



Investment
Leadership
Programme

UN-convened Net-Zero
Asset Owner Alliance

The Future of Investor Engagement:

A call for systematic
stewardship to address
systemic climate risk

April 2022

In partnership with:



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The Alliance would also like to express its gratitude to the following reviewers/commentators: Adam Matthews (Church of England Pensions Board), Antje Stobbe (Allianz Global Investors), Ben Pincombe (Principles for Responsible Investment), Carina Silberg (Alecta), David Zellner (Wespath Benefits and Investments), Dr. Prof. Heiner Schanz (University of Freiburg), Edward Baker (Principles for Responsible Investment), Edward Mason (Generation Investment Management LLP), Eliya Devay (Net-Zero Asset Owner Alliance Secretariat), Emmet McNamee (Principles for Responsible Investment), Hamish Stewart (Principles for Responsible Investment), Jascha Tutt (Allianz SE), Jérôme Tagger (Preventable Surprises), John Hoepfner (LGIM America), John Scott (Zurich Insurance Group), Laura Devenney (Boston Trust Walden), Mark Van Clieaf (Future Zero), Meredith Block (PIMCO), Morgan LaManna (Ceres), Nili Gilbert (The David Rockefeller Fund), Peter Sandahl (Nordea Life & Pensions), Ryan McQueeney (Wespath Benefits and Investments), Sarah Kemmit (Net-Zero Asset Owner Alliance Secretariat), Stephanie Lavallato (Interfaith Center on Corporate Responsibility), Sue Reid (Global Optimism), Thomas Liesch (Allianz SE), Thomas O'Neill (Universal Owner Initiatives), Travis Antoniono (CalPERS), Udo Riese (Allianz Investment Management SE), Valeria Piani (The Phoenix Group), and multiple reviewers from Caisse de dépôt et placement du Québec.

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Foreword

Conducting stewardship activities within investment portfolios is one of the most direct levers that investors can use to achieve real-world decarbonisation. We define stewardship as a broad array of tools that investors have for influencing the real economy, with a focus on public discourse, proxy voting, and engagement. The Principles for Responsible Investment (PRI) defines engagement as a practice that “primarily refers to an investor (or an engagement service provider) communicating with current or potential investees/issuers (such as companies) to improve ESG practices, sustainability outcomes or public disclosure” (Belsom et al., 2021).

The Net-Zero Asset Owner Alliance has a core commitment to use engagement to further our collective goals, and many Alliance members have experience using corporate engagement to drive decarbonisation outcomes. To have an effective conversation on what role corporate engagement can play in societal decarbonisation, we believe investors must first recognise the bounds of corporate engagement, including those established by the proverbial rules of the game set by economic and policy incentives that companies must operate within. By not transparently acknowledging the rules of the game and the bounds of what can be achieved via corporate engagement, as argued by sustainability economist and investor Duncan Austin, investors risk over-allocating resources to “Voluntary Market-Led” strategies and thereby diverting resources from contributing to needed structural policy and economic change (Austin, 2021).

The Alliance Engagement Track has a particular focus on enabling asset owners to leverage their unique position and engage their asset managers on aligning to their customers’ long-term interests. We will continue to develop material and guidelines that enable our members to effectively engage their asset managers. Extending beyond the Alliance, in this paper we issue the following three critical calls for all investors to expand their climate stewardship activities.

1. Investors should identify opportunities in their current stewardship practices to address systemic risk. This includes developing processes and providing resources that support systematic stewardship activities like engagement, proxy voting, and public discourse.
2. Investors should pursue new means of direct collaborative engagement such as sector/value chain engagement and asset manager engagement.
3. Investors should work to influence the rules of the game to enable a transition to net zero through policy engagement, in collaboration with other stakeholders.

Jake Barnett (Wespath Benefits and Investments) and
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Executive summary

Institutional investors have responded with increasing urgency to the financial risks that climate change poses to investment portfolios. For climate-aware asset owners, these financial risks include existential risks to the core business functions of ensuring retirement security and/or providing affordable insurance products. This response has manifested in the steady increase of investor net-zero commitments.

Transitioning an investment portfolio to net-zero greenhouse gas emissions reduces the risks resulting from physical or transitional disruption caused by climate change. In particular, the mobilisation of capital to finance the transition to net zero is one of the financial sector's key roles. However, if this transition of investment portfolios is completed by capital reallocation alone, it does little to support real-world decarbonisation directly and thus does not mitigate the existential risk of climate change. Facilitating the net-zero transition in the real economy requires that investors also actively support decarbonisation efforts through engagement with companies and their stakeholders.

To date, investors have primarily focused on corporate engagement with publicly listed companies, using tools such as dialogue and proxy voting. Corporate engagement efforts have demonstrated many successes in raising climate ambitions in the business community and securing company commitments within the bounds of the current policy framework and business environment.

However, corporate engagement becomes increasingly less effective when the business case for the requested action is impractical, uneconomic, or uncertain. This is often the case for companies in hard-to-abate sectors. When the decarbonisation needed is not technologically feasible, lacks sufficient economic incentives, or lacks stable, predictable, and reliable policy frameworks to build a business case – it will not materialise at scale through corporate engagement alone. Therefore, society should not rely solely on corporate engagement to deliver outcomes that meet 1.5°C investor ambitions, while companies are incentivised otherwise.

This paper provides an overview of the climate engagement landscape and expounds five limits that bound the ability of corporate engagement alone to catalyse the systemic change necessary for decarbonising the real economy on its own. These limits are:

1. The significant resources needed for effective corporate engagement
2. A narrow, single company focus
3. The inefficiencies of focusing on voluntary, company-by-company disclosure
4. An uneven investor focus across companies and asset classes
5. The boundaries set by the rules of the game

By recognising these limitations of corporate engagement, investors committed to real-economy decarbonisation can address them by expanding the breadth of their efforts with **increased efforts in sector/value chain engagement, policy engagement, and asset manager engagement**. The added value of each of these approaches is discussed below.

- **Sector/value chain engagement** increases investors' abilities to support solutions across industries. It is often more efficient for companies and investors to address Limits 1 and 2 through sector/value chain engagement. Additionally, it helps investors identify systemic economic, technological, and/or regulatory hurdles obstructing decarbonisation processes, which sets the foundation for policy engagement.
- **Policy engagement** is a critical indirect lever for investor action through which investors lend their voice, alongside other stakeholders, in calling for action from policymakers to address the technological and regulatory hurdles preventing decarbonisation at sufficient speed. This helps address Limits 3, 4 and 5 of corporate engagement.
- **Asset manager engagement with asset owners** is pivotal to ensure asset managers align their stewardship activities and public messaging with asset owners' long-term interests. This alignment asks asset managers to represent, as fiduciaries, that climate risk is not only a systemic financial risk to portfolios but an existential risk to the fundamental businesses of their asset owner clients.

1. The engagement landscape

a. Foundational perspectives for this paper

This paper primarily focuses on investors that share our commitment to decarbonisation in the real economy and limiting global warming to a maximum 1.5°C with low/no overshoot. While capital allocation has a valuable role in investors' alignment with the transition, this paper focuses on how to effectively use engagement and stewardship to accelerate alignment with a 1.5°C aligned future. Examples mostly come from public equity asset class stewardship, although the principles relevant to systematic stewardship across various asset classes are laid out. This reflects the reality that public equity accounts for most investor engagement to date. While there are different time horizons, incentives, and levers available to investors in different asset classes and geographies, there is a unifying imperative: **capital invested for diversified long-term asset owners must be stewarded in a manner which is congruent with our systemic interest in mitigating the worst impacts of climate change and enabling an orderly transition to a net-zero future.**

Further research and dialogue from fixed income and alternative asset class investors on how they can most effectively contribute to the engagement ecosystem that we describe would be welcome. We also recognize that the observations made in this paper are primarily from developed markets, and we therefore welcome further research and dialogue related to Emerging and Developing Economies (EMDEs).

By calling for investors in more asset classes and geographies to increase their involvement, we seek to add **more breadth** to the engagement community. By calling for engagement activities to move beyond corporate engagement to influence sector/value chains and policy, we seek **more depth** to the engagement community. In circumstances where investor mechanisms for corporate engagement are limited, such as with state-owned enterprises, we further emphasise the need to add depth to investor stewardship strategies.

