon capture and alternative fuels such as green hydrogen.

The team has since expanded its strategy with a new investment programme for green assets, which offers scale-up capital for nascent or maturing climate solutions, such as green steel or long-duration energy storage, that often find themselves caught between traditional buckets of capital. These companies have matured out of venture and growth equity but have not yet scaled and derisked sufficiently to attract lower-cost infrastructure finance. They might have launched their "first-of-a-kind" project and present minimal technology risks but require significant capex to scale up. GIC's patient, flexible capital could be vital in supporting these firms in their commercialization and scale-up efforts.

Overall, GIC seeks attractive entry points and partners with both large sponsors and middle-market funds that need long-term capital partners. The fund's investment track record in climate contributes to its appeal as a sophisticated partner. GIC focuses on companies with robust energy transition and decarbonization products and services and collaborates closely with partners and management teams, taking a bespoke approach to each investment. Despite a depressed exit environment in recent years, GIC has the flexibility to hold investments for longer, continuing to add value to investee firms to enhance their attractiveness to future investors.

4

Infrastructure: A detailed study

Infrastructure investment can promote sustainability and drive the energy transition while delivering commercial success.

More asset owners are now directly investing in infrastructure and playing an essential role in raising decarbonization ambitions with their GP co-investors.

With extensive experience managing global infrastructure assets, many infrastructure GPs are well positioned to drive growth and create value. This expertise provides reassurance to LPs of their ability to meet the rising demand for clean energy and decarbonization solutions.[37] The trust these firms have built with offtakers and other counterparties through consistent execution gives them and their operating companies a competitive edge. Their track records enable close collaboration to meet those high customer standards, reinforcing their reputation as reliable partners for managing large-scale energy transition projects.

Many infrastructure GPs have long focused on energy transition in their flagship funds, seeing that companies with strong energy transition value propositions attract higher valuations, secure stronger market positions, mitigate terminal value risk and achieve more favourable exits. Many firms focus on value creation levers to grow energy transition assets, such as procurement, digital transformation, capital efficiency and talent management. They enhance performance through commercial excellence, renewal management, lean operations and operational efficiency. Many GPs have strengthened sustainability teams and developed playbooks to improve collaboration and add value through sustainability within those functional areas. GPs also use sustainability to attract customers, optimize pricing and win green tenders, while improving marketing, branding and community relations. Their capital markets expertise helps secure favourable financing, reducing costs and freeing up capital for larger energy transition projects at all stages of development from construction finance to grid integration and capital structure optimization once assets become operational.

More asset owners are now directly investing in infrastructure and playing an essential role in raising decarbonization ambitions with their GP co-investors.[38,39] They help GPs unfamiliar with advanced practices guide management teams through decarbonization roadmaps and reposition businesses for future growth. Asset owners are drawn to sponsors and deals with strong decarbonization goals and encourage GPs to "go where the emissions are" and undertake brown-to-green transformations in hard-to-abate sectors.[40]

Many GPs have refined their processes to showcase decarbonization progress and future opportunities, positioning companies to attract a broader range of buyers, including energy transition specialists.[41] As Meyer of J.P. Morgan points out, "Those potential buyers are attracted to companies that offer climate solutions or have more sustainable offerings but are very discerning and have high standards for the companies they back. They want to see that the commercial work has been done to identify the customer pain points with regard to sustainability and how the target's offering meets those needs, and that there is an aligned brand and GTM capability for that to scale under a new owner. They want to see the customer willingness to pay a premium and that the offering from the company is differentiated. They also want to see that the operational work has been done and there is quantifiable data to demonstrate that the products and services meet that need. If all of that work is done, it is much easier for companies and their bankers to justify that multiple uplift."[42]

This holistic asset management approach – combining strategic development with rigorous execution – allows firms to scale energy transition investments faster and at a larger scale regardless of which fund they sit in today. As infrastructure GPs focused on energy transition grow, they see even more opportunities to integrate sustainability expertise, positioning GPs to accelerate climate solution investments on the scale required for the energy transition.

CASE STUDY 12

APG

APG takes a proactive approach to working with partners on sustainability and decarbonization as part of its direct investment activities in infrastructure assets. APG engages with co-investors, management teams and operating partners at the outset of deal discussions to increase their ambitions in setting science-based climate targets at an asset level. APG's approach hinges on a robust alignment with its pension fund clients and its capacity to deliver their ambitious long-term sustainability goals.

