

P I M C O

# Sustainable Investing Report 2023







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# Sustainability at PIMCO

A leading investment solutions provider >

Proprietary ESG frameworks >

Influencing change to benefit investment outcomes >

**\$559bn<sup>1</sup>**  
**AUM**  
in Sustainability Strategies<sup>2</sup>

<sup>1</sup> As of 31 December 2023. The figure includes Third party and Allianz AUM with strategies that include (i) minimum standards that refine the investment opportunity set based on client directed exclusions criteria ("exclusionary" portfolios); (ii) a focus on enhancing the sustainable characteristics of the portfolio in comparison to its investment universe ("enhanced" portfolios) or (iii) a focus on achieving a specific environmental/social objective in addition to a financial objective ("thematic" portfolios).

<sup>2</sup> Sustainable Strategies are strategies with client-driven sustainability requirements. For these strategies, PIMCO actively incorporates sustainability principles (i.e. excluding issuers fundamentally misaligned with sustainability factors, evaluating issuers using proprietary and independent ESG scoring) consistent with those strategies and guidelines. Further information is available in PIMCO's Sustainable Investment Policy Statement. For information about funds that follow sustainability strategies and guidelines, please refer to the fund's prospectus for more detailed information related to its investment objectives, investment strategies, and approach to sustainable investment.



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Proprietary ESG frameworks >

Influencing change to benefit investment outcomes >

PIMCO CREDIT AND ESG  
ANALYSTS HAVE SCORED OVER

**3800**<sup>3</sup>

**corporate issuers**  
with a proprietary ESG score

## CONTINUED DEVELOPMENT OF PROPRIETARY FRAMEWORKS ACROSS MULTIPLE ASSET CLASSES AND THEMES, INCLUDING:

- Enhanced corporate sector evaluation for utilities and building materials; expanded ESG scoring coverage and analysis of structured products including auto-asset backed securities (ABS), collateralized loan obligations (CLO), covered bonds, sovereigns, supranationals, and agencies (SSA)
- In-depth climate risk and biodiversity analysis, including additional carbon analytics, carbon attribution and projection tools. For example, evaluating mortgage-backed securities (MBS) physical risk exposure for the average annual building loss rate of underlying collateral
- Expanded analysis to additional alternative asset classes including private credit and real assets
- Ongoing advancement of GSSS-labeled<sup>4</sup> bond analytics, including tools for relative value and tracking the progress of sustainability-linked bonds

<sup>3</sup> As of December 31, 2023.

<sup>4</sup> Green Bonds: are a type of bond whose proceeds are used to finance or re-finance new and existing projects or activities with positive environmental impact. Eligible project categories include: renewable energy, energy efficiency, clean transportation, green buildings, wastewater management and climate change adaptation.  
Social Bonds: are a type of bond whose proceeds are used to finance or re-finance social projects or activities that aim to address or mitigate a specific social issue or seek to achieve positive social outcomes. Social project categories include providing and/or promoting: affordable basic infrastructure, access to essential services, affordable housing, employment generation, food security, or socioeconomic advancement and empowerment.  
Sustainability Bonds: are a type of bond whose proceeds are used to finance or re-finance a combination of green and social projects or activities. Sustainability bonds with strict accountability of the use of proceeds towards activities that advance the UN Sustainable Development Goals or SDGs may be labeled as SDG Bonds.  
Sustainability-linked Bonds: are bonds which are structurally linked to the issuer's achievement of certain sustainability goals, such as through a covenant linking the coupon of a bond to specific environmental and/or social goals. Progress, or lack thereof, toward the aforementioned goals or selected key performance indicators results in a decrease or increase in the instrument's coupon. In contrast to the green, social and sustainability bonds described above, sustainability-linked bonds do not finance particular projects but rather finance the general functioning of an issuer that has explicit sustainability targets that are linked to the financing conditions of the bond.



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## ENGAGEMENT

**1350+**  
engagements<sup>5</sup>

**75%+**  
PIMCO's **firmwide market value** in corporate assets<sup>6</sup> in 2023

## NEW PARTNERSHIPS

### Member of the Core Team of The Partnership for Carbon Accounting Financials (PCAF)

The Core Team has an ultimate goal of harmonizing GHG accounting and reporting across the financial industry.

### Member of the Executive Committee of the ESG Integrated Disclosure Project (ESG IDP)

The Executive Committee supports the consistent collection of data from sponsored and non-sponsored borrowers across the private and broadly syndicated credit markets.

<sup>5</sup> As of 31 December 2023. SOURCE: PIMCO. PIMCO firm-wide ESG engagement activities, Jan 1 - Dec 31, 2023. 1,355 corporate issuers engaged in 2023 refers to all tracked engagements that discussed sustainability topics. Engagements were conducted by ESG and/or credit analysts. Not all ESG analysts are 100% ESG-dedicated, some split their time between ESG engagement and traditional credit research. Refers to tracked engagements conducted by ESG or corporate analysts. Due to PIMCO internal system mapping of issuers, engagement figures, including interaction data by pillar and topic as of 2023 can vary and are subject to change.

<sup>6</sup> About 75% of PIMCO's firmwide market value of corporate issuers engaged on ESG topics from Jan 1 - Dec 31, 2023. Includes all engagements conducted by ESG and credit analysts. Calculated as % AUM as of 31 December 2023. Corporate issuers are credits covered by PIMCO's corporate analyst teams. This percentage is based on corporate assets under management of engaged issuers held (numerator) divided by firm wide corporate assets under management (denominator). Please note that issuers engaged over the course of the calendar year may have been sold prior to the year end, and in such a circumstance, would not contribute towards the proportion of issuers engaged.



# Foreword



**Emmanuel Roman**  
CEO of PIMCO

**In this year's report, we consider several secular sustainable investing drivers that PIMCO believes will reshape the investment landscape, following a year of robust market debate.**

First, evolving regulatory frameworks around the globe seek to streamline the ecosystem of sustainable investing to help protect investors and fortify market resilience. Regulation that seeks to enhance transparency and comparability on material topics will benefit investors by further supporting investment managers as they execute their fiduciary duty to their clients.

Global forces which impact markets, including climate change, remain highly durable. As market participants seek to reduce risks and capitalize on opportunities, regulatory objectives will continue to have investment implications.

Second, we believe two themes will dominate sustainable investing over the long-term – climate finance and unlocking capital flows to underserved markets. Having attended the last three UN Climate Conferences, it is clear to us that funding for the transition and, increasingly, climate resilience will headline the sustainability agenda. Transition and resilience finance are intrinsically tied to quality of life, particularly in emerging markets, and play a vital role in how all economies continue to develop with increasing equity. PIMCO's climate investing frameworks and sustainable investing strategies should support clients well in this rapidly expanding space.

Third, we see an exciting nexus between emerging themes (e.g., nature and biodiversity, climate physical risks, affordable housing) and steadfast investment vehicles, such as thematic labeled bonds, structured products, and private credit strategies. We are working with several important organizations – including the International Capital Market Association and the United

Nations – to expand the sustainable investing market through new guidance and resources, aligned with the Sustainable Development Goals.

In the following pages, you will find detailed information on how we are translating our sustainable investing policy statement into robust investment processes, strategies and solutions, consistent with our fiduciary duty. We hope this report proves valuable and informative.

As always, we welcome your views, feedback, and ideas.





# Sustainability at PIMCO







## PIMCO'S SUSTAINABILITY PHILOSOPHY



### Stewards of our clients' capital

PIMCO seeks to deliver superior investment returns, solutions, and service to our clients. For over 50 years, our extensive resources, global presence, and time-tested investment process have helped clients meet their financial goals and investment objectives.



### Fiduciary duty to consider relevant risks in our investment process

Where applicable, we aim to integrate sustainability risks in our investment process for our actively managed assets as a key risk management tool. The consideration of ESG factors may be appropriate when evaluating long-term investment opportunities and risks for certain asset classes across public and private markets. This integration of sustainability risks can take place during both the bottom-up analysis of issuers and the top-down analysis of cyclical and secular trends.



### A client-centric approach to sustainability

For clients seeking to achieve specific sustainability outcomes alongside financial objectives, we offer a suite of dedicated investment solutions that incorporate the firm's proprietary ESG optimization criteria. PIMCO recognizes that sustainable investment solutions are not one-size-fits-all, and we are well equipped to partner with clients to identify and customize sustainability objectives that can help satisfy their specific needs.



### A platform to engage with issuers

As a leading fixed income manager, PIMCO has the scale and access to engage issuers on matters that we believe are essential when pursuing compelling risk-adjusted returns. We believe PIMCO's size, scale, history, and involvement across industry initiatives provides a platform to engage with issuers who are continuing to evolve their sustainability practices.





