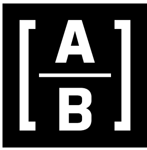

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INSTITUTIONAL INSIGHTS

Q4 2021

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Key Signs on the Road to Net Zero

As climate change intensifies, so does the need for action to slow global warming and transition to net-zero carbon emissions. The solution must come from all sides: policymakers, companies, asset owners, investment managers and academics—even individual citizens. Here are some of the more prominent topics that surfaced in our recent conversations with climate experts, asset owners and other stakeholders as the world works to tackle this pressing challenge.

A Global Challenge Requires a Collaborative, Cross-Discipline Effort

New insights reveal that the stakes of climate change are much greater than believed just a few years ago. Climate change is a highly nonlinear process that features waves of cascading events. Advances in climate modeling indicate that the warming scenario of 2°C seems increasingly as dire as the 4°C scenario seemed only a few short years ago, with tail risks grossly underestimated.

The world can still tackle this urgent challenge and achieve net-zero climate emissions in time. Reductions of 50% by 2030 are even possible, aided by changing investor sentiment and declining renewable energy prices. But achieving nationally determined contributions under the Paris Agreement will be a marathon—and no one has all the answers.

To move the needle further toward net zero, three broad spheres must coalesce: public policy, private sector activity and academic expertise. Public policy is needed to craft regulatory and fiscal frameworks that shape private sector action and unlock business opportunities. Incentives and mandates are needed to promote better climate disclosure, data and transparency.

The private sector must lead the way to net zero. The amount of investment needed to enable the transition is staggering—by some estimates on the order of $100 trillion by 2050, mostly from non-government sources. Asset owners, investors and other stakeholders collectively need to ensure that this capital is directed toward solutions and that issuers deploy capital in ways that enable net zero while also meeting their fiduciary obligations.

A key conduit in directing that capital is continued growth in the market for ESG-aligned investing, whether it's traditional investments with ESG integration or purpose-driven strategies. Given the sheer scale of capital required, the field of solutions needs to expand and diversify to include tailored solutions directed at climate response and innovation. It's targeted investment—not divestment—that will enable net zero.

We also can't overlook the critical role of climate scientists, economists and policy experts, given their deep reservoirs of knowledge, access to oceans of data and connections to public sector research initiatives. Climate experts—and their colleagues in other disciplines—can help investors better understand climate change and sharpen their analysis and tools to dimension risks and opportunities.

Investors Must Expand Climate Knowledge and Tools

Given the massive amounts of private sector capital needed to fund the net-zero transition, it's critical to target that capital effectively. Asset owners and investors are on the front lines in making those critical decisions. Whether it's evaluating company transition plans, exploring new areas of opportunity or advocating for better behaviors, investors must go to school on climate change.

The analytical challenge itself is daunting. It's not simply about determining the level of overall emissions for an issuer, or whether or not it's aligned with a 2°C warming scenario. Analysts have to trace the physical and transition risks of climate change to income statements, balance sheets and business models to identify vulnerabilities and opportunities. What are the implications of climate change and the net-zero transition on an issuer's revenues and costs? How will the transition affect market share and product mix? Climate costs can be direct (such as carbon taxes) or indirect (the cost of air scrubbers). As climate-reporting requirements ramp up, investors must apply a critical eye to sustainability reports and emissions data.

Engagement is equally important, not only in understanding risks and opportunities but in enforcing progress. We've answered the "whether" and "why" of the net-zero goal—asset owners and investors will help determine the "how." Issuer transition plans must be assessed quickly and accurately, and coverage of issuers scaled up. From large-cap, developed-market firms to businesses in emerging markets, engagement is a clear channel in holding companies accountable for gaps in net-zero plans.

Focused engagement campaigns can help, as can collaborative engagement through international coalitions. Net-zero progress may be incremental, but it has to be tangible. The process needn't be highly prescriptive, but issuers should be held to their commitments, even if it requires escalation—from broader discussions to open letters or shareholder resolutions. Divestment is a last-ditch effort: capital is most effective when it's present and encouraging change, not absent.

Brown and Green Industries Have Vital Transition Roles

The focus on net zero and the need to limit global warming is already translating into investment preferences, with stronger premiums for leaders versus laggards. But there's a clear place for "brown" issuers—companies not among the leaders but making meaningful progress and playing critical roles in enabling the transition.