These different forms of engagement will help enrich an investor's understanding of the systemic risks and opportunities posed by a transition to net zero, ultimately leading to better long-term investment decision-making.

b. The evolution of corporate engagement

As stated, the most common form of engagement for investors, including asset owners, is corporate engagement with publicly listed companies. In recent years, engagements have increasingly focused on environmental, social, and governance (ESG) considerations. In fact, a Harvard survey of senior executives at institutional investors found that ESG “was almost universally top of mind” (Eccles & Klimenko, 2019).

Corporate engagement has been, and will continue to be, an integral form of investment stewardship and one of the most direct levers for influencing change. Corporate engagement can drive important incremental change within the economy as a whole and can sometimes catalyse dramatic change within single companies. It can also maintain company accountability to investors and broader stakeholders on many key ESG topics (Ceres et al., 2019). In describing corporate engagement throughout the paper, we intend to cover both bilateral and collaborative engagement. We generally consider collaborative engagement as often the more efficient of the two (Freshfields Bruckhaus Deringer, 2021).

Regarding climate issues, the most prominent current example of collaborative corporate engagement is Climate Action 100+ (CA 100+), which now includes over 600 cooperating investors representing US \$65 trillion. CA 100+ has made significant progress by bringing many investor voices into targeted collaborative dialogues with high-emitting companies on the need to align their businesses with a net-zero future. This type of coordinated engagement aligns with the principles of common goals and collaborative action espoused as best practices by PRI’s Active Ownership 2.0 (Peres Da Costa & Chandler, 2019).

The impact of CA100+ is a powerful example of how corporate engagement, executed collaboratively, can speed up climate action and empower net-zero commitments from companies. The landscape of corporate climate engagement and stewardship is also strengthening rapidly. For example, the Climate Action 100+ Net-Zero Company Benchmark and its rigorous analysis of company alignment to net zero in line with 1.5°C has enhanced the consistency and clarity of expectations of companies. Investors can now employ the Net-Zero Company Benchmark to hold companies accountable when the measured pace of change at the company does not meet expectations. For instance, investors utilising the Net-Zero Company Benchmark can systematically integrate company scores into stewardship approaches; low scores inform escalation strategies—such as votes for or against directors, climate resolutions, and/or transition plans.

The initial results from the Net-Zero Company Benchmark demonstrated that there remains a sizable gap between what is needed to achieve net zero and current company action. In unveiling the first round of results for the benchmark, CA 100+ stated that “companies are increasingly making ambitious climate commitments, but now need to deliver” (Climate Action 100+, 2022).

The evolution in climate stewardship, demonstrated by CA 100+ and others, is a distinctly positive development that underlines that corporate engagement will remain necessary for investors seeking rapid corporate action on reducing emissions. However, corporate engagement alone cannot achieve the rapid and unprecedented change needed to achieve real-world decarbonisation.

c. The steepening cost curve for corporate decarbonisation

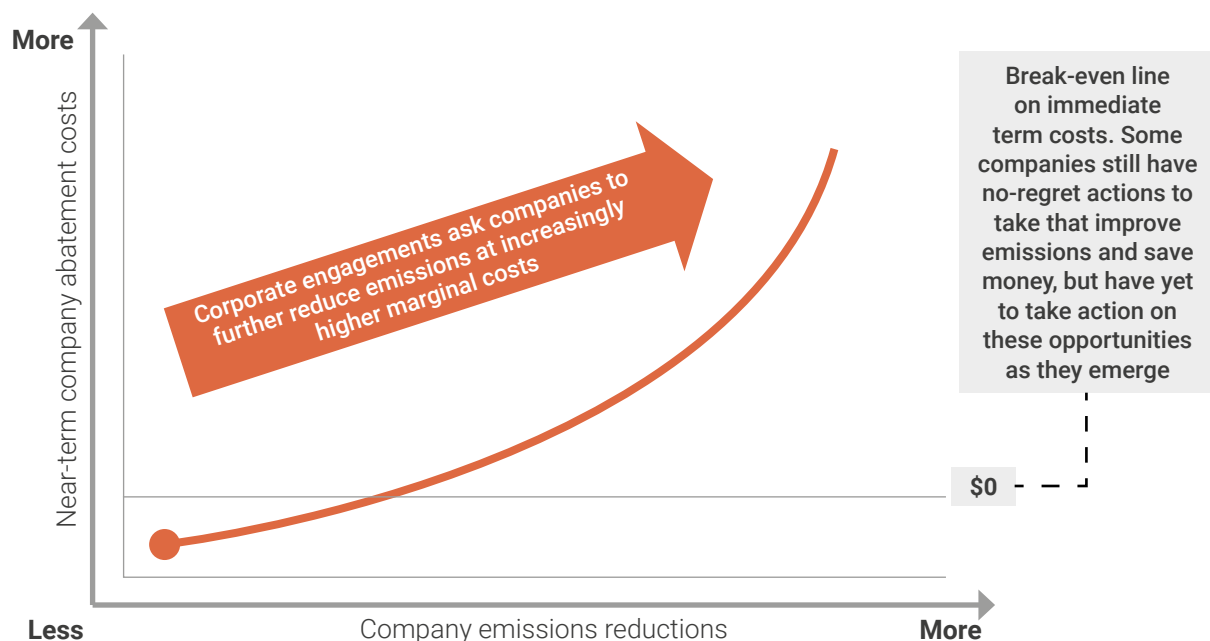
The premise of corporate climate engagement is that investors call on companies to do more to reduce their emissions. In many cases, companies have already acted on opportunities to reduce emissions that also improve their short-term profitability. This is the same assumption made by many economists in their discussions of marginal abatement cost curves. Olivier Elamine, CEO of German property firm Alstria, was quoted in *Responsible Investor*, describing his experience with this phenomenon in investor outreach:

When I have a shareholder phone me and say: “There’s low-hanging fruit and it would improve your returns”, my feedback is: “That’s not managing ESG, it’s just managing my business. If I manage my business properly, I should already be doing all this business-friendly stuff to reduce emissions because it’s a no-brainer”.

Oliver Elamine as cited in Robinson-Tillet, 2021

After companies tackle these “no-brainer” emission reductions, holding all else equal, any new emission abatement efforts come at an increasing marginal cost. We depict this in a simplified manner with the steepening curve in Figure 1.

Figure 1: The Steepening Decarbonisation Cost Curve



Corporate engagement asks companies to further reduce emissions at increasingly higher marginal cost.

Despite increasing costs after “no-regret” efforts below the break-even line are exhausted, there are still compelling long-term strategic reasons for why companies should seek to position themselves as climate leaders. Company action on ESG issues, and climate specifically, can improve branding, reduce reputational risk and strongly bolster a company’s social license to operate (Henisz & Nuttall, 2019). In the longer term, it may benefit the company to position itself against higher-emitting competitors and reduce its transition risks from policies and regulations that are expected to internalise carbon costs. In addition to addressing transition risks, companies will benefit in the mid- and long term by hardening their assets and business models against climate change induced physical risks that the Intergovernmental Panel on Climate Change (IPCC) has warned are “widespread, rapid, and intensifying” (IPCC, 2021). Finally, by clearly signalling support for the transition to net zero through their own public discourse and strategic positioning, companies not only provide momentum, but also an important indicator of readiness, to other stakeholders that are necessary to bring about the systemic changes for 1.5°C alignment—especially policymakers and regulators.

The initial results from the Climate Action 100+ benchmark indicate that there are still a multitude of opportunities for companies to increase their alignment with net zero through “no-regret” efforts. However, as companies take steps to decarbonise and start to move up the ever-steepening cost curves, investor requests for additional emission reductions are met with increasing resistance. Without quantifying an exact point on this curve, which would differ even among peers in the same sector, it follows that companies will inevitably hit a boundary where they can no longer justify going further. **These boundaries are set by the economic and technological feasibility of emission reductions within a sector and the incentives, or lack thereof,¹ set by the regulations and policy framework(s) that companies operate within. These regulations and policy frameworks are the proverbial “rules of the game.”** Unfortunately, the rules of the game are not always designed to incentivise decarbonisation.

1 The most obvious example of a lack of incentives that is slowing decarbonisation is the absence of a carbon price. Without pricing the carbon externality (explicitly or implicitly), the global market relies on ‘soft’ and voluntary incentives, which do not suffice, as argued by the Alliance in the [Discussion Paper on Governmental Carbon-pricing](#).