# Shaping market convention

## FIXED INCOME AND THE TRANSITION TO A SUSTAINABLE ECONOMY

Debt capital markets and bond investors can play a pivotal role in financing the transition towards a more sustainable economy. By providing capital directly to issuers, bond holders can help shape economies and business models. PIMCO employs a comprehensive toolkit across its research, engagement and investment activities, designed to facilitate the interaction between issuers and investors, with the ultimate goal of fostering a resilient and inclusive global economy. By leveraging these tools, PIMCO aims to enhance its investment strategies, promote sustainable practices, and contribute to economic resilience.



## PIMCO'S ROLE IN THE TRANSITION

PIMCO's scale and experience across a range of markets make us well positioned to play a vital role in strategic industry efforts related to sustainable investing. This extends beyond corporates, into structured credit, sovereigns, municipals, and alternatives, where applicable. These multifaceted efforts provide a distinctive market perspective that is unique to PIMCO.

Equipped with this perspective, PIMCO aspires to be an industry leader for continued development in ESG labeled bond issuance. We demonstrate this through our activities as a member of the ICMA Executive Committee of the Principles, including as a coordinator of the Sustainability-Linked Bond Working Group<sup>7</sup>, and our publication of best practices guidance, covering corporate, sovereign, and municipal issuers<sup>8</sup>. As the Co-Chair of the CFO Coalition for the SDGs, PIMCO engages directly with leading CFOs and corporate executives to identify solutions in addressing the Sustainable Development Goals. Through our participation in the Core Team of the Partnership for Carbon Accounting Financials (PCAF), PIMCO aims to address the increasing demand from market participants for more consistent, comparable data to measure greenhouse gas emissions in different sectors and across the capital structure.

Furthermore, PIMCO supports a number of international climate-related disclosure standards and frameworks such as the Institutional Investors Group on Climate Change (IIGCC) and TCFD\* increasing transparency, measurement and management of climate risks. Our longstanding history with numerous borrowers through a range of economic cycles provides a path for constructive engagement on sector specific sustainability themes in seeking to uncover investment insight, and outcomes that may reduce risks or capitalize on opportunities.

Our direct issuer engagement and industry leadership efforts aim to support investment decisions by identifying current and emerging risks, improving market transparency, and informing proprietary credit assessments and sector frameworks. These efforts feed into our overall investment process in pursuing beneficial investment outcomes for our clients.



<sup>7</sup> In 2023, ICMA and the Executive of the Principles published updated Q&A and Sustainability-Linked Bond Principles notably featuring adapted language and metrics for sovereign issuers. <https://www.icmagroup.org/News/news-in-brief/the-principles-announce-updated-guidance-for-transition-finance-and-climate-themed-bonds-and-the-integration-of-sovereign-issuer-considerations-in-the-recommendations-and-tools-for-sustainability-linked-bonds/>

<sup>8</sup> Source: PIMCO Guidance for Sovereign Sustainable Bond Issuance.

\* As of 4Q23 the TCFD was disbanded and the FSB appointed the IFRS Foundation to take over the monitoring of companies' climate-related disclosures. Please refer to PIMCO's global Task Force on Climate-Related Financial Disclosures (TCFD) report.





We believe that shaping market convention on sustainability standards, themes, and products can help incentivize issuance and create diverse sources of potential investment opportunities for our portfolios.

## PIMCO AND THE PRIMARY MARKET

As one of the largest investors in green, social, sustainable, and sustainability-linked (GSSS) bonds, the impact of our invested capital is sizeable and quantifiable. PIMCO uses its market position, and the demand for GSSS bonds, to encourage high quality issuance.

To allocate investor capital toward credible projects, there must be a variety of high quality GSSS bonds available in the market. For over a decade, PIMCO has been one of the leading institutions supporting the GSSS bond market, and we remain committed to building the primary and secondary markets for labeled bonds:

- As noted previously, PIMCO sits on the ICMA Principles Executive Committee, and has been a member since 2019. ICMA's GSSS bond working groups shape the guidelines for issuers to follow when bringing these bonds to market.
- PIMCO portfolio managers, credit research analysts, and ESG analysts, conduct both routine and ad-hoc calls with bank syndicates and issuers.
- PIMCO offers feedback on recent GSSS bonds, advising on how to strengthen issuer commitments and best align these commitments to global sustainability standards.
- PIMCO ESG analysts maintain due diligence on GSSS bonds throughout stages of the issuance process, providing feedback on pre-deal calls through active questioning of both the issuer and their advisors.

In order for GSSS issuance to be successful, for ESG risks to be managed, and opportunities to be identified, a market environment that benefits all stakeholders needs to be realized.





## Creating GSSS supply through routine issuer engagement

Credit research and ESG analysts regularly engage with the executives and senior representatives of corporate, sovereign, and quasi sovereign entities to encourage balance sheet management and discuss bond issuance where applicable. Routine engagement also serves to provide additional data points on management quality and governance assessments.

In the case where we believe sustainability topics are material to general corporate purpose (GCP) bond issuance, or the company is interested in issuing a GSSS bond, our ESG and credit analysts work together to advise on ideal structures, recommend the most applicable features to the business model, and communicate criteria we hope to see in a bond framework. PIMCO's size, scale, and collaborative approach has led to routinely anchoring deals for both GSSS and GCP bonds, to the benefit of our clients. Additionally, the bond issuance from our long-term engagements has supported shifts in corporate strategies that we believe may benefit our clients, e.g. investing in green bonds from utilities to finance renewable energy generation capacity, as they phase out thermal coal.



## Encouraging improved sustainability practices for issuers of GSSS bonds

PIMCO engages issuers on various elements of their sustainability strategies to enhance access to the capital markets, further supporting the implementation of the GSSS bonds they may issue. These are long-term relationships, which may also include a reverse inquiry. At its best, engagement offers investment insight and may help mobilize progress. PIMCO's expertise across different asset classes and global perspective offers a strong position of counsel. Our analysts and portfolio managers are in continuous communication with senior leadership across our investee entities – guiding the development of the sustainable bond market.





# Engagement approach

As one of the world's leading bondholders, we use our platform to engage with issuers on factors we believe are material to risk and return considerations. We engage to uncover investment insights, mitigate risk, and capitalize on prospective opportunities, with the potential to help influence investment outcomes.

We believe that working with issuers to support enhancing their operational practices can have a more significant impact – especially for issuers with higher exposure to ESG related risks. We aim to create value and influence forward momentum by engaging with companies at different stages of their sustainability journey, particularly those in historically hard-to-abate sectors. Our engagement practices, spanning diverse asset classes and types of issuers, are designed to help drive efficiencies, which may also benefit additional stakeholders. The purpose and structure of our engagements are underpinned by creating value for our clients.





## Purpose

The purpose of our engagement is to gain investment insights and pursue outcomes aimed at reducing risks. We prioritize issuers across the platform where we have meaningful<sup>9</sup> financial and ESG risk exposure, focusing on what we believe to be material topics. Active management can greatly benefit from engagement, particularly when it comes to mitigating potential regulatory and secular ESG risks.<sup>10</sup> By offering best practices for issuers to consider, we aim to enhance their risk management strategies, strengthen their credibility through increased transparency, and avoid potential controversies. We hold the view that consistent issuer engagement is essential for a thorough understanding of the investment's risk-reward scenario, which is critical to making informed buy or sell decisions.



## Structure

At PIMCO, our engagement approach is designed to leverage the full scale of our global team of credit analysts and build upon our firm's decades of experience working constructively with issuers. Our engagement structure is built on two key mechanisms: bilateral engagement and collaborative engagement.

As previously covered, our bilateral engagements, conducted by our credit research analysts, portfolio managers, and ESG analysts, allow us to address ESG risks platform wide. Guided by three principles – thinking like a treasurer, engaging like a partner, and holding to account as a lender – we seek to identify issuers that may benefit from engagement, develop tailored engagement objectives, foster productive dialogue, and measure progress against pre-defined internal benchmarks.

We actively participate in a wide range of industry initiatives and working groups that seek to advance sustainability efforts, help define global standards, encourage greater disclosure from issuers, and promote a more resilient marketplace. Where we think it can benefit our clients, industry initiatives allow PIMCO to participate with other investors to advocate for clarity in ESG guidance to issuers/companies.

<sup>9</sup> Defined through a proprietary determination which considers the size of the investment position, the presence of material ESG risk and the robustness of the ESG-risk mitigants implemented by the issuer.