The electric vehicle (EV) market is one example. EVs are a major cog in the plan to achieve net-zero emissions, and automakers are rolling out business plans to sell more of them—prodded by consumer demand and public sector regulation. However, batteries are needed to make EVs work, and the supply chain of EV battery components relies on traditional brown industries—notably the mining of lithium, cobalt, nickel and other minerals.

Investment capital must be deployed all along the EV chain to capitalize on opportunities and encourage growth. This doesn't mean "brown" industries and issuers can keep operating at their own discretion, but simply divesting from brown industries that are transition enablers ignores the complex challenge of shifting an entire planet and society to a net-zero emissions model—and may hobble net-zero progress.

Instead, a distinction is needed between greenwashing—investors or issuers claiming to have sustainable strategies or products when they don't—and issuers with high but falling carbon emissions. The contributions of these improvers to net zero stretch far beyond the EV example. Heavy construction industries are indispensable in building wind turbines or dams—and fortifying or relocating buildings in areas at risk from rising sea levels and severe weather.

A pragmatic lens views brown industries and organizations along a continuum. It acknowledges that they're critical to the net-zero transition and need time—spurred by active engagement—to adapt and evolve. But there's no indefinite lease for companies to clean up their act, and asset owners, investors and society should press them to make progress.

Data Needs: Better Quality, Broader Availability and Culture Change

Whether it's measuring climate risks in investment portfolios, assessing issuers' progress along their individual paths to net zero, or evaluating the best avenues for private funding to facilitate the transition, data and information are key.

Climate-risk modeling is a case in point. Available models are still young, with a wide variety of approaches, strengths and weaknesses. Expanding asset coverage should be a data priority, so that asset owners can better evaluate their adherence to net-zero-related commitments. Public assets are reasonably well covered, but it's harder to get data on nonpublic assets and categories such as derivatives. Asset owners have enlisted asset managers to help—even hiring consultants to dig into specific properties.

Advances in data collection technology could help verify GHG emissions across the globe, though they remain several years away. Advances in sensor platforms, including mini-satellites and drones, could pin down emissions in hard-to-reach locations. As the data set matures in the next few years, climate scientists can help investors and asset owners derive relevant information.

What can stakeholders do while data "catches up" to net-zero ambitions? Scope 1 emissions data are in relatively good shape; some aspects of scopes 2 and 3 data are useful but need refining. The best foot forward for now is to use scopes 1 and 2 data while acknowledging that fundamental analysis and direct engagement will always be needed to interpret portfolio and issuer footprint calculations.

There seems to be broad agreement that a data culture shift would be welcome, given that data is expensive to access even when it's available. Improved transparency and norms around data sharing would enable a shift from the notion of proprietary data toward publicly available repositories that can be reviewed for accuracy and interrogated by stakeholders.

This shift requires overcoming hesitancy in providing proprietary company-level data, driven usually by concerns about reputation or other consequences if initial data disclosures are later found inaccurate. Government and auditors could be enlisted in this effort, potentially by creating a "safe harbor" of sorts for the more transparent issuers and first movers in climate-data disclosure.

Don't Let the "E" of the Climate Transition Obscure the "S"

We've also seen the desire to maintain a strong link between the "E" and "S" in ESG when it comes to the net-zero transition—a "just transition," as the Paris Agreement puts it.

Just as poor and marginalized groups are more prone to suffer from global warming, they likewise face transition risks as entire economies and industries are reshaped. Consider the far-reaching impact on workers in areas where carbon-intensive industries operate, as those job numbers shrink and shift toward greener processes and facilities that may be geographically out of reach.

What becomes of lower-skilled workers as the job base is transformed to a greener profile requiring different skills and training? What happens to towns and communities that relied on declining industries to support their social and infrastructure needs? Recall the impact in the United States Midwest a generation ago as a sizable portion of the manufacturing base shifted offshore. The investment community also needs to recognize that, even as industries that are less environmentally friendly enable the transition (the EV example), they continue to have ecological impacts on regions and people. Those impacts must be minimized, managed and remediated.

Ensuring a just transition is a complex challenge. It requires a concerted effort to ensure that marginalized groups aren't left behind. From an investor's perspective, the ability to accurately integrate social considerations into investment decisions is a key tool. So is the ability to target investment capital to avoid undue harm to marginalized groups—and ideally to empower better outcomes.

Summing Things Up

These themes are by no means an exhaustive accounting of the considerations of the drive toward net zero, but they highlight the need for advances and collaboration across the public, private and academic spheres to match growing ambitions and commitment. A common thread running through the dialogues we've been having on net zero is the need for pragmatism.