The disconnect between corporate action on climate and economic incentives is not new. The Center for Climate and Energy Solutions identified a similar theme 20 years ago in their 2001 paper, *Corporate Greenhouse Gas Reduction Targets*:

A number of underlying themes emerged regarding companies' motivations for setting targets. Among the most salient are these: companies that set GHG reduction and energy efficiency targets do so because they believe that setting and meeting the targets will improve their bottom line and drive innovation. They believe that over the long-term, the world will have to deal with climate change, so their climate-friendly investments will pay off. They also believe that by taking the initiative, they can help the government to create a climate change policy regime that works well for business.

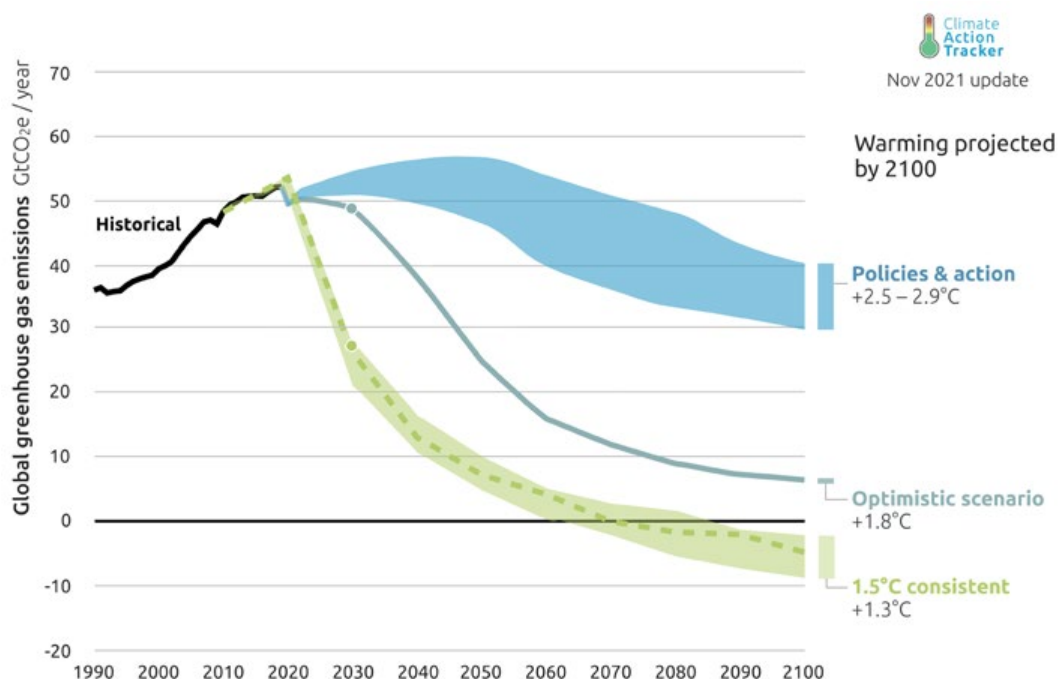
However, in taking these actions, these leading businesses are taking risks. They are betting that there will ultimately be government policy on climate change, that it will allow companies flexibility, and that it will reward and not punish early movers. If they turn out to be wrong, these companies could be disadvantaged relative to their less proactive competitors. (Margolick & Russell, 2001)

There is no doubt that the pressure investors put on companies to address climate change has increased since 2001. The relevant landscape has also shifted considerably – e.g., via adoption of the Paris Agreement, release and uptake of the recommendations of the Task Force on Climate-related Financial Disclosures, and myriad private and public sector commitments to achieve net-zero emissions. In addition, as the impacts of climate change become ever more widespread and palpable, so too do the costs of inaction continue to escalate.

Nevertheless, the core tension described above still generally persists today. The policy framework that enables decarbonisation aligned with a 1.5°C future, with low/no overshoot, has still not sufficiently materialised. Therefore, the business case for decarbonisation remains uncertain, which creates a risk to companies moving aggressively on climate action and limits the ability of the whole economy to transition to net zero.

We represent these limits in Figures 2 and 3 below. What we wish to communicate is that the current business as usual approach (“Policies and Action”), shaped by the existing rules of the game, is far from sufficient to enable a net-zero future in its range of outcomes. Instead, Figure 2 shows that a dramatic shift in trajectory is necessary on a global level to enable a net-zero transition, as is shown in the 1.5°C consistent pathway.

Figure 2: Policy Frameworks and Their Corresponding Emission Pathways



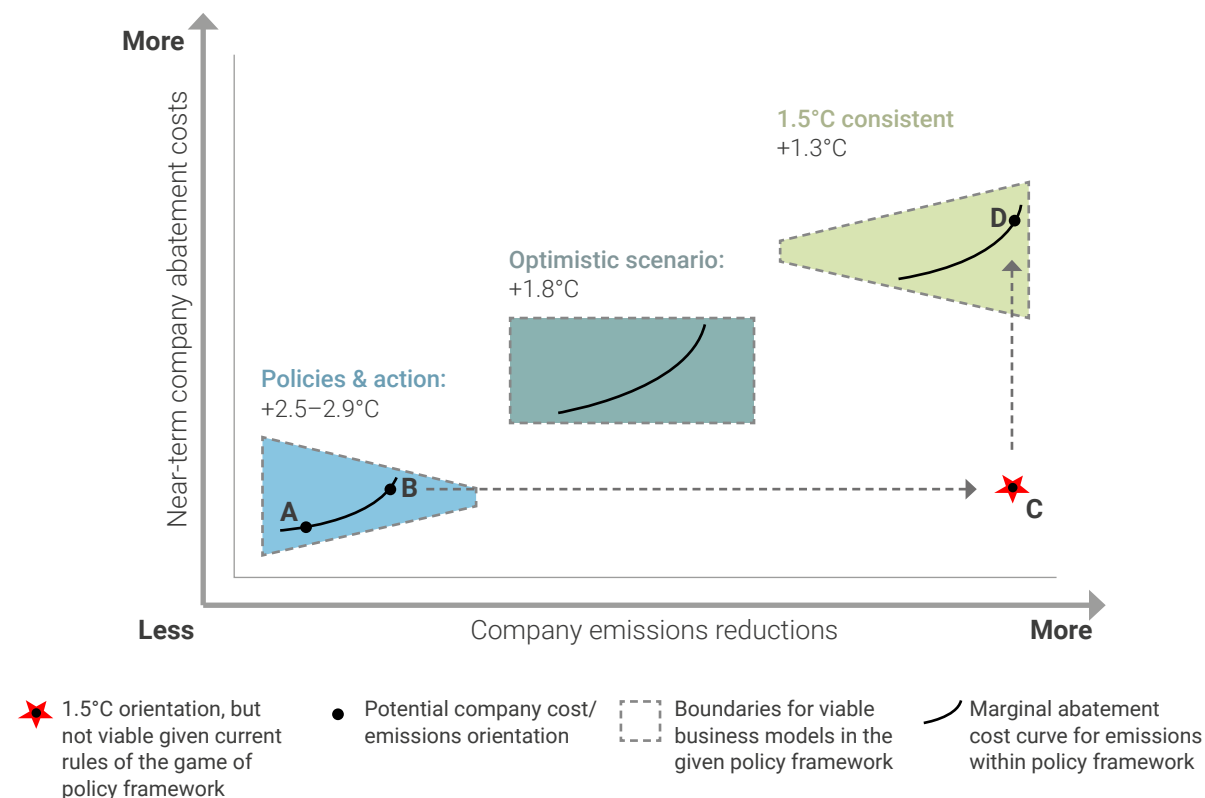
<p>Policies & action: Real world action based on current policies</p>	<p>Optimistic scenario: Full implementation of all announced targets including net-zero targets, LTSs and NDCs</p>	<p>1.5C Consistent Scenario: Policies and trajectory aligned with a 1.5°C future</p>
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Source: Adapted from Climate Action Tracker. (n.d.) *Glasgow’s 2030 credibility gap: net zero’s lip service to climate action.*

By combining the cost curve in Figure 1 and the scenario pathways in Figure 2, we show in Figure 3 how many companies, especially those in hard to abate sectors, can only move so far—from Point A to Point B—in their alignment to net zero, independent of changes in the boundaries set by the rules of the game. Investors can and should call on companies to adopt 1.5°C-aligned targets—as depicted by Point C in Figure 3—but without addressing the systemic barriers to allowing for this company orientation, progress by many companies will be insufficient.