When APG's investment team begins a relationship with an operating partner or works with a co-investor for the first time, they communicate the high level of ambition with which they approach every deal. When partners do not share such ambition, ongoing and active engagement to drive alignment is crucial. On the other hand, when investing alongside other pension funds and asset owners with elevated sustainability and decarbonization credentials, they are well aware of the high standards expected for the investment.

Usually, co-investors can see how addressing climate change drives value and mitigates physical and transition risks. Through ongoing dialogue and governing body discussions, partners develop and further their understanding of the relevance of holistically integrating such considerations within all phases of the investment process and the underlying operations.

APG always welcomes financial and operating partners that bring deals with fully developed strategies and a robust theory of change. These strategies include setting clear objectives and maintaining effective measurement and reporting mechanisms to monitor, communicate and, more importantly, continuously improve the investment's performance from a sustainability and decarbonization perspective.

Governance is key. A strong strategy is always led by a knowledgeable team and overseen by a governing body that understands how sustainability drives value via stakeholder engagement, top-line growth and risk management.

Infrastructure as an asset class plays a significant role in transitioning towards a low-carbon and more sustainable economy. As such, and as an active investor in the sector, APG commits to further work and engagement with its financial and operating partners to deliver on its pension fund clients' ambitions while generating sustainable and long-term returns.

CASE STUDY 13

Brookfield

Brookfield's long history as an owner-operator of essential infrastructure assets worldwide enables the firm to benefit from deep operational expertise in driving the value and growth of its portfolio companies and assets. One strength of Brookfield's asset management and operating capabilities for its renewable power platform, as well as its flagship Global Transition Funds, is the relationships the firm has cultivated with large corporate clients, considered some of the largest buyers of clean power globally. A prominent example is Brookfield's partnership with Microsoft to deliver more than 10.5 gigawatts of renewable energy capacity by 2030, one of the largest corporate clean energy agreements ever.[43]

This long-standing history of execution provides certainty and confidence to partners, giving Brookfield a competitive advantage as an investor by demonstrating that the firm can work with its own operating companies to meet the exacting standards of large customers through the trust it has gained.

Scale also enables Brookfield to use its capital markets teams to drive even more favourable financing terms that will be accretive to their companies and partners by reducing their cost of capital. This frees up additional capital over time to drive greater decarbonization instead of going towards higher interest payments and applies to construction finance, funding interconnection to the grid and optimizing company capital structures once the assets are operating.

The firm's commercial, operating and capital markets capabilities, when paired with strong management teams and a derisked asset base with a high-quality pipeline and access to a high-quality supplier base, positions Brookfield to execute optimal exit strategies. It has global relationships with the major buyers and sellers of assets and can ensure that each company is well positioned for the next buyer to continue to scale its energy transition platforms aggressively. Brookfield applies a portfolio management approach that positions its companies for growth, and this, alongside its hard work in developing and operating projects, enables Brookfield to scale energy transition investments in a differentiated way.

Brookfield's history of building renewable energy and transition platforms globally is what led it to launch its emerging market-focused Catalytic Transition Fund in partnership with its climate-focused investment vehicle ▶

ALTÉRRA at the 2023 United Nations climate change conference (COP28). That fund, managed by Brookfield, is the next phase of growth for its transition platform. According to the International Energy Agency (IEA), emerging markets comprise an ever-increasing share of global emissions and have historically been starved of energy transition capital, receiving only 15% of global energy transition investments.[44] Brookfield is focused on “go where the emissions are” and investing in the emerging markets fits its strategy. The firm knew a dedicated vehicle was needed to capitalize on the opportunity and bring the scale that could not exist within a more broadly diversified fund vehicle.

Brookfield has had investment and operating teams locally in most of the largest emerging market countries for many years. This long track record of operating effectively in those jurisdictions, coupled with the firm’s focus on decarbonization and transition planning, access to high-quality equipment, construction and engineering capabilities, global offtaker relationships and M&A execution experience, gave the firm and its partners the conviction and credibility to launch the new fund.

As the Catalytic Transition Fund continues to scale alongside the Global Transition Fund, the firm sees no shortage of opportunities in the future. Paired together, the funds represent the largest pool of private capital dedicated to the transition to net zero. The combination of decarbonization and robust transition planning expertise with commercial excellence and operating capabilities will continue to drive Brookfield’s energy transition efforts and accelerate investments in decarbonization solutions.