This doesn't mean lowering the bar for net-zero ambitions—it means staying focused on the ultimate goal while taking tangible, meaningful steps to advance progress while the world develops better mechanisms, tools and processes to facilitate that drive. In other words, we shouldn't let the desire for perfection be the enemy of the good.

The views expressed herein do not constitute research, investment advice or trade recommendations and do not necessarily represent the views of all AB portfolio-management teams.

MICHELLE DUNSTAN
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Global ESG Improvers Strategy

Our Net-Zero Journey

Creating a Credible Commitment

ESG in Action

Public commitments to a net-zero carbon emissions goal will be empty promises if they aren't backed by a coherent plan. At AllianceBernstein, our journey to net-zero is rooted in an extensive analysis of the tricky issues related to climate change and investing, which informs our evolving efforts to develop and implement a strategic program that can deliver measurable results.

The Issue

Asset-management firms are joining global efforts to reduce carbon emissions, but many questions about how to reach net-zero remain unresolved.

The Investment Case

Climate-related issues will have a profound impact on future market share, cash flows and profitability for companies across sectors. Investors need a clear strategy and research tools to assess the risks and opportunities.

Engagement Goals

By engaging for action with company management, AB's climate activities aim to promote positive changes in corporate behavior on climate issues that support shareholder returns and open clear paths to net-zero.

Climate promises are not the same thing as climate action. At AllianceBernstein (AB), we believe that a credible commitment to reducing carbon emissions starts with exploring tough questions, developing tangible goals and integrating climate analysis across our portfolios before declaring a net-zero target.

In recent years, the asset-management industry has awakened to the urgency of global warming. Increasing regulation, growing investor awareness and more extreme weather patterns have made climate change a strategic imperative—for the world and for our business. But the path to achieving net-zero emissions is far from clear. Public commitments to a net-zero goal will be empty promises if they aren't backed by a coherent plan. And there are many vexing questions about climate accounting for investors to wrangle with, while a comprehensive cultural shift is also required. That's why our journey to net-zero is rooted in an extensive analysis of the tricky issues related to climate change and investing, which informs our evolving efforts to develop and implement a strategic program that can deliver measurable results.

What Is a Net-Zero Commitment?

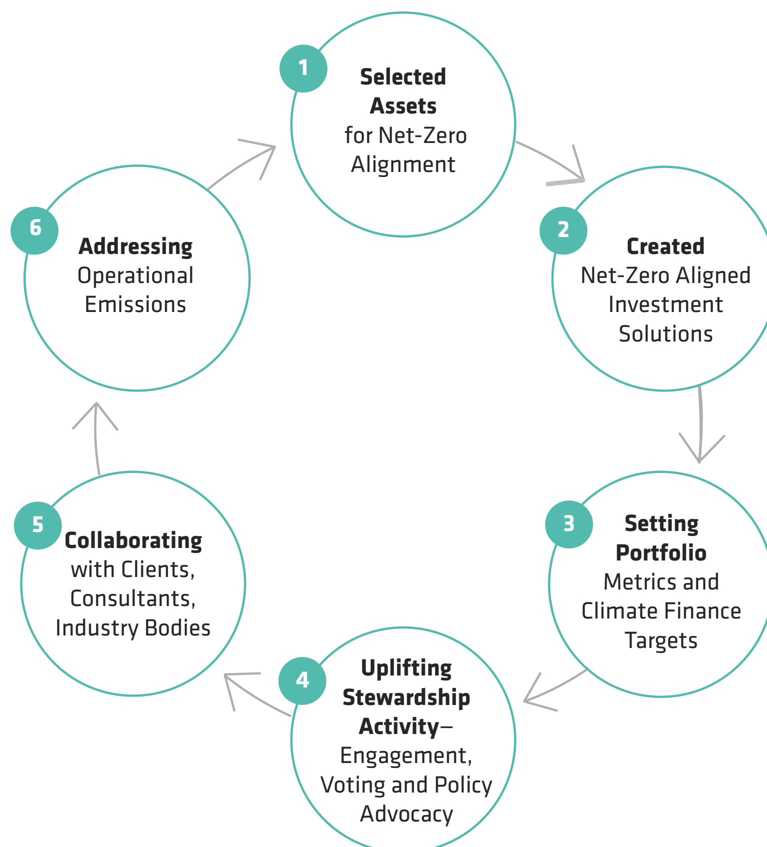
Net-zero commitments are widely seen as an oath of allegiance to fight climate change. At COP26, the recent United Nations Glasgow Climate Change Conference, countries, cities and companies lined up to make net-zero pledges. Yet committing to net-zero doesn't mean that greenhouse gas (GHG) emissions will be eliminated entirely. Net-zero means limiting future emissions and removing existing carbon to align with efforts to prevent global temperatures from rising by more than 1.5 degrees Celsius by 2050, as per the Paris Agreement of 2015. In general, this requires a reduction of an entity's carbon emissions that is proportionate to the contribution of emissions.