Therefore, investors must keep engaging companies on climate to move them as close as possible to the right side of the policy framework, as depicted by the movement from Point A to Point B—while simultaneously taking further action to engage stakeholders that can influence, design, or set new policy frameworks that make net zero possible by moving the entire playing field to be conducive to 1.5°C-aligned economies, as depicted by Point D.

Figure 3: Policy Frameworks and Their Corresponding Playing Fields



Each potential policy framework and corresponding decarbonisation pathway (in Figure 2) creates a bounded playing field for the industry actors’ viable business cases.

d. Limits of corporate engagement: Five key problems

While corporate engagement plays a valuable role in addressing acute ESG issues in investor portfolios, it is limited in its ability to address systemic problems like climate change when conducted in isolation from other engagement approaches. Regardless of how ambitious or strongly articulated investors’ requests are, if they are not imminently technically or economically feasible, companies may face ever-increasing difficulties to meet them. Companies and investors often acknowledge this reality by making their net-zero commitments contingent upon society and policy moving in tandem or ahead of corporate action.

To spell out the bounds to corporate engagement’s efficacy and efficiency, we highlight five limits to corporate engagement in the following boxes. Later sections cover how different forms of engagement address these limits.

Limit 1: The significant resources needed for effective corporate engagement

Effective exchange between companies and investors requires considerable time, effort, and access to a finite amount of personnel. As companies receive ever-more engagement requests from investors, their resources spread thin, diminishing the quality of conversations, and leaving some inquiries unanswered.

High-quality engagements also require a significant investment of resources from investors. The most effective engagements are when an investor has devoted time and human capital to understanding a company, including its idiosyncratic risks and opportunities, as well as the nuances of the broader sectoral and policy landscape they operate within.

A recent survey of 70 leading asset owners, asset managers and listed companies found companies emphasise “that engagements are only helpful conversations when investors are knowledgeable about their company. Ill-informed investors are seen as an obstacle to successful engagement” (Eccles et al., 2021).

Limit 2: A narrow, single company focus

Engagement with a single company often is insufficient to advance improvements at the sector and value-chain level. Some engagement topics, such as a company’s climate reporting or target setting, are logically well suited for direct corporate engagement. However, engaging on topics that rely on addressing sector-wide or systemic problems, such as the need for shared infrastructure investment to enable a net-zero energy transition, are less efficiently addressed in single company engagements.

The same principle applies to engagement on topics that involve a broader value chain approach, such as discussions about the electrification of heavy-duty transport. Those dialogues would be more effective if they included additional relevant corporate sectors (power utilities, vehicle manufacturers, vehicle customers, etc.) and their respective trade associations.

Limit 3: The inefficiencies of focusing on voluntary, company-by-company, disclosure

Currently, significant stewardship resources are devoted to seeking improvements in company disclosure and reporting on risks related to climate change (Flammer et al., 2021). This focus can lead to improved best-practices on disclosure among corporations. Investors, especially asset managers, should continue to engage directly with corporations on evolving disclosure expectations until there is more robust policy regulating disclosure in a market. However, focused and in-depth engagements on disclosure with each company in a market or portfolio can be an inefficient use of limited investor stewardship resources.

Publicly articulating expectations for action on significant climate issue should complement many of these corporate engagements, so that engagements with companies become a reinforcement of widely communicated expectations. Investors can strengthen these engagements by holding companies accountable through stewardship activities that follow these expectations in the normal course of investor actions. This includes incorporating expectations into merit-based proxy voting policies that set clear criteria for evaluating resolutions and election of directors (U.N.-convened Net-Zero Asset Owner Alliance, 2021b).

Limit 4: An uneven investor focus across companies and asset classes

The investor community often focuses engagement resources on large, publicly listed companies. This makes sense intuitively, as these companies are often the largest holdings in their portfolios, generate the most relative emissions in many investor's portfolios, and have brand names that all stakeholders will recognize. However, this leaves investors prone to "squeezing the balloon" on climate risk, whereby risk is shifted from one to another part of an investor's portfolio or to another investor altogether.

For example, it has been argued that private asset classes lag their public market counterparts on ESG commitments (Latham, 2021). As publicly listed companies from high-emitting sectors respond to shareholder pressure to reduce GHG emissions, they may sell high-emitting assets to smaller public or private companies. Obviously, this sale does not preclude the assets from facing market pressures from an energy transition, which investors in all asset classes need to take into consideration as part of their due diligence process and fiduciary duty (Fickling, 2022). However, evidence suggests that private investors who acquire carbon intensive companies and assets face less operational scrutiny and investor pressure on climate issues, meaning the transfer in ownership potentially worsens real-world emission outcomes (Giachino & Mehta-Neugebauer, 2021). It is also important to note that there is a loss of continuity in the investor-company relationship and engagement history when these assets change hands, which is detrimental to engagement efficacy.

There are signs that this is already happening, with the recently released Fitch report entitled “*Shifting Ownership Patterns of Fossil Fuel Assets and Decarbonization*” which states:

Despite some pressure from institutional investors, there are only limited mechanisms to drive private equity firms towards emissions reductions. Increased shareholder and investor activism in recent years has put pressure on companies and financial institutions to divest fossil fuel assets. Private companies and private equity firms are less exposed to these trends. (McNeil & Tang, 2021, p. 2)

Limit 5: The boundaries set by the rules of the game

Perhaps the most consequential limit to corporate engagement is its inability to move outcomes beyond the boundaries of the “playing field” as set by the rules of the game. Regardless of how ambitious investor commitments are, the systemic change required to achieve net-zero targets will not materialize if there are no plausible pathways, business cases or incentives to allow it under existing economic frameworks.

Adopting ambitious climate practices beyond the boundaries of conventional economic or technological feasibility poses both an opportunity and a risk for companies. On the one hand, it could provide a competitive advantage if the world moves quickly in alignment with a 1.5°C scenario. However, this risk may put a company at a competitive disadvantage if a shift in the policy and regulatory framework to enable 1.5°C alignment does not materialize. In the latter case, investor influence alone will not lead to global voluntary decarbonisation in line with maximum 1.5°C low/no overshoot warming while companies are incentivized by a real economy and regulatory framework that still largely ignores this goal.

Despite these identified limits, corporate engagement still plays a critical role for investors when representing their long-term interests directly to investee companies. When engaging companies to accelerate climate action for the various strategic reasons listed in 1c, Alliance members focus on the companies generating the largest “owned emissions” in their portfolios. This helps drive accountability for climate targets at the highest-emitting companies and helps increase investor understanding of idiosyncratic risk and opportunities posed by a company’s climate strategy (U.N.-convened Net-Zero Asset Owner Alliance, 2022). In addition, corporate engagement provides insights that can inform investors’ approach to broader industry and policy engagement.

However, given the five limits described above, we argue that investors committed to real-world decarbonisation should complement their corporate engagement programs with the three-stream engagement approach, focusing on: 1) sector/value chain engagement, 2) policy engagement, and for asset owners specifically, 3) asset manager engagement.

2. Expanding investor engagement

The following two sub-sections, focusing on sector and policy engagement, apply to all investors. In section 3, we will focus on the opportunity for asset owners specifically in engaging with their asset managers.

a. Sector and value chain engagement

Sector/value chain engagement is another form of direct influence available to investors. This engagement stream pushes for real-world decarbonisation actions across a sector or value chain to catalyse change. In this form of engagement, investors bring together multiple stakeholders—including peer companies, suppliers, regulators, and customers. By taking part in these engagements, investors and companies can identify the regulatory and policy hurdles to achieving net-zero alignment and, as a result, direct their policy engagement to encourage the development of necessary incentives and frameworks that would make 1.5°C alignment possible.

One example of effective sector engagement is the Investor Mining and Tailings Safety Initiative (The Church of England, 2022). Following a major dam failure at the Córrego do Feijão mining facility in Brumadinho, Brazil, a group of institutional investors engaged over 700 extractive companies seeking improved disclosure on the management of tailings storage facilities (TSFs). This initiative resulted in a first-of-its-kind global database of TSFs and a new globally recognised tailings safety standard. Although this example is not net-zero specific, it provides a case study for effective sector-wide engagement by investors.