<sup>10</sup> Non-regulatory drivers such as consumer trends, a changing climate, political risks, market access risks, etc



## PIMCO PARTNERSHIPS

As a leading global investment manager, we partner with a number of key industry groups, including those listed, to help drive a coordinated global approach.

| Industry Affiliations  | Overview   |
|--|--|
| <b>Access to Nutrition Initiative (ATNI)</b><br>Signatory  | <ul style="list-style-type: none"> <li>Collaborating with investors, academics, non-profits, and foundations across the globe, ATNI establishes partnerships with organizations committed to solving the world’s nutrition challenge, specifically working with food and beverage companies to improve their business practices.</li> </ul>  |
| <b>Bank of England Climate Financial Risk Forum (CFRF)</b><br>Member                             | <ul style="list-style-type: none"> <li>CFRF works to build capacity and share best practice across industry and financial regulators to advance the sector’s responses to the financial risks from climate change.</li> <li>Brings together senior representatives from across the financial sector, including banks, insurers, and asset managers and includes observers from trade bodies to represent a broader range of firms to ensure the output of the CFRF is communicated to their members.</li> </ul>  |
| <b>Carbon Disclosure Project (CDP)</b><br>Signatory  | <ul style="list-style-type: none"> <li>Backed by approximately 680 investors totaling over \$130 trillion in assets, CDP runs the disclosure system for stakeholders across the globe to manage the environmental impact of greenhouse gas emissions.</li> </ul>   |
| <b>Climate Bonds Initiative (CBI)</b><br>Partner   | <ul style="list-style-type: none"> <li>A leading organization focused on fixed income and climate change solutions, CBI has been instrumental in supporting more robust data and standards to propel the green bond market and remains heavily involved in shaping new green bond-related regulations.</li> </ul>  |
| <b>The ESG Integrated Disclosure Project (ESG IDP)</b><br>Executive Committee Member             | <ul style="list-style-type: none"> <li>The ESG Integrated Disclosure Project (ESG IDP) template provides borrowers with a harmonized and standardized means to report ESG information to their lenders.</li> <li>The Executive Committee oversees the use and development of the ESG IDP template, to support the consistent collection of data from sponsored and non-sponsored borrowers across the private and broadly syndicated credit markets.</li> </ul>  |
| <b>Farm Animal Investment Risk and Return (FAIRR)</b><br>Member                                  | <ul style="list-style-type: none"> <li>A global network of investors addressing ESG issuers in protein supply chains, FAIRR has over \$23 trillion in member AUM.</li> <li>The aim of the initiative is to build a network of investors who are aware of the issues linked to intensive animal production and who seek to minimize the risks within the broader food system.</li> </ul>  |
| <b>Global Investors for Sustainable Development Alliance (GISD)</b><br>Member                    | <ul style="list-style-type: none"> <li>PIMCO is one of only 30 members of the UN Secretary-General’s GISD Alliance, which focuses on accelerating investment into sustainable development. In partnership with investors, governments, and multilateral institutions, GISD will drive investment towards achieving the UN’s Sustainable Development Goals.</li> </ul>  |
| <b>International Capital Markets Association (ICMA) Principles</b><br>Executive Committee Member | <ul style="list-style-type: none"> <li>ICMA promotes the development of appropriate, broadly accepted guidelines, rules, recommendations, and standard documentation to maintain and enhance the framework of cross-border issuing, trading, and investing in debt securities.</li> <li>The executive committee is responsible for the management and administration, which includes addressing all matters relating to the ICMA’s Principles: The Green Bond Principles (GBP), Social Bond Principles (SBP), Sustainability Bond Guidelines (SBG), and Sustainability-Linked Bond Principles (SLBP).</li> </ul> |
| <b>Investor Group on Climate Change (IGCC)</b><br>Member   | <ul style="list-style-type: none"> <li>Collaboration of Australian and New Zealand investors focused on the impact of climate change on investments.</li> <li>Represents investors with total funds under management of over \$3 trillion in Australia and New Zealand and \$30 trillion around the world. IGCC members represent over 7.5 million people in Australia and New Zealand.</li> </ul>   |



## PIMCO PARTNERSHIPS (CONTINUED)

| Industry Affiliations  | Overview   |
|--|--|
| <b>ISSB Investor Advisory Group (IIAG)</b><br>Founding Member                      | <ul style="list-style-type: none"> <li>Under the umbrella of the Value Reporting Framework, IIAG comprises asset owners and managers who recognize the need for consistent, comparable, and reliable disclosure of ESG information. The group participates in the ongoing standards development process and encourages companies to participate in the development process.</li> </ul>   |
| <b>Institutional Investors Group on Climate Change (IIGCC)</b><br>Member           | <ul style="list-style-type: none"> <li>IIGCC is a leading investor coalition on climate change, with more than 350 members across 23 countries, and over €50 trillion in assets.</li> <li>The group drives investor collaboration on climate change and takes action for a prosperous, low carbon future.</li> </ul>   |
| <b>One Planet Asset Management (OPAM)</b><br>Initiative Member                     | <ul style="list-style-type: none"> <li>Initiative created following the 2015 Paris Agreement to mitigate the effects of climate change.</li> <li>Aims to help Sovereign Wealth Funds foster a shared understanding of key principles, methodologies, and indicators related to climate change; identify climate-related risks and opportunities in their investments, and enhance their decision-making frameworks to better inform their priorities as investors and financial market participants.</li> </ul>  |
| <b>The Partnership for Carbon Accounting Financials (PCAF)</b><br>Core Team Member | <ul style="list-style-type: none"> <li>PCAF is a global partnership of financial institutions working together to develop and implement a harmonized approach to assess and disclose the greenhouse gas (GHG) emissions associated with their loans and investments.</li> <li>The Core Team of PCAF governs the Global GHG Accounting and Reporting Standard for the Financial Industry and all its updates and expansions, with the ultimate goal of harmonizing GHG accounting and reporting across the financial industry.</li> </ul>   |
| <b>Principles for Responsible Investment (PRI)</b><br>Signatory                    | <ul style="list-style-type: none"> <li>The UN-supported Principles for Responsible Investment (PRI) is the world's largest investor initiative focusing on integrating ESG factors into the investment processes.</li> <li>PIMCO is an active signatory of the PRI and engages in several work streams, including:                         <ul style="list-style-type: none"> <li>Chair of the PRI Sustainable Development Goals Advisory Committee (SDG)</li> <li>Member of the Advance Initiative's Advisory Committee, engaging companies to strengthen commitment, due diligence, and remediation of human rights issues.</li> </ul> </li> </ul> |
| <b>Transition Pathway Initiative (TPI)</b><br>Supporter                            | <ul style="list-style-type: none"> <li>A global asset owner-led initiative (including clients and investment consultants), TPI assesses companies' preparedness for the transition to a low-carbon economy.</li> <li>TPI data and tools help inform our assessment of climate risks and engagement with bond issuers.</li> </ul>   |
| <b>UN Global Compact (UNGC)</b><br>Member  | <ul style="list-style-type: none"> <li>UNGC is a principles-based framework for businesses aimed at advancing sustainable and responsible policies and practices.</li> <li>PIMCO supports the Ten Principles of the UN Global Compact with respect to human rights, labor, environment, and anti-corruption – and is committed to incorporating these principles into our strategy, culture, and day-to-day operations.</li> <li>PIMCO co-chairs the UN Global Compact's CFO Coalition, which is an effort to create a movement of chief financial officers to address SDG investment and financing.</li> </ul>                                      |





# Client Focus



## PIMCO'S SUSTAINABLE INVESTMENT SOLUTIONS

For clients seeking greater sustainability orientation in their portfolio, PIMCO manages a dedicated suite of mandates that follow sustainability strategies and guidelines. These strategies<sup>11</sup> utilize the three building blocks of PIMCO's ESG portfolio construction process:



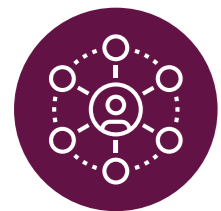
**Limit exposure to sectors and issuers with higher ESG risk factors.**



**Emphasize issuers with leading and improving ESG risk-mitigation strategies and those who seek to capitalize on sustainable operations and business models.**

This includes issuers of green, social, sustainability, or sustainability-linked (GSSS) bonds who want to improve their ESG risk management or seek to take advantage of secular sustainability trends. Issuers and GSSS bonds are identified through PIMCO's proprietary ESG scoring system, which considers both an issuer's momentum and their performance relative to industry peers.