CASE STUDY 14

AIMCo

AIMCo believes that investing in climate solutions alone is not sufficient to decarbonize the global economy. It is just as important to ”go where the emissions are”. Real emissions reductions are achieved when investment decisions help companies reduce their carbon intensity and increase their climate solutions offerings. Traditional energy-intensive assets with credible decarbonization strategies may be where the biggest emissions reductions can be achieved. Investors should not shy away from these opportunities. AIMCo believes that the industry, particularly asset owners and managers, needs to have a nuanced conversations with regard to this topic in the years ahead.

The fund takes a deliberate approach to thinking about the climate transition readiness of its assets. AIMCo developed its own climate taxonomy as a tool to identify areas of risk and opportunity in existing and prospective investments, classifying assets into defined categories of grey, transition or green. AIMCo’s taxonomy appraises assets in terms of two variables. First, the fund benchmarks the energy intensity of the asset compared to the carbon intensity of its sector. Second, it assesses the maturity of the asset’s transition plan by evaluating aspects such as its greenhouse gas (GHG) emissions inventory management plan, target type, level and ambition, and the capex and management team needed to achieve the asset’s stated climate targets. This framework provides a tangible and achievable basis for conversations between AIMCo and its portfolio companies.

AIMCo is now working collaboratively with the management teams of portfolio companies to create robust emissions inventory management plans and develop transition plans, including an assessment of how ready assets are to achieve their near- or medium-term targets and what capex and management team attention would be needed. With each collaboration, the fund is able to further understand and refine best-in-class practices that can then be used to help other portfolio companies that are earlier in their journey to accelerate progress and value creation.

CASE STUDY 15

Ardian

Ardian Infrastructure has progressed beyond the strong ESG foundation the firm established towards a more holistic and integrated ESG approach linked to portfolio company operational excellence, while deliberately focusing on three key drivers of positive change: strong governance; ESG-linked incentives; and cross-functional collaboration and knowledge-sharing.

Operational expertise is the foundation of Ardian's approach to managing its direct infrastructure investment assets, and the team has strengthened this in recent years by hiring candidates with purely industrial backgrounds and by enhancing its internal data science capabilities. The team reinforces this in-house expertise through the support of its extensive operating partner network (more than 30 senior advisers), as well as Ardian's internal sustainability team comprising 13 experts (including climate, data management and ESG regulatory specialists), to support its portfolio companies not only as a capital provider but also as a supportive partner able to pull levers to simultaneously drive decarbonization and digitalization while achieving superior financial performance.

In embedding ESG into the full investment life cycle and its industrial asset management approach, Ardian's infrastructure team is able to link strategic sustainability objectives and management incentive packages to ESG targets from day one of its investments (100% of CEOs in Ardian's European Infrastructure portfolio have at least one ESG KPI linked to their bonus package), and the annual collection and monitoring of data by Ardian (more than 200 ESG indicators are monitored, using a dedicated data management platform) enables investment teams to make informed and effective decisions and to assess the progress and achievement of the sustainability objectives of their portfolio companies.

Furthermore, with more than 30 operating partners that support the infrastructure team, Ardian takes a hands-on approach to designing sustainability incentive plans with management teams and developing ESG strategy early on to ensure that clear indicators of success can be established. This approach of using industry expertise and hands-on engagement with management teams has reshaped the way in which Ardian approaches business challenges and collaboration and supports portfolio companies in managing risk, optimizing operations and navigating the complexities of capex planning and growth strategy execution.

A notable example of the value derived from this approach, as well as the team's conviction in backing decarbonization and digitalization, is AirCarbon, a software product developed fully in-house by Ardian's data science and IT teams in close collaboration with its airport portfolio companies. AirCarbon helps airports to accelerate progress in quantifying emissions and identifying tangible reduction levers – a clear goal to accelerate the energy transition. Through its direct infrastructure investment activities, Ardian has significant experience of owning and operating European airports, and it fully recognizes its duty to help secure the future of aviation while working positively towards the industry's net-zero target by 2050.