Encouragingly, sector/value chain engagements focused on climate are now emerging. One example is the newly formed Mission Possible Partnership—a coalition seeking to speed up the decarbonisation of seven sectors involving heavy industry and transport (Allen, 2021). The Glasgow Financial Alliance for Net-Zero is also focusing on developing sectoral pathways as part of their overarching work. A final example built on the foundation of strong corporate engagement is the CA100+'s Global Sector Strategies workstream. This initiative seeks to “coordinate sector-wide engagement, inform investor expectations on company transition plans and recommend interim actions to accelerate progress” (Climate Action 100+, 2021).

The above strategies highlight the unique role that investors can play as conveners of sectoral and value-chain dialogues. Many investors, especially large asset owners like those within the Alliance, manage globally diversified portfolios with long-term return objectives. This gives investors an incentive to move beyond single company engagements to convene discussions among industrial peers within a sector or value chain, to identify innovative pathways for decarbonisation, and facilitate the cross-sector collaboration necessary for reaching net-zero at a larger scale.

The sectoral focus is also critical for addressing limits of corporate engagement outlined in section 1. d.:

Addressing corporate engagement Limit 1: The significant resources needed for effective corporate engagement

Sector engagement is well aligned with the call in PRI's "Active Ownership 2.0" paper for investors to "seek outcomes, prioritise systemic sustainability issues, and use collaboration as an integral tool to overcome the collective action problem" (Peres Da Costa & Chandler, 2019). As such, sector engagement addresses the scalability issues of corporate engagement by facilitating collaborative outreach and action from investors. This coordination reduces the burden placed on companies and increases the quality of investor analysis and insight.

Addressing corporate engagement Limit 2: A narrow, single company focus

Sector/value chain engagement can help investors and companies focus on real-world decarbonisation solutions that require sector-wide action. One benefit of this type of engagement's wider focus is that it can help drive a level of accountability that is not always possible when engaging a single company.

For example, an investor requesting that an automobile manufacturer prioritises the development of electric vehicles may receive the counter argument that there is insufficient demand. The same investor may hear from prospective electric vehicle customers that there is insufficient supply. Value chain engagements help end this circular conversation by bringing potential suppliers and customers together to address information asymmetries and explore innovative ways to address collective hurdles.

Sector/value chain engagement can also uncover technology sharing opportunities or common regulatory and policy hurdles that are best addressed collaboratively.

When successful, sector/value chain engagement could make it easier for companies to develop new technology, collaborate with peers and stakeholders, share costs, and execute projects that improve efficiency. However, sector/value chain engagements are still in their relative infancy. Investors must put forth more resourcing and collaboration on this stream of engagement to ensure it leads to accelerated decarbonisation in

the real economy. Nevertheless, multi-stakeholder actions still hit their limits, as they continue to be bound by the economic reality set by the rules of the game.

Early lessons from initial sector dialogues are that the top-down models based on scientific pathways to net zero, such as the One Earth Climate model and those developed by the International Energy Agency, are often significantly more ambitious than bottom-up models with pathways based on industry feasibility and best practices. The gap between the rate of decarbonisation in what science tells us we must achieve, and what bottom-up analyses says is feasible, is the “policy gap”. This policy gap must be closed by more ambitious climate policies and regulations that enable a faster transition to net zero.

Therefore, an important aim of climate-related sector/value chain engagement should be to identify and understand the policies, regulations, stakeholder concerns, and economic realities that inhibit pathways in line with a 1.5°C scenario and real-world decarbonisation. This understanding will help investors work alongside the stakeholders they engage to address the identified barriers to net zero with industry groups and policymakers. In this way, sector/value chain engagement directly feeds into our next topic: policy engagement.

Case study: Sector/value chain engagement leading to policy insights

As part of the aforementioned CA100+ Global Sector Strategies initiative, the Institutional Investors Group on Climate Change (IIGCC) published a report on the steps needed to facilitate a net-zero transition in the steel sector.

The report *Investor interventions to accelerate net zero steel* found that it would be technically feasible for the sector to reach net zero, but that achieving this goal would require significant collaborative action (Gardiner & Lazuen, 2021). IIGCC stated that 58% of total future emissions reductions in the sector would need to correspond to “coordinated” and “mainly external” actions.

The report calls on all steel companies to, among other “specify the policy positions that the company will adopt to accelerate the delivery of its transition plan” and asks that investors “support sensible and socially responsible policy that incentivises the steel industry” to reduce emissions and transition to net zero.

b. Policy engagement: Re-writing the rules of the game

In this section, we detail three approaches to policy engagement that investors should undertake to shift the rules of the game and facilitate real-world decarbonisation.

Approach 1: Request and inform mandatory corporate disclosure requirements

One of the most straightforward policy engagement opportunities for investors is calling for regulation that requires company disclosure of material climate information. Transparent, thorough, and reliable corporate disclosures on climate are necessary for investors to properly manage their portfolios' risks, opportunities, and impacts. Recent regulatory efforts to develop or require climate reporting standards in multiple markets underscore this recognition, including the EU (Laidlaw, 2021), USA (Johnson, 2021), and Canada (Trudeau, 2021). This momentum is translating into global regulatory focus, with the International Financial Reporting Standards Foundation establishing the International Sustainability Standards Board in November 2021 to help meet the growing demand of investors for the development of transparent, reliable, and comparable climate and ESG reporting standards.

Naturally, mandatory climate reporting must fit into a larger ESG data reporting system, as argued by prominent sustainable investment leaders Oliver Bate, CEO of Allianz, and Hiro Mizuno, UN Special Envoy on Innovative Finance and Sustainable Investments:

For investors to get behind businesses that are serious about reducing their carbon footprint, slowing biodiversity loss, and advancing a regenerative economy, they need reliable data and tools to differentiate between virtue signalling and real impact. A key obstacle facing these investors is the lack of meaningful and comparable data, based on a global standard for corporate ESG reporting.

Bäte & Mizuno, 2021

Investor engagement with regulators on the need for greater transparency and standardisation of company reporting on climate risk is impactful. Even the U.S. Securities Exchange Commission Chair, Gary Gensler, cited investor demand in his explanation for the decision to solicit public input on climate change disclosures: "Investors are looking for consistent, comparable, and decision-useful disclosures so they can put their money in companies that fit their needs" (Pisani, 2021).

In this evolving regulatory and disclosure landscape, it is important that investors continue to engage with regulators—even after the high-level commitment on further climate change disclosure has been made—to ensure that the final disclosure frameworks are sufficient for investors' assessment of climate risk. An example of this type of engagement is the Alliance's statement on the EU Non-Financial Reporting Directive (U.N.-convened Net-Zero Asset Owner Alliance, 2020).

Approach 2: Engage portfolio companies on their lobbying practices and industry associations

Investors have another impactful direct lever to influence policy by integrating corporate climate lobbying expectations in their existing engagement dialogues with compa-

nies. There is a pressing need for this focus on alignment, as there is a significant gap between best practices for net-zero-aligned lobbying and current corporate behaviours (Ceres, n.d.). There are two methods for an investor to focus on closing this gap and both revolve around extending discussions with companies on climate policy alignment—including analysis and disclosure regarding the company’s membership in trade associations.

First, investors should set expectations that their portfolio companies’ lobbying activities align with the interests of society and the broad economy by supporting rapid decarbonisation. Many companies, especially those in hard-to-abate sectors, may have short-term incentives to slow down rapid decarbonisation. Therefore, it is pivotal for investors to make clear that lobbying practices that hinder sensible and well-designed policies for real-world decarbonisation put companies at odds with the direction of the global economy and threaten their long-term social license to operate.

Institutional investors have a clear incentive to make this argument. If the obstruction of decarbonisation policy efforts is successful, the consequences of climate change will have inescapable negative impacts on the diversified investment portfolios held by global asset owners (Freshfields Bruckhaus Deringer, 2021). Regardless of whether a company has committed itself to net zero, investor stewardship should reinforce an expectation that this type of hinderance is unacceptable corporate behaviour with corresponding escalation activities for when companies violate this norm.

Second, for companies that have set net-zero ambitions, investors should insist that lobbying alignment is a necessity for maintaining the legitimacy of those ambitions. We have observed that many companies setting ambitions for net zero do so contingent upon movement from policy or broader society. Therefore, to remain credible, companies that are setting net-zero ambitions contingent upon society must also simultaneously take action to support the policy actions that they see as necessary to successfully decarbonise. Investors should make clear their expectations that companies that publicly support climate action cannot be complacent or counterproductive in the policy conversations needed to drive real-world decarbonisation.