In addition to pursuing risk-adjusted returns, these portfolios may seek to actively manage the portfolio's carbon footprint, achieve a meaningful GSSS allocation and/or tilt toward issuers with leading, or improving, ESG characteristics.



**Engage constructively with issuers to help influence ESG and sustainability practices over time.**

PIMCO's engagement practices are conducted on behalf of the firm to gain insight into an issuer's management quality and inform investment decisions. Engagements may focus on sustainability practices and ESG risks that could have the potential to enhance risk-adjusted returns. We believe that collaborating with, and allocating capital to issuers willing to improve the sustainability of their business practices has the potential to benefit a strategy's investment outcomes, rather than simply avoiding issuers with poor ESG metrics and favoring those with strong metrics.



<sup>11</sup> Sustainable Strategies are strategies with client-driven sustainability requirements. For these strategies, PIMCO actively incorporates sustainability principles (i.e. excluding issuers fundamentally misaligned with sustainability factors, evaluating issuers using proprietary and independent ESG scoring) consistent with those strategies and guidelines. Further information is available in PIMCO's Sustainable Investment Policy Statement. For information about funds that follow sustainability strategies and guidelines, please refer to the fund prospectus for more detailed information related to its investment objectives, investment strategies, and approach to sustainable investment.



## PIMCO'S RANGE OF SUSTAINABILITY STRATEGIES

We offer a wide range of sustainability strategies across the spectrum of fixed income markets.

PIMCO acknowledges that clients around the world define their sustainability objectives differently and may require a range of tailored solutions to achieve their objectives. We are committed to helping clients pursue their investing goals, and are well equipped to partner with clients to explore the possibility of implementing custom mandates with sustainability strategies and guidelines<sup>12</sup> tailored to their needs, as well as their risk and return profiles. We have collaborated with clients on numerous tailored solutions to help pursue their financial and sustainability objectives, including but not limited to portfolios with allocations weighted towards sustainability leaders, GSSS labeled bonds, relative carbon intensity targets, and low-carbon transition strategies.

As markets and investor demands continue to develop, PIMCO will actively engage with our clients to implement thoughtful solutions that aim to deliver on their goals and objectives.

<sup>12</sup> Sustainable Strategies are strategies with client-driven sustainability requirements. For these strategies, PIMCO actively incorporates sustainability principles (i.e. excluding issuers fundamentally misaligned with sustainability factors, evaluating issuers using proprietary and independent ESG scoring) consistent with those strategies and guidelines. Further information is available in PIMCO's Sustainable Investment Policy Statement. For information about funds that follow sustainability strategies and guidelines, please refer to the fund prospectus for more detailed information related to its investment objectives, investment strategies, and approach to sustainable investment.



## CLIENT REPORTING CAPABILITIES

### Credible ESG data is the foundation for a robust sustainability platform.

Access to credible ESG data has historically been one of the biggest challenges to sustainable investing. While traditional financial statements are readily available, credible and reliable ESG data is only now being reported by the largest companies. Unlike accounting data, ESG data can be primarily qualitative and is often not comparable across issuers.

In recent years, the quality and quantity of ESG data has improved rapidly as stakeholders push companies globally to disclose more ESG information, which may help improve investment decision-making. PIMCO has been investing in the team and the technology to incorporate ESG data into our investment process for many years. Our dedicated ESG technology team has developed tools that enable portfolio managers across the firm to integrate third-party and proprietary ESG data into the investment process where relevant. We centralize and incorporate ESG data into our research and investment processes where relevant.

In addition, we are committed to transparency with our clients and our ESG technology team has developed proprietary tools to support ESG reporting. For accounts that follow sustainability strategies and guidelines<sup>13</sup>, we regularly publish reports in an effort to provide portfolio information, including sustainability metrics such as GSSS bond allocations, carbon metrics, and portfolio aggregate ESG scores.

We can also develop robust custom reporting packages for separate account clients depending on the nature of their requests. These may include monitoring of carbon footprint and metrics to help illustrate the outcomes from relevant investment decisions, measurement of the carbon footprint in corporate credit and sovereign portfolios, or measurement of carbon emissions and carbon intensity at the portfolio or select sector level.

As PIMCO's sustainability efforts continue to grow and the quality and quantity of industry available ESG data improves, we will continue to invest in our infrastructure, monitoring, and reporting to seek increased value for our clients. In 2023, we incorporated reporting functionalities linked to various use cases, including climate risk, portfolio decarbonization, impact reporting, and exposure to climate solutions.

<sup>13</sup> Sustainable Strategies are strategies with client-driven sustainability requirements. For these strategies, PIMCO actively incorporates sustainability principles (i.e. excluding issuers fundamentally misaligned with sustainability factors, evaluating issuers using proprietary and independent ESG scoring) consistent with those strategies and guidelines. Further information is available in PIMCO's Sustainable Investment Policy Statement. For information about funds that follow sustainability strategies and guidelines, please refer to the fund prospectus for more detailed information related to its investment objectives, investment strategies, and approach to sustainable investment.







# Integration, Research, Engagement: Our Active Edge







## ESG INTEGRATION HIGHLIGHTS: PHYSICAL RISKS, SECTOR FRAMEWORKS AND STRUCTURED PRODUCTS

As outlined in PIMCO's sustainability philosophy, we believe the consideration of relevant ESG factors is part of a robust investment research process. ESG factors may be important inputs when evaluating long-term investment opportunities and risks across asset classes in both public and private markets. ESG factors may include but are not limited to: climate change risks, resource efficiency, natural capital, human capital management, human rights, regulatory risks, balance sheet management, and reputational risk at an issuer level, among others. We recognize that ESG factors may be increasingly important inputs when evaluating global economies, markets, industries, and business models.

The relevance of ESG factors to PIMCO's investment decisions may vary across asset classes, strategies, products, valuations, and investment horizons. Integrating relevant ESG factors into the evaluation process does not mean that ESG-related information is the sole or primary consideration for an investment decision; instead, PIMCO's portfolio managers and analysts consider a variety of factors and their materiality when making investment decisions. By increasing and diversifying the information available to the portfolio management team, we seek to provide a more holistic view of an investment, which we believe will benefit our clients.





# PIMCO INCORPORATES ESG CONSIDERATIONS FROM A TOP-DOWN AND BOTTOM-UP PERSPECTIVE

TOP-DOWN



Themes identified through annual Secular Forum process

Speakers include Nobel prize winners, heads of state, renowned academics, global central bankers

Climate change

Geopolitics

Corporate governance

Health and Safety

Demographic trends

Cybersecurity

Specialty desks, credit analysts, security selection

Understanding all material risks is critical to making sound investment decisions

**ENVIRONMENT**

Employs resource efficiency, from waste to energy consumption

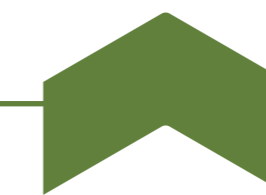
**SOCIAL**

Ensures sound product safety and quality standards to protect end-users

**GOVERNANCE**

Management's capacity to manage risk over the cycle

BOTTOM-UP



Source: PIMCO. Including indicative examples of themes and risks. For illustrative purposes only.



## CLIMATE PHYSICAL RISKS AND RESILIENCE

### Weather disruptions are intensifying

As underscored by the Intergovernmental Panel on Climate Change (IPCC), risks from extreme weather events are considered likely to increase in frequency and severity in the coming decades as global average surface temperatures continue to rise. However, effects are already visible<sup>14</sup> and 2023 has been identified as the hottest year on record globally, with an average temperature of almost 1.5 degrees celsius above pre-industrial levels<sup>15</sup>. This has been linked by scientists to various climate anomalies and events, such as severe heatwaves and wildfires in places with very different climates<sup>16</sup>.

Extreme weather events appear more frequently, occurring simultaneously in different locations, and may pose market risk since they reduce the possibility to diversify sourcing, which could trigger supply chain shortages and disruptions. These factors affect critical assets and natural resources within the production value chain of global debt issuers. These effects are expected to increasingly impact company financials<sup>17</sup> (e.g., via growing costs of raw materials or insurance premiums, increased investment needs to cope with these risks, or the heightened volatility of revenues linked to business disruptions or shifts in customer demand) and in turn, valuations. Consequently, adaptation and resilience are becoming pivotal topics for capital markets, as a lack of climate action likely means greater risk to return potential and higher volatility.

<sup>14</sup> Assessment Report 5 – Topic 2: Future Climate Changes, Risks and Impacts.

In 2023, losses from natural catastrophes could total US\$ 270bn according to Munich Re (a slight reduction over 2022 but a material increase over previous years).