Promises to reach net-zero emissions are usually made for many years in the future, often with a 2050 target date. Such long-term vows don't ensure a commitment to action and accountability, according to Austin Whitman, chief executive officer of Climate Neutral, who was cited in a **recent Financial Times article**. "I think we are taking far too much comfort from the fact that companies are making these commitments for 2050," said Whitman, whose nonprofit organization helps companies cut emissions. "There's a reality that if you're making a 2050 pledge you really don't have to change anything today."

For asset-management firms, a net-zero commitment applies to both a company's operations and its portfolio holdings. However, since investment businesses don't emit much carbon in day-to-day operations, about 95% of our GHG emissions are a product of the assets owned in our portfolios.

Across our industry, 128 investment firms with US$43 trillion in assets under management made a public commitment to net-zero emissions as of October 2021. That's a 19% increase in AUM since March 2021, when only 34 firms had made a commitment. AB has not made a net-zero pledge. Yet even without a commitment, our extensive climate-related activities (*Display*) are aligned with almost all requirements of the Net Zero Asset Managers initiative, an international group of asset managers committed to supporting the goal to reach net-zero by 2050 or sooner.

AB'S MAIN NET-ZERO ACTIVITIES



For illustrative purposes only.
Source: AllianceBernstein (AB)

There are many different methods for achieving net-zero. The heart of our climate actions is focused on developing firmwide and portfolio-level metrics and targets while engaging with company management on key issues. Instead of resorting to widespread exclusions or divestment as the first option, we view divestment as one tool in our escalation strategy after engaging for action has failed. In many cases, companies that are part of the global climate problem are instrumental in the solution, and staying invested offers opportunities to influence corporate behavior for the better. Most importantly, we acknowledge that climate issues present many unknowns—and we simply aren't equipped to deal with all of them in house. So we need to assess which issues can be addressed internally and which require external help.

Educating Investment Teams

All of our net-zero activities are rooted in education. In the past, at most investment firms, climate change research was the remit of energy analysts, as the sector was directly in the line of climate-related pressure. Now, every company in every sector and industry should be preparing for climate change. From healthcare to consumer staples to industrials, analysts who may not have focused on climate change issues in the past needed to be trained in the importance of climate to an investing thesis about portfolio candidates and holdings. This was a huge cultural challenge for our organization.

Companies that think about climate now—and put money toward solutions—will be better prepared to face the future in a market where competitors may develop lower carbon alternatives. Regulations are changing rapidly, so companies that don't prepare might suddenly get hit with a carbon tax or new building requirements or equipment upgrades. And customers are changing their purchasing behaviors as climate awareness grows. These issues will all have a profound impact on future market share, cash flows and profitability. To incorporate these considerations in financial analysis, we first needed to train our investment teams in the underlying climate-related issues.

Educating our investment teams required expertise that we simply didn't have in-house. In 2019, we formed an exclusive partnership with Columbia University's Earth Institute, which is home to hundreds of climate change scientists and experts, to collaborate on developing a **climate change course for investors**. Since then, all our portfolio managers and analysts, as well as several members of our board, have participated in this climate change training.

The course covers the basic science and direction of climate change; the legal, public health, policy and regulatory implications; potential solutions; and how to translate climate change into financial analysis. We've also expanded the reach of the course to train clients and asset owners. By November 2021, more than 1,100 people from outside the firm had participated in the climate course. We're now working with Columbia to develop collaborative projects that will leverage Columbia's multidisciplinary approach to climate change in our investment processes. These include working groups on renewable energy, carbon accounting, salmon fisheries and synthetic biology. We believe this unique partnership between a distinguished scientific institution and our firm will provide distinct advantages in our ability to deepen a climate-aware investing approach and to engage more effectively with companies.