From idea to inception, AirCarbon has now developed into a fully fledged, usable tool to support airports in measuring and managing their indirect emissions and enabling them to make data-driven decisions to reduce their environmental footprint. The challenge that Ardian Infrastructure and airport operators faced was that high-quality data did not exist for airport Scope 3 emissions. To solve this, the infrastructure team built AirCarbon to capture real operational data at a granular level and engaged with the Airport Carbon Accreditation programme (ACA, the only internationally endorsed standard that independently evaluates and recognizes airports' efforts to manage and reduce their CO_2 emissions) to validate the methodology. Ardian successfully deployed AirCarbon at five airports in Europe, and the tool was used by airports to achieve important sustainability milestones. For example, in 2024 the two airports in Milan, managed by the SEA Group used AirCarbon to renew their ACA 4+ certification. Following the successful deployment and enquiries from non-Ardian-owned airports to access the platform, Ardian recently decided to provide AirCarbon more broadly as an open version.

The development of AirCarbon over the past five years has further driven a shift in the way the Ardian infrastructure team works internally. What started as a proof of concept has fundamentally shifted the mindset to problem-solving and driving solutions for operational excellence at portfolio company level. The cross-functional collaboration and communication among data science, information technology (IT) and sustainability teams, as well as the deal teams and portfolio company management teams, drove new ways of working and approaching problem-solving. It validated the sentiment that energy transition and decarbonization throughout the portfolio requires input from the portfolio companies themselves and necessitates partnerships and collaboration to find scalable solutions to problems that are faced by more than one entity.

As Ardian looks forward, the process of embedding specialists across functions to develop bespoke solutions for portfolio companies will continue to take place. Formal ESG oversight at board level will also continue, while all portfolio companies will include dedicated ESG committees and incentives will still be linked to ESG strategy, and the convergence of data, digital and decarbonization will push the team to explore further how they can bring their expertise to support portfolio companies to continue to move sustainability forward.

5 Sustainability and commercial excellence transferability

GPs are supporting companies in their traditional funds to use sustainability for commercial growth.

As previously stated in this paper, driving investment and greater commercial outcomes through sustainability and decarbonization is not limited to energy transition funds. Opportunities also exist within traditional flagship funds. Private equity and infrastructure investors are engaging in this work by systematically analysing revenue streams throughout their wider portfolios, tagging those with sustainability characteristics and conducting diagnostics to find ways to accelerate growth via market and customer insights and to dig into the revenue operations supporting current GTM efforts. GPs also collaborate with management teams to develop systematic M&A plans targeting businesses with more sustainable offerings to increase the share of revenue that can be tagged to a given sustainability characteristic.

Meyer of J.P. Morgan says, “One thing that our GP clients still find challenging is the relative dearth of investment opportunities for energy transition companies that fit between VC and infrastructure on the size and risk-return spectrum. Many companies are growing rapidly but may not be a good fit for climate-focused growth private equity or buyout funds. There are a number of companies with strong potential to reposition their business models or offer new technologies or products and services, but they have not done the work to meaningfully capitalize on this large and growing opportunity.” Meyer further explains, “This is where we see the most advanced GPs doing significant work today to collaborate with portfolio companies to meet this demand and capture the associated valuation uplift. We have seen that for those that do and do it well, they can drive meaningful multiple expansion that they otherwise could not justify without having done that front-end work.”[45]

The sophistication of traditional GP sector investment teams with regard to sustainability theme development has grown as sustainability trends and corporate buyer preferences have evolved. High-potential company archetypes within GP portfolios guide decisions on which sustainability value levers to pull. Many firms with sustainable business models have not yet quantified their impact, enabled sales and marketing teams or branded themselves accordingly, leaving significant value untapped. Some companies have sustainable offerings that, if prioritized, could boost growth, while others sell into end markets with high sustainability expectations but have not capitalized on the opportunity to commercialize the work that has already been done to outmanoeuvre competitors. GPs have become increasingly adept at using their value creation toolkit to help these different types of company use sustainability for commercial growth.

Private equity and infrastructure investors and their operating teams are making significant progress, and as understanding of sustainability-driven commercial excellence deepens, more GPs are conducting top-down diagnostics and bottom-up analyses to drive that sustainability commercial excellence. The momentum is only expected to accelerate as more GPs seize those opportunities.

CASE STUDY 16

Eurazeo

Over the past few years, the Eurazeo investment and asset management group has focused on bringing sustainability and impact closer to the core of everything the firm does across its platform. For more than 15 years, Eurazeo has integrated sustainability into its business model to help companies prepare for the social and environmental challenges of transitioning to the economy of the future. However, the firm has decided to go even further to deliver real positive change and ensure its companies have a role and strong growth potential in a world with more people, limited resources and a low-carbon economy.