Investors have many resources to help shape their engagement approach on company lobbying activities. A key pillar is the research of InfluenceMap (n.d.), which informs the climate policy engagement indicator of the CA100+ Net-Zero Company Benchmark. Other useful resources include Ceres’ work on *Responsible Policy Engagement* (Ceres, 2020) and *Responsible climate lobbying: The global standard*, which launched in 2022 after a two-year consultation with investors and businesses (The Global Standard, n.d.).

Approach 3: Support industrial policy that effectively addresses climate change

A welcome development in investor policy engagement has been the onset of broad calls for more ambitious climate actions from governments, such as the most recent 2021 Investor Agenda open letter to all governments or the 2021 GFANZ call for governments of the G20 to take action on climate change. For investors to publicly signal that climate action is directly aligned with their fiduciary duty is important and impactful. However, we have observed in our engagements that many investors are still hesitant to narrow their climate policy engagement to advocacy on specific policies or regulations. This may be to avoid being perceived as partisan by certain stakeholders or because of lack of investor expertise on sector-specific industrial policy.

We believe investors can maintain a non-partisan stance and represent their long-term interests on specific policy issues by advocating smart climate policymaking. Investor messaging to policymakers can focus on issues related to financial risks to portfolios, existential risks to asset owner businesses, and transition risks to the real economy that grow in disruptive potential the more delayed the policy response becomes (Inevitable Policy Response Consortium, 2021).

This type of advocacy is increasingly recognised as an important investor responsibility. For example, the report *A Legal Framework for Impact: Sustainability Impact in Investor Decision Making*, commissioned by PRI, found that the very nature of systemic risks, such as climate change, creates an imperative for investors to advocate for smart climate policy as a key fiduciary consideration (Freshfields Bruckhaus Deringer, 2021). There are already some encouraging examples, showing that this type of engagement is becoming more common—for instance, the broad-based investor engagement seeking strong methane regulation from the Environmental Protection Agency in the United States (Ceres, 2021).

While investors need to acknowledge and operate respectfully as one stakeholder among many in the policy process, we believe that the investors' interest in the long-term health of the economic system can help counterbalance the sometimes-narrower interests of individual companies or trade associations.

Case Study: Alliance Policy Engagement to Address Systemic Risks

Among economists, a carbon price is the most widely accepted solution for reducing emissions in the near-term and sending market signals that account for externalities. For investors to call on policymakers to implement carbon pricing policies is both necessary and feasible. As members of the Alliance, we look to our own publication on calling for a legally binding, long-term, just, carbon-pricing corridor in line with best available science. In the Alliance's 2021 *Discussion paper on governmental carbon-pricing*, members outlined that:

The carbon-pricing mechanisms proposed are a hybrid scheme between emissions trading or cap-and-trade schemes (ETS), and carbon taxes or levies. A minimum market price – the floor – can be set to provide certainty to investors and a guardrail against price crashes. A maximum market price – the ceiling – provides a guardrail against rapid increases in prices, preventing backlash that could undermine political support for carbon-pricing more broadly. (U.N.-convened Net-Zero Asset Owner Alliance, 2021b)

The Alliance has also used policy engagement to call on governments to implement measures that accelerate the phase out of power generation from thermal coal. Our Thermal Coal Position specifically highlights the need for supporting ambitious public policy, stating:

Our commitment signals to our stakeholders, the global business and finance community and all government policymakers that we are ready to support corporate action and expect the creation of ambitious public policy to promote rapid decarbonization of developed and emerging economies in a socially responsible manner. (U.N.-convened Net-Zero Asset Owner Alliance, 2020b)

Effective policy engagement addresses three of the limits of corporate engagement

By leveraging insights from both corporate and sector/value chain engagement, policy engagement addresses Limits 3, 4, and 5 of corporate engagement in ways described in the following boxes.

Addressing corporate engagement Limit 3: The inefficiencies of focusing on voluntary, company-by-company, disclosure

Investor engagement with corporations on disclosure is likely to remain necessary as regulatory disclosure requirements evolve. Because many disclosure requests made by investors to companies are of a similar or identical nature across sectors, they are well suited for investors to publicly state requests and hold companies accountable through systematic stewardship, like merit-based proxy voting decisions (Bâte & Mizuno, 2021). Investors should complement their direct requests to companies by engaging policymakers to encourage regulatory requirements for material climate-related disclosures. This higher-level engagement on disclosure frees investor and company resources to focus corporate engagements on more strategic topics.

Addressing corporate engagement Limit 4: An uneven investor focus across companies and asset classes

Effective policy and regulation can help avoid the shuffling of climate externalities between different markets, corporate entities and from public to private markets. Companies who are climate leaders have an additional incentive to call for policy that is aligned with net zero as it rewards their strong position as a climate leader while raising the standards for all actors, public or private.

Effective climate policy and regulation can also reduce the systemic risk of shifting ownership of carbon-intensive assets from companies with high climate scrutiny to those without climate policies/governance, since it integrates both companies into a decarbonisation-enabling policy environment.

Addressing corporate engagement Limit 5: The boundaries set by the rules of the game

Investors must simultaneously push companies to set ambitious short- and long-term targets to align with net zero and urge them to lobby for policy action that ensures that achieving those targets can become a reality.

By doing so, the structural regulatory and policy hurdles that limit the viable business case for decarbonisation can be addressed head on. This adds critical credibility to commitments contingent upon society and constructively contributes to enabling companies and investors to veritably reach their shared decarbonisation goals.

Finally, investors should be cautious not to over-state their influence on policy nor their potential to provide solutions to complex multi-stakeholder climate problems. Investors should make clear that they are using their direct and indirect influence in large part to call on policymakers, including civil society experts and stakeholders, to step in to develop and implement smart climate policy.

The resulting policy process needs to be influenced and led by many stakeholders, including, but not limited to, the business community, with key leadership and insights needed from workers, community groups, scientists, academics, and others. Investor policy engagement will be most effective and impactful if it is done in collaboration with broad multi-stakeholder interests (Hornqvist, n.d.). Learning how to effectively partner with diverse groups is a complex, essential and iterative exercise for investors as we seek to change the rules of the game to drive the transition to net zero.

Perhaps most importantly, supporting inclusive policymaking is a pre-condition to ensuring that the decarbonisation transition investors are calling for is just, fair and sufficiently accounts for the social implications of a shifting economy. Without consideration for the social impacts of the transition, investors will soon face understandable pushback from many stakeholders in society whose livelihoods might be negatively affected by the transition.

3. Opportunities specific to asset owners: Asset manager engagement

As asset owners and members of the Alliance, one of the most important and impactful engagement opportunities we have is engaging our asset manager partners to support greater climate action and 1.5°C alignment with low/no overshoot. This is true for asset managers investing on our behalf in both public and private markets.

Asset managers choose the companies in our portfolios, conduct corporate engagements, cast votes on directors and climate resolutions on our behalf, and influence the business community through their own policy engagement and public discourse. They also typically have more staff, resources, and analytical insights for stewardship activities within their organisations than asset owners. Although individual asset managers may have different business models and investment strategies, they are—as a whole—one of the most active participants in the investor engagement ecosystem. Asset owners have a responsibility to pick those managers that best align their actions with asset owners' long-term interests, including climate change mitigation.

We welcome the Net Zero Asset Managers Initiative and look forward to collaborating with the group on our shared objectives. However, net-zero commitments alone are not enough. To meet their 2050 commitments, asset managers must act now as influencers of the real economy through all three streams of corporate, sector/value chain, and policy engagement to support the net-zero goals of their asset owner clients.

a. Asset owner action to increase asset manager ambition and accountability

Asset owners must increase their efforts to ensure that asset managers understand and properly represent the systemic and long-term interests of their asset owner clients. In the current system, there is not a natural alignment of time horizons or scope between asset owners and managers for systemic issues like climate change (Freshfields Bruckhaus Deringer, 2021). Properly representing the long-term interests of asset owners is only achieved when asset managers address climate change throughout their entire organisation's investment and stewardship activities. As such, it is insufficient for asset managers to offer climate products and strategies to some customers, while maintaining stewardship actions or funding activities in other areas of the business that slow or obstruct the transition.