Engaging on Climate Targets

Divesting from companies is taking the easy way out, in our view. By withdrawing from a controversial industry or company, investors forfeit the opportunity to influence corporate behavior for the better. Bad actors with improvement potential are less likely to change their ways without activist investors pressing for change. Take deforestation as an example. One of our portfolios has holdings in Brazilian beef producers, which are big contributors to deforestation of the Amazon—a major environmental crisis.

Given the scale of the deforestation crisis, it might seem counterintuitive to invest in Brazilian. But the logic is actually clear. While avoiding or divesting from Brazilian beef producers would decrease our portfolios' exposure to deforestation risk, it wouldn't help reduce deforestation. AB's holdings in Brazilian beef producers allow us **to engage effectively with management teams on deforestation risks**. Since 2012, we have studied each company's practices and, in frequent engagement meetings, have pushed them to improve. By staying invested, we can encourage companies to adopt more sustainable practices, which is good for the environment as well as for business performance and shareholder returns.

Similarly, some investment firms might steer clear entirely of oil and gas companies. We think that is a naïve approach that doesn't acknowledge the world's need for hydrocarbons over at least the next decade as we transition to renewable energy. In this transition, some major oil companies are much cleaner operators than others, and some are playing important roles in building renewable energy infrastructure. If an asset manager decarbonizes a portfolio by selling all its oil and gas holdings, it has not made any contribution toward decarbonizing the world.

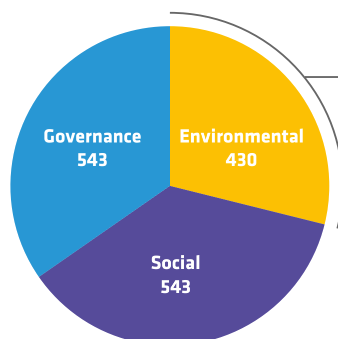
As active investors, engagement with company management is central to our philosophy on environmental, social and governance (ESG) issues. By engaging with executive teams, we aim to influence company behavior, which in turn can make a positive impact on investment returns. In 2020, we launched our first targeted ESG engagement campaign—focused on our largest equity holdings that didn't have either carbon emissions reduction targets or ESG metrics in executive compensation, as defined by Institutional Shareholder Services and Bloomberg. We asked these companies to introduce such measures over the next two years and have been following up with those issuers in our 2021 ESG engagement campaign.

More broadly, we held more than 12,500 issuer meetings during 2020, including 835 engagements on ESG topics across 534 companies. Climate-related issues were the most prominent in these meetings, including 249 focused on carbon emissions, 74 on climate change vulnerability and 45 on opportunities in clean technology (*Display*).

AB'S CLIMATE CHANGE STRATEGY: STEWARDSHIP

Engaging for Insight and Action

Engagement by ESG Pillar (2020)*



Environmental Engagement Key Issues	
Carbon Emissions	249
Climate Change Vulnerability	74
Supply Chain–Environmental	54
Opportunities in Clean Tech	45
Product Carbon Footprint	43
Opportunities in Renewable Energy	36
Other	32
Packaging Waste	32
Toxic Emissions and Hazardous Waste	27
Water Management	27
Biodiversity and Land Use	23
Resource Management	23
COVID-19	21
Opportunities in Green Buildings	14
Electronic Waste	7

For illustrative purposes only.
As of December 31, 2020
*Numbers will not sum to total as engagements frequently discuss multiple ESG topics across or withing pillars.
Source: AllianceBernstein (AB)

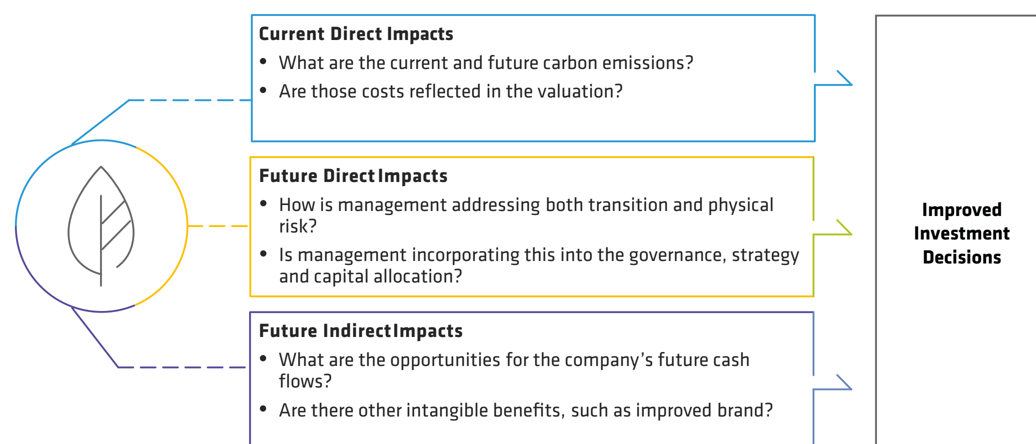
Meanwhile, we've made commitments to collaborative engagements with other organizations and firms. We are co-leads on three engagements through Climate Action 100+, an investor-led initiative to ensure the world's largest corporate GHG emitters take action on climate change. Through this project, we're engaging with Petrobras, Sasol and Eskom—some of the world's largest emitters that have been resistant to change; all three companies have made improvements since our efforts began. We also work with regulators and governments around the world. For example, we've provided feedback to the US Securities and Exchange Commission (both on paper and in person) on the direction it should take on climate issues and ESG disclosure. We've also directly addressed a group of the world's largest national oil companies on the importance of addressing climate change today.