Eurazeo has placed profitable impact at the heart of its strategic ambitions to achieve this. The firm has the ambition to be the leader in mid-market, growth and impact investing. It seeks to contribute to the emergence of products, services and technologies to help solve the world's environmental and social problems and drive the transition to a low-carbon economy.

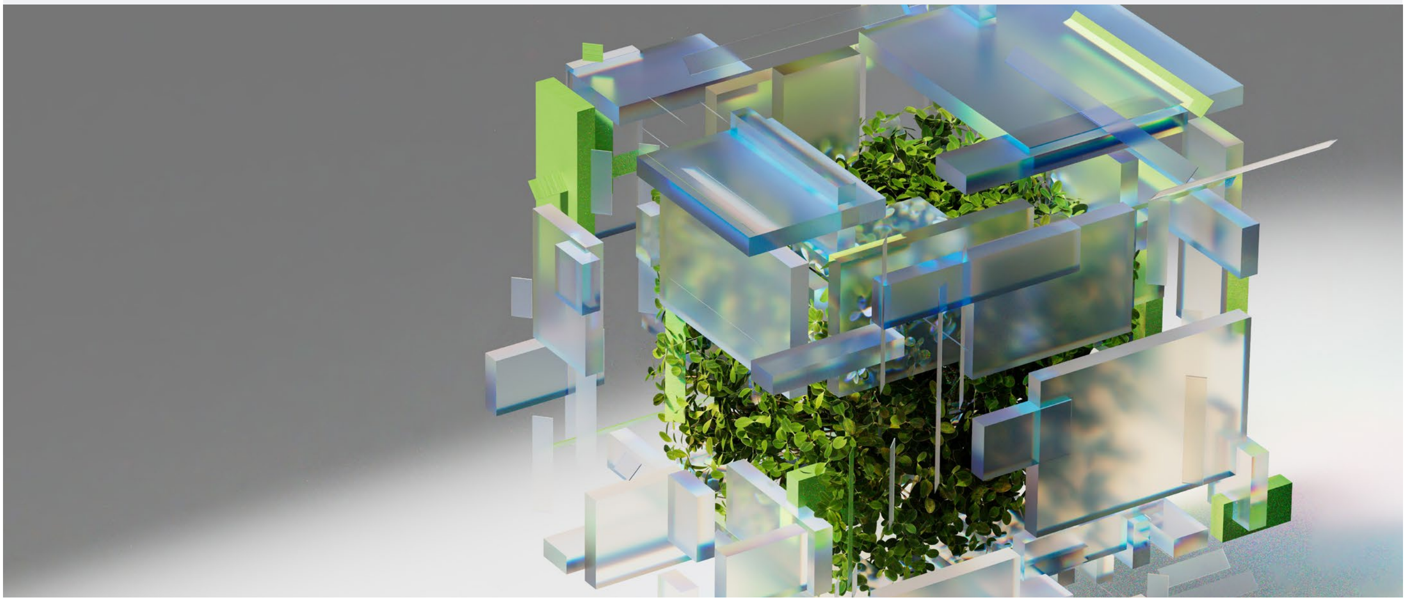
Across the firm, Eurazeo believes that impact investing is a source of resilience, growth and performance. It views impact investing as the next growth wave in the private equity industry, akin to the technology boom that has progressed over the past 15 years. To harness the impact growth potential, the firm pursues a dual course of action. The first is to create dedicated profitable impact funds – the firm already has eight impact funds, five dedicated to environmental transition (one currently fundraising) and three investing in solutions for a more inclusive society. Second, the firm integrates impact themes and impact management and measurement in all of its funds.

For example, Eurazeo recently launched an impact buyout fund dedicated to addressing the environmental crisis. This fund will finance companies whose products, services or technologies offer solutions to address the issue of crossing planetary boundaries,[46] including biodiversity, water, waste, climate and pollution issues. These challenges represent an addressable market of $3–5 trillion, bolstered by robust regulatory support in Europe.[47]

Water is a prime example of a key thematic focus for this fund in this context. In Europe, on average, 30–40% of water is wasted due to leaks in the ageing sewer networks. Addressing these challenges presents compelling investment opportunities for small and mid-sized businesses poised to become European leaders. The investment team has identified promising companies specializing in pipe-leakage control and repair services, rain and wastewater management and water efficiency technologies. Those water tech companies are profitable, use proven technologies and have substantial growth potential fuelled by a unique market momentum.