<sup>15</sup> Copernicus: 2023 is the hottest year on record, with global temperatures close to the 1.5 degrees limit.

<sup>16</sup> Sources: <https://www.ipcc.ch/assessment-report/ar6/> and <https://www.worldweatherattribution.org/>

<sup>17</sup> As estimated by various external sources, including academics, central banks, businesses, think tanks, data providers, or credit rating agencies, such as S&P (<https://www.spglobal.com/marketintelligence/en/news-insights/blog/using-scenarios-to-evaluate-the-medium-to-long-term-impact-of-transition-and-physical-climate-risks-on-credit-quality>), Fitch (<https://www.fitchratings.com/research/corporate-finance/climate-risk-related-downgrade-may-affect-20-of-global-corporates-by-2035-08-03-2023>) and Moody's (<https://www.moody.com/sites/products/ProductAttachments/Infographics/Environmental-Risks-Global-Heatmap-Overview.pdf>)





## SCORING FRAMEWORKS ACROSS ASSET CLASSES

PIMCO has developed a proprietary framework to assess the physical risk exposure of corporate bonds, sovereigns, municipal bonds, and securitized asset classes; each of these leverage third-party data specifically suited to the particular instrument, which is then adjusted and converted into proprietary physical risk scores and related metrics. In all cases, low scores may lead to lower fundamental valuations versus market pricing.

| Application   | Methodology and sources   |  |
|---|---|--|
| <b>Corporates</b>   | Sub-pillar of the Environmental pillar score for corporates, using different weights depending on the sector. See case study on page 26.                      | Exposure scores across several hazards building on climate models using the Representative Concentration Pathway 8.5 (RCP 8.5) for the period 2030-40 coupled with geolocation of the assets owned by the companies covered. Includes impacts to broader parts of the value chain.   |
| <b>Sovereigns</b>   | Sub-pillar of the Environmental pillar score of PIMCO’s proprietary sovereign quantitative model.   | Current exposure to climate hazards as well as projected climate change under the RCP8.5, consideration of human population’s sensitivity to extreme climate events, including on health, poverty, knowledge, infrastructure, conflict, agriculture, and population pressure to assess the current capacity of a country to adapt to or leverage existing or anticipated stresses resulting from climate change. |
| <b>Municipals</b>   | Sub-pillar of the Environmental pillar score of PIMCO’s proprietary framework.  | Third party climate data that includes a relative assessment of physical climate hazards based on climate models and geospatial data, as well as assessments of projected property value at risk and economic output at risk over various time periods.  |
| <b>Mortgage-and asset-backed securities (MBS and ABS)</b> | Identification of RMBS exposed to physical risk across 17 natural hazards, as part of environmental evaluation of the asset class. See case study on page 27. | Public source Federal Emergency Management Agency’s National Risk Index for Natural Hazards provides U.S. census tract-level data to produce different metrics such as an annual building loss rate.   |





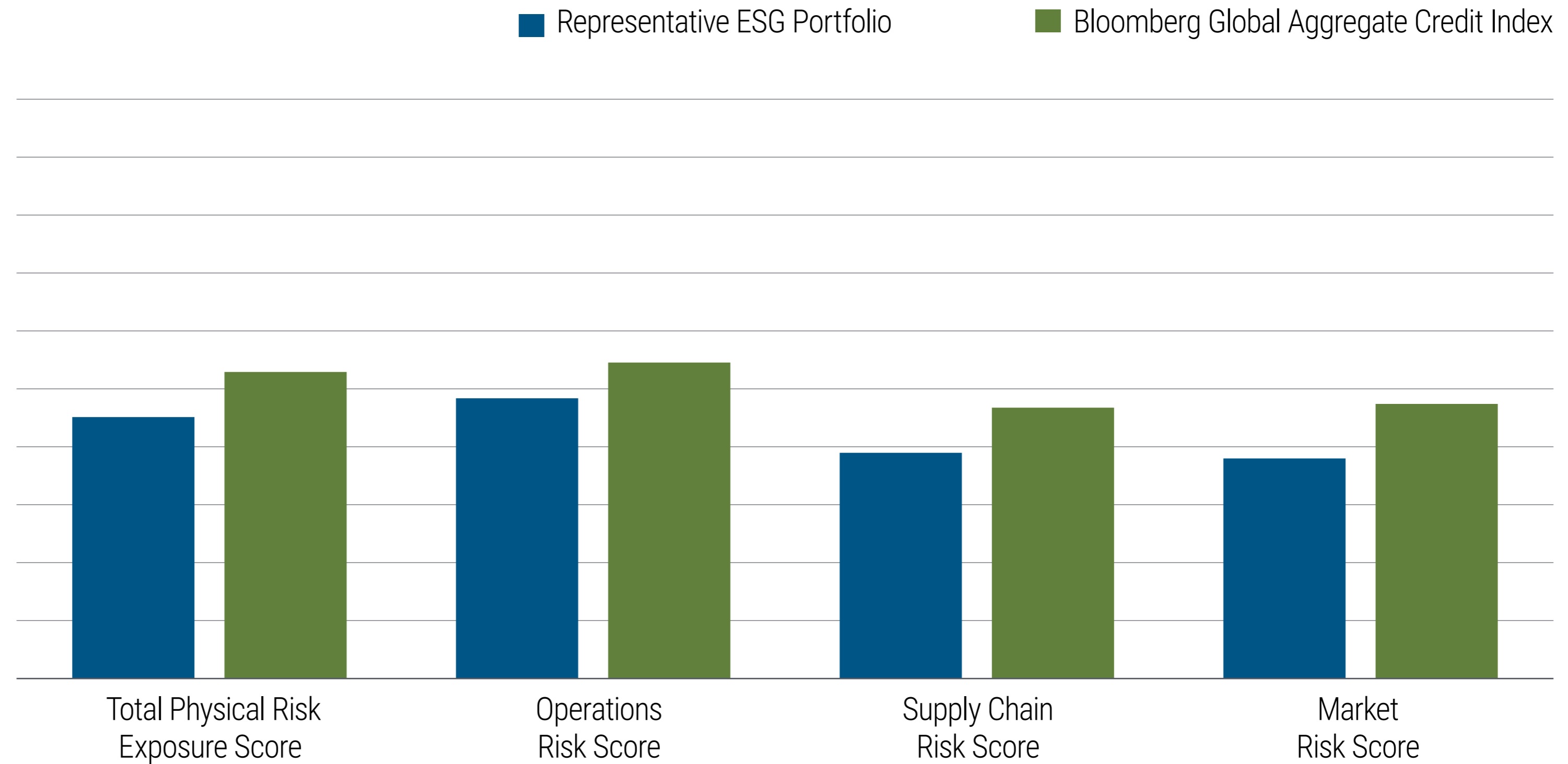
## CORPORATE CASE STUDY: PORTFOLIO LEVEL ASSESSMENT

PIMCO’s proprietary framework allows us to develop a suite of metrics and charts to help understand the exposure of our portfolios.

The chart includes the total physical risk exposure score of an illustrative portfolio, including its breakdown per the different pillars of the corporate score, and suggests lower potential exposure than the benchmark:

- Direct Impacts:  
Assets and Operations Risk
- Indirect Impacts:  
Supply Chain Risk (upstream)  
Market Risk (downstream)

### PHYSICAL RISK EXPOSURE PERCENTILE SCORES (CORPORATES)



As of 31 December 2023. Source: **Sample for illustrative purposes only.** Moody’s ESG Solutions. Weighted average percentile scores per sector based on corporate issuers. This percentile score means that each company score has been rescaled by percentile with respect to the universe of companies covered by Moody’s ESG Solutions to put them on a 0-100 scale: 0 (low risk) and 100 (high risk). The percentile score is useful to directly benchmark the hazard score of a company relative to the others. Moody’s ESG Solutions’ physical climate risk scoring methodology for corporations assesses three types of risk: Operations Risk, Supply Chain Risk, and Market Risk. Operations Risk measures the overall climate hazard exposure associated with the facilities a company owns or operates. Supply Chain Risk and Market Risk capture respectively upstream (supply chain) and downstream (distribution, customers) climate risks for companies. Operations Risk constitutes 70% of the total company score, while Supply Chain and Market Risk each account for 15%. The total risk is below the average which would be equivalent to the 50th percentile. This Figure is provided for information purposes and should not be construed as a solicitation or offer to buy or sell any PIMCO or other securities or related financial instruments in any jurisdiction.