Formalizing a Strategy

In 2020, we also formalized our approach to climate change by issuing a TCFD (Task Force on Climate-Related Financial Disclosure) statement. This statement forms the backbone of our strategy and explains how we are addressing climate risk in both our business operations and investment processes. As the climate commitment is a work in progress, so is the TCFD statement; we updated it in 2021 to reflect the evolution of our strategy.

The linchpin of our strategic efforts is the ability to understand and measure climate risk in our portfolios. In 2021, we launched pilot climate change scenario analysis projects for our portfolios, aimed at developing effective tools to assess our holdings. In consultation with Columbia faculty and scientists, we evaluated more than a dozen options and onboarded a specialist data service provider while developing our own internal climate modeling. The strategy aims to combine the best elements from external sources with the fundamental insights of our research analysts, who routinely engage with companies on climate risks and opportunities (*Display*). Our goal is to create insights for our teams to use in their investment processes and reports that highlight climate change implications to our clients.

INCORPORATING CLIMATE COMMITMENTS INTO FUNDAMENTAL RESEARCH DRIVES BETTER OUTCOMES



For illustrative purposes only. There can be no assurance that any investment objectives will be achieved.
Source: AllianceBernstein (AB)

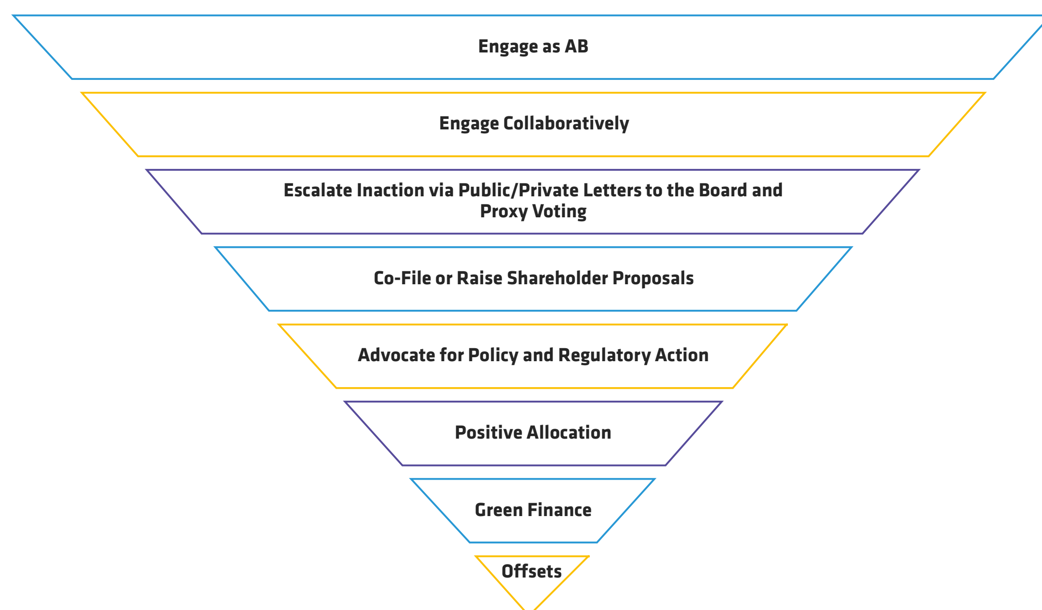
At the portfolio level, we can simplify the problem by separating our holdings into three key buckets: companies that have committed to net-zero and have a credible plan for getting there; companies that don't have a plan but offer engagement opportunities to drive improvement; and companies that are laggards in reducing their carbon emissions. Over time, we want to migrate more holdings toward the companies that have actual commitments and a credible plan.