Eurazeo has also integrated impact investing through all of its generalist funds. The buyout franchise exemplifies the firm's approach in this area. Corporate and consumer demand for more sustainable products and services is growing, and regulatory pressure is accelerating. The secular tailwinds for companies that help address these demands – offering services, technologies and products that help to solve environmental and social problems – present tremendous opportunities for investors who are willing to deploy capital strategically throughout their sector investment teams.

Furthermore, Eurazeo has seen the benefit at exit of having these better-positioned businesses that can attract higher valuations. The firm has also heard from its LPs, who are requesting more options to invest in impact funds across asset classes and risk-return profiles. These include venture, growth, buyout and infrastructure. Its LPs have been very supportive of this new approach. This virtuous cycle has enabled Eurazeo to do what it considers to be something truly different, putting impact at the heart of its entire fund model. The firm believes it will be able to remain at the forefront of the impact and transition investing market.



CASE STUDY 17

Triton Partners

At Triton, a structured application of ESG factors drives value creation. When identifying new portfolio companies – “sourcing” – Triton looks for investments in companies bringing to market goods and services aligned with sustainability drivers. This is evidenced by recent investments in companies bringing to market energy services and grid components. In 2024, Triton has already considered – and made – investments in several sectors with strong supporting environmental megatrends such as companies in energy and utility services, infrastructure components and digital medical services.

After Triton makes an investment, building on the sustainability work done during due diligence, Triton’s ESG team works with each company over time to ensure goods and services are optimally aligned with changing customer demand and business practices. Their portfolio companies are thus supported in using sustainability to explore new revenue lines in adjacent business areas and potentially seek new end markets. They also work closely with management teams to drive a greater share of company revenues from those sustainability-focused offerings.

Triton’s dedicated value creation group has the capabilities and expertise to partner with those companies to ensure sales teams are upskilled and that company brands and GTM efforts align with each company’s sustainability story. They also work with those types of companies to ensure they are not just meeting but exceeding their customers’ expectations so that they become a vendor of choice when it comes to those customers’ key sustainability purchasing criteria.

When selling companies, Triton finds that potential buyers from across the spectrum – financial, trade and public market – are increasingly focused on operational and strategic sustainability. Marketing companies, by showcasing the upside exposure of products and services to sustainability trends and themes, is also an important lever in realizing successful outcomes.

CASE STUDY 18

PAI Partners

PAI’s ESG team sits in the firm’s portfolio performance group alongside operating partners focused on top line, talent, operations, digital and IT and supply chains. This structure highlights the strategic value of sustainability and reflects the fact that each portfolio value creation plan is developed with these verticals in mind. Each portfolio company has a dedicated ESG team lead who takes on the project from due diligence, leading the business on its ESG action plan throughout the hold period and through to exit. The team works closely with management to help shape a tailored approach to action planning and implementation.

As an investor in the real economy, PAI has embedded ESG directly into the firm’s view on operational excellence throughout the portfolio. PAI keeps the exit in mind, starting from due diligence, where the implications of carbon emissions are quantified using the firm‘s internal price on carbon. This mechanism quantifies the impact the investment will have on the firm‘s emissions and supports it in assessing the future value of potential investments based on successful decarbonization of the assets. Similarly, PAI’s commitment to nature and biodiversity highlights the critical importance of water stewardship as a key business input. A rigorous assessment of water use ensures that an action plan for water needs and wastewater is in place.

Using the firm’s advanced tools and data-collection capabilities, PAI can better understand the implications of environmental factors on its portfolio, thereby enhancing the overall value creation plan and exit strategy for each investment. By implementing rigorous assessments of supply-chain practices, the firm ensures that human rights considerations are prioritized, which not only mitigates risks but also promotes a more resilient and ethical operational model. Additionally, data supports in driving capital allocation decisions for resourcing, retooling and repositioning businesses that offer a sustainability tailwind and opportunity to capture value.

The ESG team also works to build collaboration throughout the portfolio by convening ESG and other operational experts to bring thematic material issues to life and develop solutions, benefiting from diversity of thought, expertise, skill set and perspective. For example, PAI’s annual sustainability club convenes ESG representatives throughout the portfolio and typically includes a site visit to a portfolio company to help them understand what good implementation looks like in practice.

Conclusion

Investments that accelerate sustainable growth have great potential to unlock value.