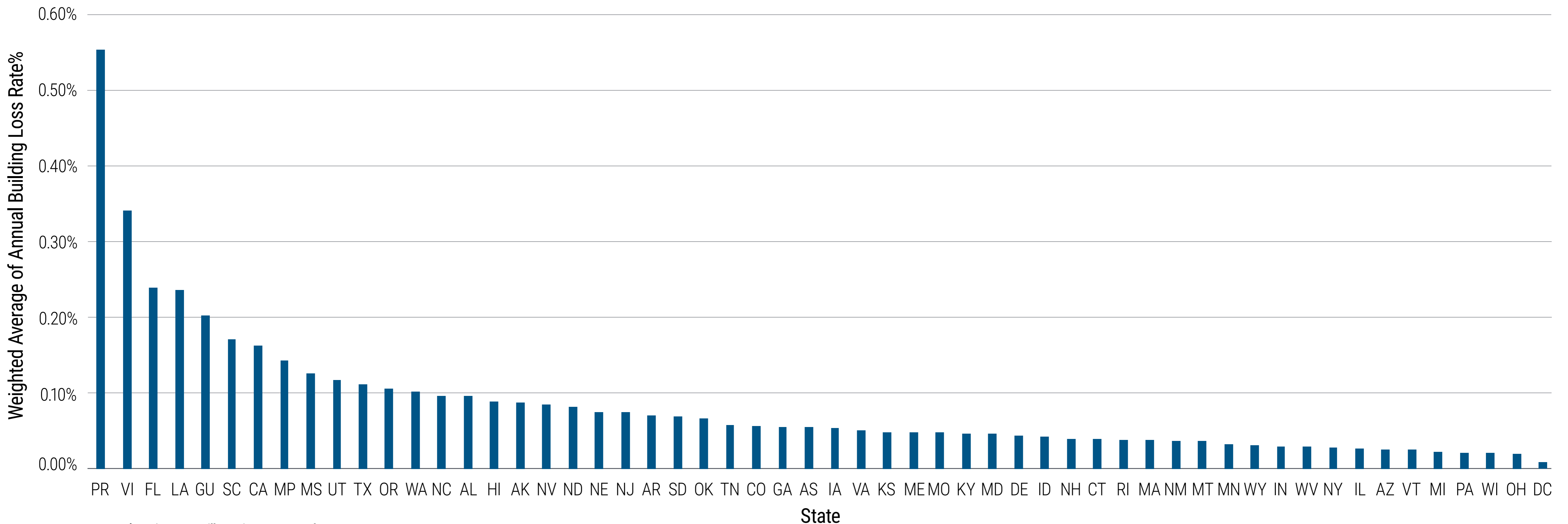


## STRUCTURED PRODUCTS CASE STUDY: MORTGAGE-BACKED SECURITIES IN THE U.S.

Within structured products, the physical risk for individual subsectors is different. Residential mortgage-backed securities (RMBS) or commercial mortgage-backed securities (CMBS), where collateral is mostly concentrated in real assets, are exposed to higher physical risk.

Our assessment combines climate risk data from Federal Emergency Management Agency (FEMA) and PIMCO’s existing geo-spatial mortgage analytics that help locate the real estate assets. By doing so, we can estimate the physical risk exposure of MBS from a host of natural hazards in aggregate in the U.S. The exposure is expressed through metrics at the security and portfolio level, which serve as proxies to help clients understand the gross exposure of MBS investments to physical risk. Our work continues as we explore ways to incorporate more climate scenarios into the analysis.

### ANNUAL BUILDING LOSS RATE BY STATE



Source: FEMA, PIMCO. As of March 2023. **For illustrative purposes only**

Weighted Average Annual Building Loss Rate. The building loss rate is derived from the National Risk Index which is developed by the Federal Emergency Management Agency to provide a relative measurement of community-level natural hazard risk in the US region including US territories. Building exposure is defined as the dollar value of the buildings determined to be exposed to a hazard according to a hazard-specific methodology. Annual Building Loss Rate is calculated as a ratio of total expected loss of buildings within a specific location relative to the total value of buildings in the same location (e.g. buildings within the same state).





## APPLYING PHYSICAL RISK RESEARCH TO OUR ISSUER ENGAGEMENT PROCESS

PIMCO has incorporated specific physical risk elements as part of its ESG engagement framework. This helps us determine the extent to which corporate issuers are assessing and monitoring those risks internally and, most importantly, the extent to which they are developing adaptation solutions, since there is typically less data available on such actions.

Questions covered relate to the assessment, disclosure, findings and actions – which may include how impacts are calculated across the value chain, business segments or geographies, alignment with the TCFD recommendations – and the significance of results on the business and future risk mitigation strategies.

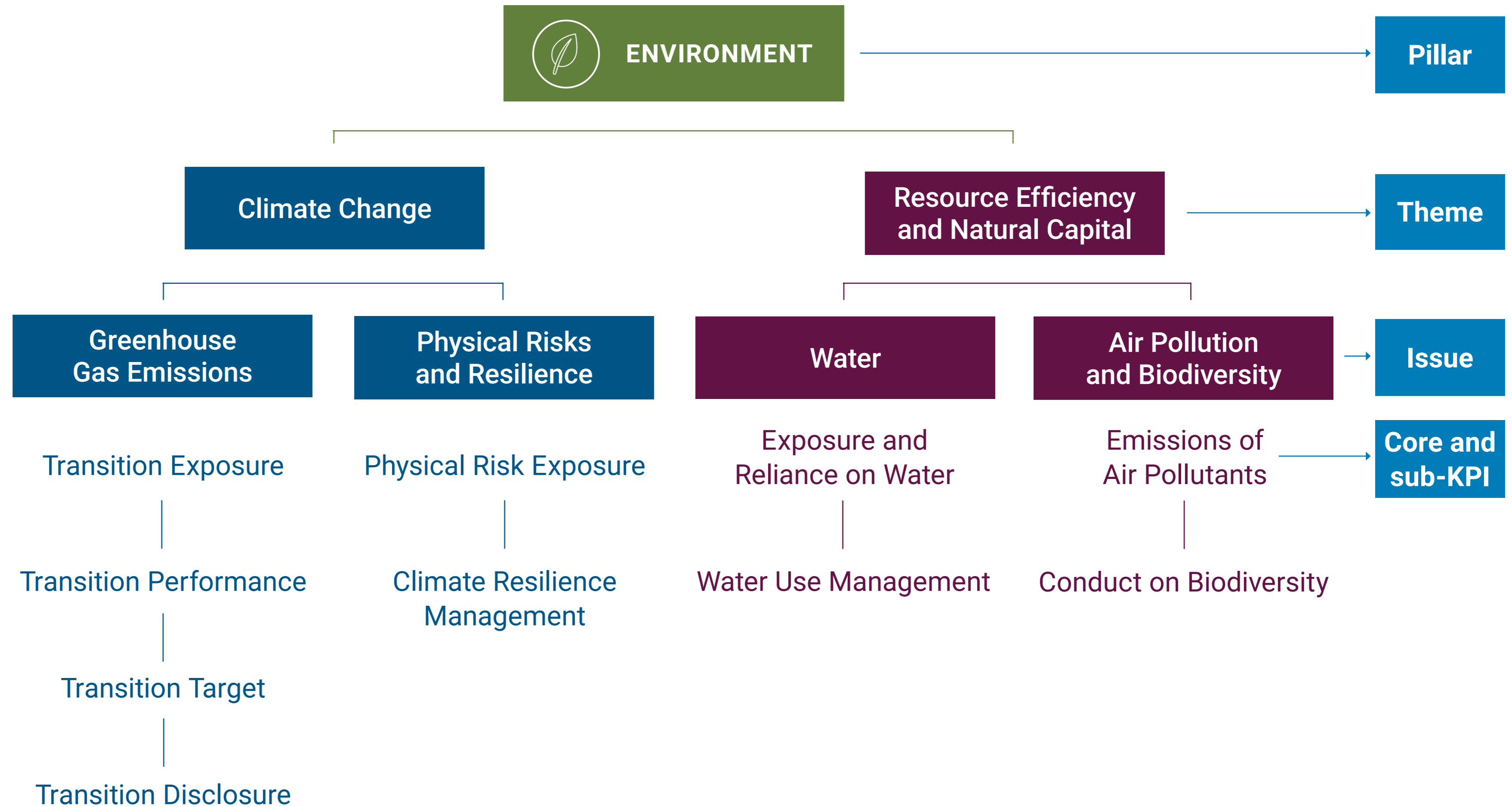


## SECTOR FRAMEWORK SNAPSHOT

In this example, we outline the 2023 enhancements to the Environmental pillar in our Utilities Sector Framework.