Therefore, to achieve alignment with their long-term climate goals, asset owners must push for stewardship activities by asset managers that expand beyond the direct and idiosyncratic lever of corporate engagement. This will include adapting certain foundations of traditional asset owner-asset manager relationships. One example is for asset owners to challenge alpha's primacy as a performance measure against benchmarks. As we pointed out in the article *Asset Owners Must Demand Bold Climate Action From Asset Managers*, pursuing alpha should not be prioritised in a silo that ignores the potential impact of market beta on asset owner returns (Peura & Barnett, 2021). This approach not only serves to increase investor welfare—but societal welfare too—while reframing investors' understanding of how they operationalize their actions to steward their long-term interests (Gordon, 2021).

To emphasise the seriousness and importance of this alignment of interests, asset owners should evaluate the strength of asset managers' systematic stewardship efforts related to climate and integrate that evaluation into their ongoing selection, appointment, and monitoring (SAM) processes. This evaluation of asset managers should seek to look beyond an asset manager's public commitments and evaluate the strength and robustness of actions being taken to drive decarbonisation in the real economy.

Case Study: Alliance Principles for Engaging on Alignment with Asset Manager Proxy Voting

One opportunity for effective asset manager engagement is ensuring alignment with climate-related proxy voting expectations. In April 2021, the Alliance published a working paper titled *Elevating Climate Diligence on Proxy Voting Approaches: A Foundation for Asset Owner Engagement of Asset Managers*.

This document outlines a foundation for assessing and engaging asset managers on climate-related proxy voting. The Alliance organized these principles in four themes: governance, interest alignment, merit-based evaluation, and transparency. Of particular importance is the expectation for merit-based evaluation of climate proposals, wherein “voting guidance states general (or specific where possible) evaluation criteria used when considering common topics of Climate Votes” (2021, p.5). Clear public voting policies for these proposals avoids the opaque process of asset managers basing voting decisions on private conversations with companies or case-by-case evaluation of proposals with unclear criteria. These transparent principles also help asset owners to assess alignment between asset manager voting practices and asset owner long-term interests. These clear, accountable, and transparent criteria should also be used for director votes and votes on transition plans.

These principles were designed in collaboration with professionals within the Alliance who are responsible for asset manager oversight to ensure that they could be easily integrated into the ongoing SAM processes of asset owners.

b. Encouraging asset managers to think systemically on our behalf

Asset managers have a unique role in many of the systemic issues outlined throughout this paper. Asset managers often have long-standing and strong relationships with companies in their portfolios and hold more concentrated positions in companies than their asset owner clients. This gives clear weight and influence to any messaging that asset managers deliver to companies on the need to manage systemic risks.

Asset managers' participation in sector/value chain engagements can provide unique insights into broader economic trends and potential policy developments. These insights can in turn influence financial flows, if they inform the manager's capital market assumptions. Furthermore, in managing climate risk on behalf of their asset owner clients, asset managers know first-hand the important need for transparency and quality of the data used to make forecasts about the future and can bring these examples into public discourse to support calls for better mandatory disclosure.

Lastly, asset managers must serve an important role in influencing the rules of the game. Through thought leadership, public discourse, and policy engagement, asset managers can help encourage the development of the policy frameworks and economic incentives that are needed to catalyse the systemic shifts that would limit warming to 1.5°C. Asset owners must set the tone in public discourse by asserting that strong policy engagement is an expected part of their managers' fiduciary role. If the rules of the game inhibit the net-zero ambitions of an asset owner, and if their asset managers are unwilling to act to change the rules of the game, then asset owners should communicate that their best interests are not being authentically represented, including by changing mandates if necessary.

4. Conclusion

Dramatic systemic shifts in the economy are necessary to preserve global warming below 1.5°C. Stabilising the climate is not possible without the support and involvement of a wide breadth of stakeholders.

As stated throughout this paper, investors can support climate action by using their influence, convening power, and engagement resources to steward their portfolios to net zero in a way that helps lead to a 1.5°C-aligned future. This is necessary not just to protect against financial risks to investment portfolios, but existential risks to asset owners' core businesses.

More resources and best practice examples are needed to move work on systematic stewardship forward. Examples include additional sector/value chain engagement streams, further development of investors' sector-specific expertise to facilitate engagement on policy, and additional guidance for asset owner engagement of asset managers to align long-term interests with portfolio management.

Investors also need to elevate their focus on engagement strategies in emerging and developing economies (EMDEs). The Paris Agreement accepts that EMDEs will require an accelerated roll-out of technology and finance to meet their Nationally Determined Contributions (NDCs). Systematic engagement, advocated for in this paper, must therefore have an international lens. Investors in G7 and G20 countries have the unique responsibility to advocate for helping unlock the large-scale financial and technical roll-out needed to support EMDEs.

Investors adopting the more novel engagement streams described throughout this paper will require the build-out of different resources within stewardship teams and a willingness within organisations to complement their status quo engagement approach with less familiar strategies. Investors should navigate the uncertainties associated with the iterative evolution in strategy by operating as transparently as possible. This could include consulting with technical experts to inform sectoral engagement or reaching out to civil society stakeholders when pursuing policy engagements. A commitment to active listening, authentic relationship-building, and trusting collaboration will serve investors well.

The work of investor stewardship must drive a financial system that is resilient to systemic risk, while also better serving the collective interests of asset owners, the business community, and humanity in general. To do this, the financial sector stewardship activities must contribute more to mitigating real world systemic risks from climate change. This includes a vision of a just transition to a 1.5°C-aligned future that leads to greater stability, equity, and prosperity. Making this vision a reality will not be easy, but it is necessary.

5. Bibliography

Allen, D. (2021, March 17). *Collaboration to Decarbonize Heavy Industry*. *The Santa Barbara Independent*. independent.com/2021/03/18/collaboration-to-decarbonize-heavy-industry/

Austin, D. (2021). *Market-led sustainability is a 'fix that fails'... but it may have been the necessary 'defence at first depth.'* Both Brains Required. bothbrainsrequired.com/wp-content/uploads/2021/10/2021-10-21-Market-led-Sustainability-is-a-Fix-that-Fails-Final.pdf

Bäte, O., & Mizuno, H. (2021b, October 6). *It's time to set a global ESG standard for investors*. *Fortune*. Retrieved February 16, 2022, from fortune.com/2021/10/06/esg-investing-reporting-standard-cop26-climate-talks/

Belsom, T., Chandler, P., Horne, C., & Barron, T. (2021, February 19). *An introduction to responsible investment: stewardship*. PRI. Retrieved February 16, 2022, from unpri.org/an-introduction-to-responsible-investment/an-introduction-to-responsible-investment-stewardship/7228.article

Ceres, Environmental Defense Fund, & KKS Advisors. (2019). *The role of investors in supporting better corporate ESG performance: Influence strategies for sustainable and Long-Term value creation*. Meridian Institute. ceres.org/sites/default/files/reports/2019-04/Investor_Influence_report.pdf

Ceres. (2020, July 16). *As U.S. rebuilds economy, companies urged to align lobbying with science-based climate action* [Press release]. ceres.org/news-center/press-releases/us-rebuilds-economy-companies-urged-align-lobbying-science-based-climate

Ceres. (2021, May 12). *Major investors demand ambitious methane regulations in the U.S.* [Press release]. ceres.org/news-center/press-releases/major-investors-demand-ambitious-methane-regulations

Ceres. (n.d.). *Practicing responsible policy engagement*. ceres.org/practicingRPE

Climate Action 100+. (2021, August 4). *Blog: Climate Action 100+ zeroes in on industry-wide decarbonisation*. climateaction100.org/news/blog-climate-action-100-zeroes-in-on-industry-wide-decarbonisation/

Climate Action 100+. (2022, January). *2021 Year in review a progress update*. Climate Action 100+. climateaction100.org/wp-content/uploads/2022/01/Climate-Action-100-2021-Progress-Update-Final.pdf

Climate Action 100+. (n.d.) *Net-zero company benchmark*. climateaction100.org/progress/net-zero-company-benchmark/

Climate Action Tracker. (n.d.) *Glasgow's 2030 credibility gap: net zero's lip service to climate action*. climateactiontracker.org/publications/glasgows-2030-credibility-gap-net-zeros-lip-service-to-climate-action/

The Global Standard (n.d.). *Responsible climate lobbying*. climate-lobbying.com/