Another important plank of our strategy involves developing portfolios with purpose. We've developed several equity and fixed-income strategies with a climate-aware approach. These include sustainable portfolios that tackle environmental challenges derived from the United Nations Sustainable Development Goals by targeting companies that are playing leading roles in advancing climate solutions. We're also developing goal-based portfolios that target specific responsibility goals, such as climate resilience.

Our journey to net-zero has already yielded a clear framework for decarbonizing our portfolios. All elements shown below are important, but as the inverted pyramid suggests, the upper levels are more effective methods of addressing climate change (*Display*). Engagement is the top priority, followed by voting at shareholder meetings to support change, especially when a company is not taking the necessary actions. We will also initiate shareholder proposals when appropriate. Carbon offsets are an option, but only for a residual portion of emissions that cannot be eliminated otherwise; offsets are not all created equal and sometimes may be used by companies as a way to avoid taking actions to reduce emissions from their own operations.

PROPOSED INVESTMENT DECARBONIZATION MODEL

Focus on Stewardship and active Allocation, Not Divestment



For illustrative purposes only.
Source: AllianceBernstein (AB)

Fostering a Cultural Shift

Throughout this process, one guiding principle is that we do not shy away from difficult questions. And there are many, from organizational questions related to embedding a climate-focused mindset across the firm to technical questions regarding portfolio and holding metrics. Examples include:

- How do we get portfolio managers and analysts to take ownership of climate issues across regions and asset classes?
- What can portfolio teams do to improve their understanding of climate exposure when data are often poor?
- Is there a way to normalize carbon accounting across strategies while avoiding double counting of holdings in stocks and bonds? And what about sovereign bonds, which roll up everything at the country level?
- Should the carbon accounting in short positions held be netted against long positions in the same companies?

We don't have all the answers, and there is still plenty of work to do. We've made good progress toward sizing and attributing our carbon footprint, and are working on implementing carbon emissions data-tracking software. We're in the process of developing year-on-year carbon emissions targets and determining the emissions generated from our firm's operations. It will take time to set decarbonization targets at the investment vehicle level.

Every stop on this journey throws up more complicated questions. But the process of discovering the answers will illuminate clearer and more convincing pathways with measurable climate objectives for reaching the ultimate goal of net-zero emissions over time.

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JODIE TAPSCOTT
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From Sustainability Skills to Radical Collaboration:

Themes from COP26

The recent United Nations Glasgow Climate Change Conference, also known as COP26, generated plenty of big-picture headlines, including a late agreement among nations to ramp up emissions cuts and reconvene in 2022 to up the ante. There's certainly a lot more work to do, and little time to waste.

However, also meaningful were the underlying themes emerging from formal announcements and numerous side events at the 12-day gathering in Glasgow, Scotland. They ranged from an acknowledgement that advances are needed in sustainability skills and financial catalysts to the notion that deeper, collective engagement—and even radical collaboration—can speed the race to net zero.

From "Clean Technology" to "Climate Solutions"

One interesting development was a change in tone, with the dialogue shifting away from the idea of developing specific clean technologies. There was little discussion, for example, on battery storage and renewables, though they remain key cogs in the net-zero transition. Instead, conversations seemed to refocus on the notion of climate solutions.

What does this mean in practice? We see growing recognition that decarbonization isn't just a problem for the energy and utilities sectors alone—it's a pressing issue for all industries. Decision-makers cited the need for every company to reduce and remove greenhouse gas emissions in order to ensure long-term viability. Discussions spanned aspects such as human capital, culture and nature-based solutions. Engagement from active investors, including AB, is probing how issuers across industries, sectors and regions are readying their businesses and economies for success in a lower-carbon economy.

Policy Momentum Is Growing—but Still Needs a Push

Clearly, public policy aimed at enabling decarbonization is foundational to setting the "rules of the road" for nations and industries. We've already seen significant action, particularly in the UK and European Union. Momentum is expected to pick up, with corporations calling for more regulation as industry policy advocates work with regulators in sectors such as shipping and aviation as they plan their paths to net zero.