Utilities play a key role in energy transition. The utility sector accounts for 44%<sup>18</sup> of the global energy-related CO2 emissions and plays a critical role in broader economy wide de-carbonization efforts. The energy transition and grid reliability are highly material as the sector faces financial impacts from the increase in severity and volume of climate-related weather events. This translates accordingly into PIMCO’s sector-specific framework with respective weight assigned to these topics. In addition, ESG and credit analysts collaboratively engage with issuers of existing – and potential – portfolio companies on the importance of climate transition and resilience.

### UTILITIES SECTOR FRAMEWORK AND KEY PERFORMANCE INDICATORS (KPIs) – ENVIRONMENTAL PILLAR



<sup>18</sup> Source: IEA Greenhouse Gas Emissions from Energy, as of 2021. <https://www.iea.org/data-and-statistics/data-product/co2-emissions-from-fuel-combustion>  
 Source for chart: PIMCO, as of 31 December 2023. **Chart is for illustrative purposes only.**



## STRUCTURED PRODUCTS MBS, ABS, CLO AND COVERED BONDS

Structured products account for almost 25% of all outstanding fixed income securities<sup>19</sup>. We view the asset class as an essential investment component when it comes to supporting PIMCO clients in their sustainability journeys.

Compared to corporates, securitized products offer their own unique advantages as well as challenges. The variety within the asset class has allowed our clients to explore investment opportunities that offer either environmental or social benefits.



<sup>19</sup> SIFMA, as of 2022



## STRUCTURED PRODUCTS MBS, ABS, CLO AND COVERED BONDS (CONTINUED)

Data quality and disclosure continue to pose challenges for investors. Consistent with our overall engagement approach (page 13), PIMCO views active engagement with originators/sponsors, and with the broader investor community, as playing a key role in bridging the gap and contributing to a positive change in data transparency and framework standardization. We have developed tools to track our engagements with sponsors/originators around the world. In 2023, PIMCO engaged with nearly 30% of our firmwide securitized product holdings. PIMCO is a member of the Structured Finance Association (SFA) ESG working group. Along with other issuers and investors, SFA has published inaugural ESG Best Practices for Auto ABS and Residential Mortgage-Backed Securities (RMBS) disclosures.

The investment analysis and engagement has allowed us to uncover insights from a bottom-up perspective. In addition, we also believe that policy advocacy will provide some guidance for the market from a top-down perspective.

For securitized and asset backed products with underlying loans related to mortgages, PIMCO leverages its expertise

in real estate to assess the sustainability characteristics underlying these investments. For example, on European RMBS, covered bonds and Danish mortgages, we assess ambition related to energy efficiency, energy performance certificate (EPC) composition of the portfolio, related European Union (EU) taxonomy disclosures related to the loan book, and physical climate change risk, among others. We tend to engage with issuers, both pre-and post-issuance, to inform our investment decisions.

Lastly, PIMCO applies its ESG corporate sustainability assessment frameworks – similar to application to a corporate portfolio – to analyze our Collateralized Loan Obligation CLO investments (CLOs are securitizations backed by multiple loans to corporations). As a result, we produce CLO level scoring across several important sustainability metrics, which may include carbon emissions, sensitive sector exposure, or corporate alignment with the Paris Agreement. This can allow us to evaluate and differentiate investments that are considered leaders or laggards from a sustainability perspective.







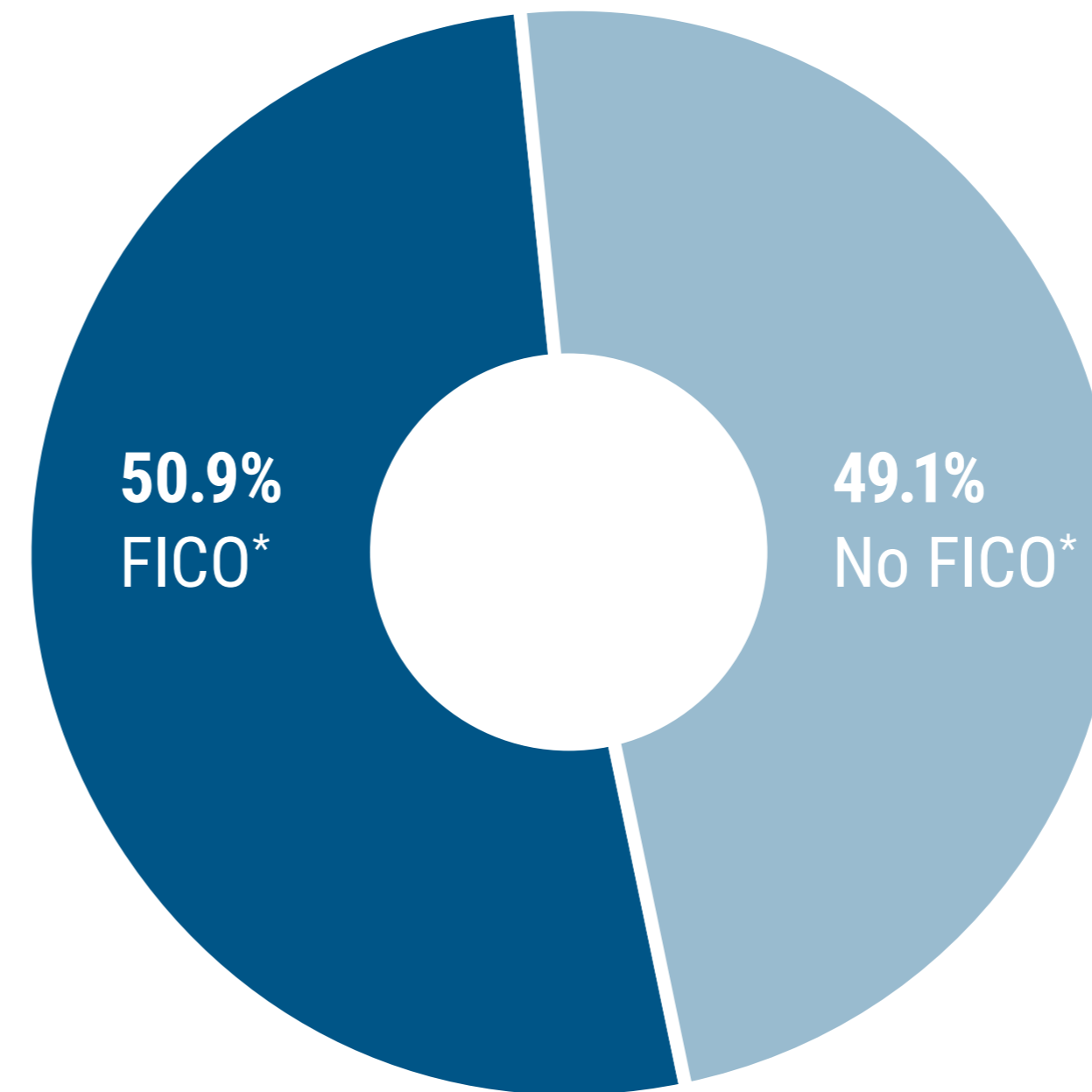
**CASE STUDY:**  
**AUTO ABS COMPANY**

The company’s underwriting is focused on “ability to pay” at reasonable rates in order to provide access to work/family transportation for a “credit invisible” cohort. By financing only work/family vehicles, the company helps lower income borrowers participate in the U.S. economy. It also provides native language and financial literacy support for borrowers to help increase transparency and drive successful outcomes for borrowers.