Eccles, R., & Klimenko, S. (2019, May 1). Shareholders are getting serious about sustainability. *Harvard Business Review*, May–June 2019 (pp.106–116). hbr.org/2019/05/the-investor-revolution

Eccles, R., Mooij, S., & Stroehle, J. (2021, June 14). Four strategies for effective engagement. Why the nature of investor-corporate discussion is key for successful outcomes. *Responsible Investor*. responsible-investor.com/four-strategies-for-effective-engagement/

Fickling, D. (2022, January 5). *Why private equity won't be the savior of fossil fuels*. Bloomberg. bloomberg.com/opinion/articles/2022-01-05/why-private-equity-won-t-be-the-savior-of-fossil-fuels

Flammer, C., W. Toffel, M., & Viswanathan, K. (2021, April 22). Shareholders are pressing for climate risk Disclosures. That's good for Everyone. *Harvard Business Review*. hbr.org/2021/04/shareholders-are-pressing-for-climate-risk-disclosures-that-s-good-for-everyone

Freshfields Bruckhaus Deringer. (2021). *A legal framework for impact - sustainability impact in investor decision making*. Principles for Responsible Investment. unpri.org/download?ac=13902

Gardiner, D., & Lazuen, J. (2021, August). *Global sector strategies: Investor interventions to accelerate net zero steel*. Climate Action 100+. climateaction100.org/wp-content/uploads/2021/08/Global-Sector-Strategy-Steel-IIGCC-Aug-21.pdf

Giachino, A., & Mehta-Neugebauer, R. (2021, October). *Giachino the climate crisis: The risks of a shadowy industry's massive exposure to oil, gas and coal*. Private Equity Stakeholder Project. pestakeholder.org/wp-content/uploads/2021/10/PESP_SpecialReport_ClimateCrisis_Oct2021_Final.pdf

Glasgow Financial Alliance for Net Zero. (2021). *Act Now. Financial leaders urge more climate action from the G20*. assets.bbhub.io/company/sites/63/2021/10/GFANZ-call-to-action.pdf

Gordon, J. N., *Systematic Stewardship* (January 24, 2022). *Journal of Corporation Law*, 2022 (Forthcoming), European Corporate Governance Institute – Law Working Paper No. 566/2021, Columbia Law and Economics (Working Paper No. 640). Available at SSRN: ssrn.com/abstract=3782814 or dx.doi.org/10.2139/ssrn.3782814

Henisz, W., & Nuttall, R. (2019, November). Five ways that ESG creates value. McKinsey Quarterly. [mckinsey.com/~/media/McKinsey/Business%20Functions/Strategy%20and%20Corporate%20Finance/Our%20Insights/Five%20ways%20that%20ESG%20creates%20value/Five-ways-that-ESG-creates-value.ashx](https://www.mckinsey.com/~/media/McKinsey/Business%20Functions/Strategy%20and%20Corporate%20Finance/Our%20Insights/Five%20ways%20that%20ESG%20creates%20value/Five-ways-that-ESG-creates-value.ashx)

Horntvedt, J. (n.d.). *Five reasons to involve others in public decisions*. University of Minnesota Extension. extension.umn.edu/public-engagement-strategies/five-reasons-involve-others-public-decisions#:~:text=Engaging%20the%20public%20as%20decisions,work%20for%20the%20common%20good

Inevitable Policy Response Consortium. (2021, March). *Executive summary: inevitable policy response 2021 policy forecast*. Principles for Responsible Investment. unpri.org/download?ac=12950

Intergovernmental Panel on Climate Change. (2021, August). *Climate change widespread, rapid, and Intensifying- IPCC*. ipcc.ch/2021/08/09/ar6-wg1-20210809-pr/ Johnson, K. (2021, June 16).

Laidlaw, J. (2021, August 3). *New EU ESG disclosure rules to recast sustainable investment landscape*. S&P Global. spglobal.com/esg/insights/new-eu-esg-disclosure-rules-to-recast-sustainable-investment-landscape

Latham, M. (2021, June 28). *PE industry still lags on ESG and diversity, report finds*. Private Equity News. penews.com/articles/despite-progress-pe-industry-still-lags-on-esg-and-diversity-20210628

Margolick, M., & Russell, D. (2001, November). *Corporate greenhouse gas reduction targets*. Global Change Strategies International, Inc. greenbiz.com/sites/default/files/document/O16F21776.pdf

McNeil, D., & Tang, M. (2021, May). *Shifting ownership patterns of fossil fuel assets and decarbonisation*. Sustainable Fitch. sustainablefitch.com/insights/shifting-ownership-patterns-of-fossil-fuel-assets-decarbonisation

Peura, P., & Barnett, J. (2021, August 17). *Asset owners must demand bold climate action from asset managers*. Responsible Investor. responsible-investor.com/articles/asset-owners-must-demand-bold-climate-action-from-asset-managers

Peres Da Costa, S., & Chandler, P. (2019, November). *Active ownership 2.0: The evolution stewardship urgently needs*. The Principles for Responsible Investment. unpri.org/download?ac=9721

Pisani, B. (2021, July 28). *SEC Chair Gensler says investors want mandatory disclosure on climate risks*. CNBC. [cnbc.com/2021/07/28/sec-chair-gensler-says-investors-want-mandatory-disclosure-on-climate-risks.html](https://www.cnbc.com/2021/07/28/sec-chair-gensler-says-investors-want-mandatory-disclosure-on-climate-risks.html)

Reuters (2021, June 16). *Analysis: Investors ask U.S. SEC for more ESG disclosures as companies resist*. [reuters.com/business/sustainable-business/investors-ask-us-sec-more-esg-disclosures-companies-resist-2021-06-16/](https://www.reuters.com/business/sustainable-business/investors-ask-us-sec-more-esg-disclosures-companies-resist-2021-06-16/)

Robinson-Tilett, S. (2021, March 30). *The CEO's perspective: 'Surely it's more responsible to tell the truth than to come up with Net Zero claims.'* Responsible Investor. responsible-investor.com/articles/the-ceo-s-perspective-surely-it-s-more-responsible-to-tell-the-truth-than-to-come-up-with-net-zero-claims

The Church of England. (2022) *The investor mining and tailings safety initiative*. churchofengland.org/about/leadership-and-governance/church-england-pensions-board/pensions-board-investments/investor-1

The Investor Agenda. (2021, September 14). *587 investors managing \$46 trillion in assets urge governments to undertake five priority actions to accelerate climate investment before COP26* [Press release]. theinvestoragenda.org/wp-content/uploads/2021/09/2021-Global-Investor-Statement-to-Governments-on-the-Climate-Crisis.pdf

Trudeau, J. (2021, December 16). Minister of Environment and Climate Change Mandate Letter. Government of Canada. pm.gc.ca/en/mandate-letters/2021/12/16/minister-environment-and-climate-change-mandate-letter

U.N.-convened Net-Zero Asset Owner Alliance. (2020a, June). *Net-zero asset owner alliance: Statement on the EU's non-financial reporting directive consultation*. United Nations Environment Programme Finance Initiative . unepfi.org/news/industries/investment/net-zero-asset-owner-alliance-statement-on-the-eus-non-financial-reporting-directive-consultation/

U.N.-convened Net-Zero Asset Owner Alliance. (2020b, July). *Thermal coal position*. United Nations Environment Programme Finance Initiative. unepfi.org/wordpress/wp-content/uploads/2020/11/Net-Zero-Asset-Owner-Alliance-Thermal-Coal-Position.pdf

U.N.-convened Net-Zero Asset Owner Alliance. (2021a, April). *Elevating climate diligence on proxy voting approaches: A foundation for asset owner engagement of asset managers*. United Nations Environment Programme Finance Initiative. unepfi.org/wordpress/wp-content/uploads/2021/04/16-Elevating-Climate-Diligence-2.pdf

U.N.-convened Net-Zero Asset Owner Alliance. (2021b, July). *Discussion paper on governmental carbon-pricing*. United Nations Environment Programme Finance Initiative. unepfi.org/wordpress/wp-content/uploads/2021/07/FINAL-AOA-Discussion-paper-on-governmental-carbon-pricing.pdf

U.N.-convened Net-Zero Asset Owner Alliance. (2022, January). *Target setting protocol. Second edition*.

United Nations Environment Programme Finance Initiative. unepfi.org/wordpress/wp-content/uploads/2022/01/NZAOA-Target-Setting-Protocol-Second-Edition.pdf



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