GPs have made significant progress in raising and deploying energy transition funds, but more effort is needed to scale these beyond their initial vintages. Many GPs have aligned portfolio operations with sustainability value creation, yet substantial untapped value remains across their broader platforms.

This value can be unlocked by accelerating growth in companies focused on sustainability, circularity and the energy transition or those with strong sustainability programmes. Most portfolio operations teams have conducted market studies but they have often missed opportunities to capture sustainability premiums by not focusing on them. Rebranding efforts and digital marketing – critical tools in broader private markets value creation – do not always work to develop and systematically take to market compelling sustainability features of company offerings. Additionally, GPs' decarbonization programmes, sometimes exclusively focused on cost savings, have overlooked the potential for higher pricing, brand value and commercial growth opportunities from more sustainable products. Upskilling management teams and business unit leaders must go beyond educating them on what ESG and sustainability are and move towards systematic quantification of the benefits of improved sustainability features of products and services across each internal function and how they can best communicate those improvements internally and to the market.

Sustainability presents opportunities for cross-sells and up-sells, and for enhancing equity stories for exits or refinancings. GTM strategies and sell-side transaction preparation projects, similar to other value creation efforts, can easily incorporate sustainability. Portfolio operations and investment teams, in close collaboration with sustainability experts, can use the private markets governance model to play an even more central role in scaling the energy transition leaders of today and tomorrow.

Glossary

ACA 4+ certification: The global carbon management certification programme for airports; ACA 4+ stands for Airport Carbon Accreditation, Level 4+: Transition, which relates to compensation for residual emissions with reliable offsets.

Adjacencies: Segments beyond a company's core business where it has a "right to win".

Brown-to-green strategies: Approaches for investing in shifting from an energy system that is fossil fuel and carbon-emission intensive to one that is not.

Carve-outs: In an equity carve-out, the process whereby a company tactically separates a subsidiary from its parent as a standalone company.

Cross-sell: The selling of related, supplementary products or services based on the customer's interest in, or purchase of, one of a company's products.

Deal partners: Investment team members at private equity firms who identify investment opportunities, close transactions, add value to the purchased companies and ultimately exit the deals through another transaction.

Energy transition investing: Investments focused on the deployment of clean technologies such as renewable energy projects, electric vehicles, power grids and hydrogen.

Fund I/Fund II/Fund III: The first fund/second fund/third fund, etc. in a fund series.

Go-to-market (GTM) strategy: The plan for an organization to position its product or service in front of its customers, detailing all elements of the process, including pricing, sales, launches and branding, to gain a competitive advantage.

GTM motion: Coordinated actions that revenue teams take to connect products to customers and generate revenue.

Hold period: The length of time a private equity investor holds a company.

Impact investments: Investments designed to generate measurable positive impact (social and environmental) as well as a financial return.

Offtakers: Parties that buy the resources produced by completed and operating projects.

Re-up: A commitment to a fund where the LP committed to the prior fund.

Sales funnel: The process of identifying where prospective customers are in the sales pipeline (from need identification to conversion).

Scope 3 emissions: Indirect emissions not produced by the company itself but which occur in the upstream and downstream activities of the company.

Secular: In the context of finance, long-term market activities.

Tailwinds: Factors and events that help increase growth or cause positive effects on profits and revenue.

Take-privates: A transaction or series of transactions that convert a publicly traded company into a private entity.

Up-sell: Sales strategy that involves encouraging customers to buy a higher-end version of a product than the one they originally intended to purchase.

Vintage year: The milestone year in which the first influx of investment capital is delivered to a project or company; this marks the moment when capital is committed by a venture capital fund, a private equity fund or a combination of sources.

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Chief Executive Officer, Washington State Investment Board

Acknowledgements

Special thanks are due to the following for their contributions to this paper's case studies and its insights.

Pierre Abadie
Group Climate Director, Tikehau Capital

Kevin Bong
Chief Investment Strategist and Head of Singapore, Alberta Investment Management Corporation (AIMCo)

Amor Boufath
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Riddhima Yadav
Vice-President, Brookfield Asset Management

Jimmy Yan
Head of ESG Integration, New York City Comptroller's Office

The report has greatly benefited from the insights and expertise of **Matt Schey**, Managing Director of External Affairs and Sustainable Investing, Institutional Limited Partners Association (ILPA).

Production

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Endnotes

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