Investment managers and asset owners must be proactive in shaping these policies. Policy advocacy could translate into supporting needed regulation, weighing in on pending legislation or engaging individually and collectively on sector-specific policy issues. Examples include AB's work to strengthen the Securities and Exchange Commission's climate change disclosure rule-making and our collaboration with peers to advocate curbs on flaring. By influencing the policy framework, the investment community can help ensure that regulations are effective, practical and equitable.

Engaging with Brown Issuers Will Enable the Transition

Even among staunch advocates of swift action to achieve net zero, the emphasis is shifting away from divestment. One reason: divestment encourages the sale of emissions-intensive assets to private businesses with less shareholder and ESG oversight. Also, shutting off capital from carbon-intensive markets will disproportionately impact emerging and frontier nations that bear most of the physical climate change risks—possibly creating an "unjust transition." Withdrawing capital also raises the cost of debt, which can inflate energy and supply-chain costs in the short and medium terms.

Rather than completely diverting capital from emissions-intensive industries, we're seeing more stakeholders coalesce behind stronger engagement—using the power of capital to influence issuer behavior. Simply put, the transition won't happen without them. This translates into the need for a performance-oriented framework for dialogues with issuers around their practices and progress on decarbonization and business-transition plans.

Policies for escalating engagement when that progress falls short should be implemented and strengthened. Engagement must encompass not only issuers' operations but their supply chains, with specific key performance indicators and milestones to assess progress.

Narrowing the Sustainability Skills Gap

The decisions, leadership and technology needed to get the world on a 1.5-degree warming path by 2050 will require a tremendous amount of climate upskilling. The sustainability skills gap is particularly acute for heavier carbon emitters—firms that are having a tough time recruiting talent. As one executive put it at COP26, "steel is not sexy."

There is a broad-based need to advance skills. For example, corporate executives need to bolster their abilities in order to effectively lead businesses on the transition. Many businesses and issuers, such as municipalities and governments, would benefit from a deeper pool of talented sustainability experts. And investors must continue to delve deeper into climate science—with the help of academics, if required—in order to translate climate knowledge into investment insights.

Carbon Offsets Are Here to Stay

Several discussions were dedicated to carbon markets, the need for more carbon pricing and the role of carbon offsets. Without carbon taxes, carbon offsets play a key role in ensuring that carbon emissions are priced appropriately. COP26 activity focused on tightening global carbon-market governance and closing loopholes by introducing carbon-credit verification systems.

The finalization of Paris Agreement Article 6 on carbon-market prices has had a stark impact—increasing the price of nature-based carbon credits by 45% and that of aviation-industry carbon credits by nearly 20%. Offsets may continue to exist in many forms and markets, but improvements in quality assurance, transparency and verification can encourage continued growth, expediting the adoption of clean fuels, technologies and solutions, as well as ensuring that valuable forestry assets are retained for carbon sequestration.

Blended Finance Is a Must to Fund Climate-Change Adaptation

Many conversations related to the need to ramp up blended finance instruments in funding climate-change adaptation activities. In blended finance, development capital is deployed creatively to attract capital from broader commercial sources—with the goal of funding climate adaptation and mitigation projects and bringing them to commercial scale. Development banks often devise structures and instruments for this purpose.

At COP26, reinsurance companies and investment banks demonstrated opportunities to partner with governments, multilateral banks and supranational organizations to structure financing for such projects. In some cases, asset owners are partnering directly with governments and corporations to fund initiatives in energy, pipeline and transmission infrastructure projects. Given the mountain of capital required to empower the climate transition, broader use of blended finance is a critical catalyst.

“Radical Collaboration” Offers Collective Empowerment

There are many passionate advocates striving to get the world on a 1.5-degree warming course, including individuals, corporations, industries, academics, governments, supranationals and nongovernment organizations. But none of these groups can limit global warming alone: radical collaboration is needed to bring together many actors to solve problems that transcend formal boundaries.

Asset managers, issuers, asset owners and academic experts are important stakeholders, and the thread of radical collaboration connects many of the COP26 themes we’ve shared here, including engagement, sustainability upskilling and blended finance. Collaboration can advance even further, whether it’s connecting firms seeking solutions with those possessing them, collaborating in innovative ways on technology, engaging corporations or tapping academic climate knowledge to sharpen investing insights.

In summary, the themes emerging during COP26 highlight the growing urgency behind net zero, the need for creative approaches to empowering and financing progress and acknowledgement that no single stakeholder group alone can drive success. Progress toward net zero must be forceful, innovative and collective. And we all must do our part.

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