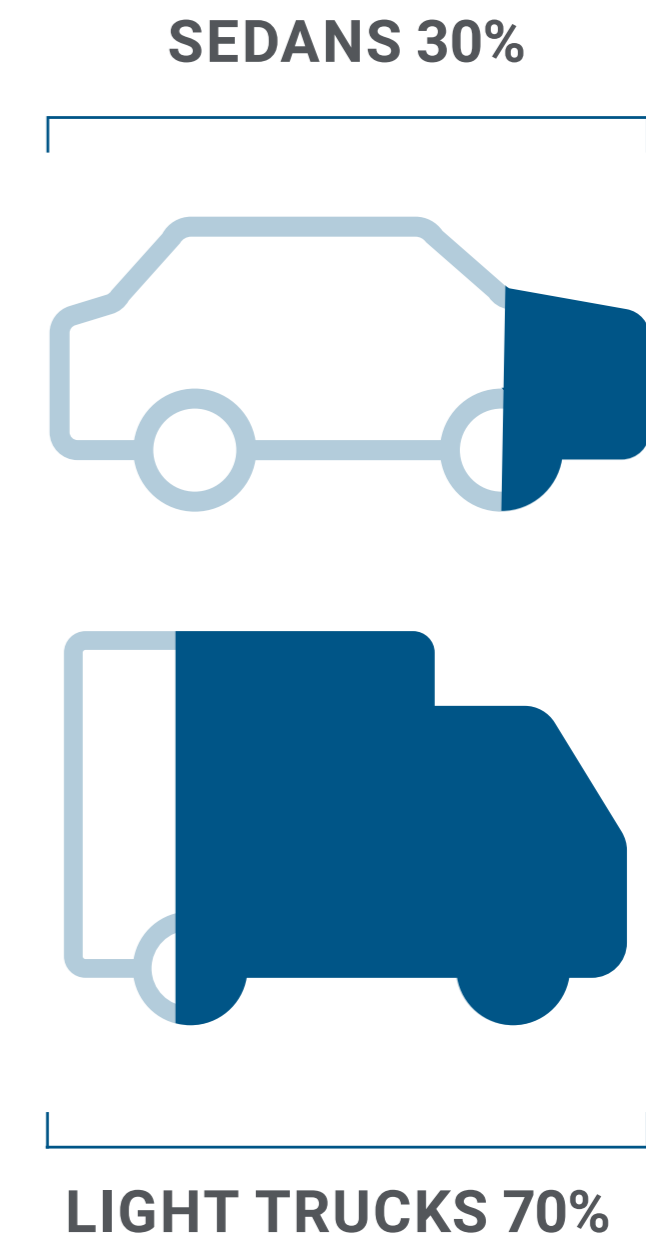
Prudent ESG and traditional underwriting practices may help mitigate credit risk, and the auto loans originated by this company have performed well. We expect the senior bonds to also have sufficient credit support to potentially withstand severe recession scenarios.

By engaging early on both ESG and portfolio management, PIMCO was able to negotiate what we believe to be favorable deal economics.

**NUMBER OF ACTIVE ACCOUNTS**



**UNDERWRITES WORK/FAMILY VEHICLES**



**The example above is presented for illustrative purposes only**, as a general example of PIMCO’s ESG research and engagement capability and is not intended to represent any specific portfolio’s performance or how a portfolio will be invested or allocated at any particular time. PIMCO’s ESG processes may yield different results than other investment managers’ and a company’s ESG rankings and factors may change over time. Source: PIMCO. All data is as of 31 December 2023, unless otherwise stated.

\* Fair Isaac Corporation (FICO) score: utilized for credit scoring services/purposes. Source: PIMCO, Bloomberg, company filings.





## CASE STUDY:

### SOLAR ASSET-BACKED SECURITIES (ABS) COMPANY

The company supports customers across 45 U.S. states with the large upfront costs of residential solar services, removing the entry barrier to renewable energy. They are also a signatory of Solar Energy Industries Association (SEIA) Forced Labor Prevention Pledge – a commitment to help ensure that the solar supply chain is free of forced labor.

Cost of residential solar has dropped by more than 50% over the last 10 years<sup>20</sup>, making it competitive with utility-scale prices; the recent passage of the U.S. Inflation Reduction Act should continue to provide tailwind on pricing.

Unlike unsecured exposure to the solar industry, solar asset-backed securities (ABS) are backed by prime quality collateral (solar loans) and this solar ABS deal has performance triggers that may further insulate investors from credit losses.

<sup>20</sup> <https://www.seia.org/us-solar-market-insight>

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## ENGAGEMENT CASE STUDY:

### U.S. FEDERAL HOUSING FINANCING AGENCY (FHFA)

In Q1 2023, FHFA issued a Request for Input (RFI) on Enterprise Single-Family Social Bond Program. To date, Fannie Mae and Freddie Mac have issued labeled multifamily social bonds, but neither has issued labeled single-family social bonds.

PIMCO ESG research on MBS has a materiality approach to social topics, focusing on housing affordability and access to credit. We believe this approach can help address underserved areas of demand and promote additional sources of supply. These efforts can also benefit the housing market and economy more broadly.

We have conducted one-to-one engagements with Government-Sponsored Enterprises (GSEs) and have provided our suggestions on sustainable finance practices and sustainability disclosure. We have also provided responses to the FHFA Request For Information (RFI), and shared our views of the implication on both the housing finance market and the borrowers.

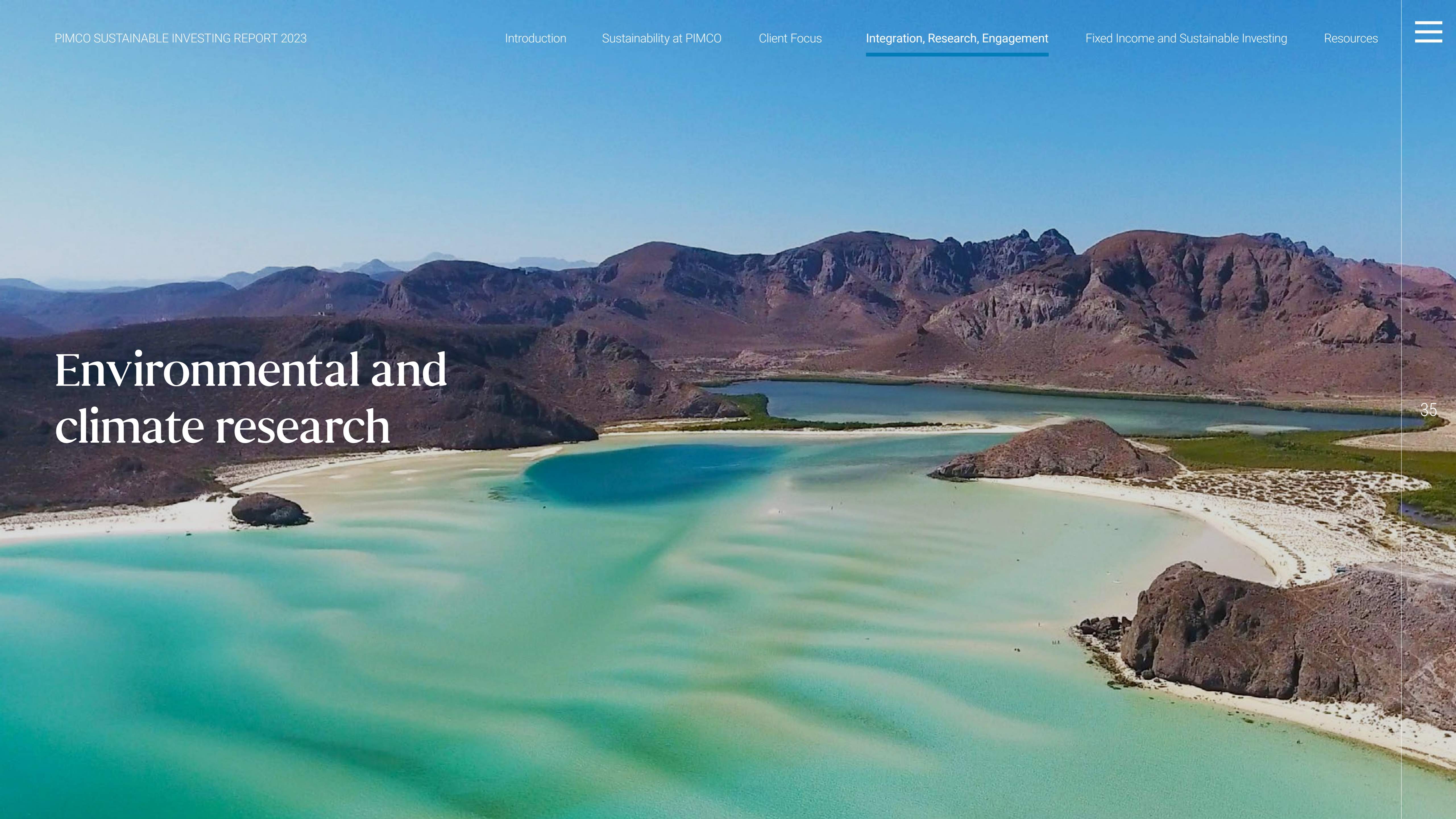


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# Environmental and climate research







## CAPTURING OPPORTUNITIES AS THE WORLD SHIFTS FURTHER TOWARDS A DISORDERLY TRANSITION

2023 proved eventful for the transition to a lower-carbon economy.

### Market developments

Disruptions occurred last year in parts of the renewables market (e.g., offshore wind), largely related to starting valuations, execution problems, supply chain issues, or funding costs – given high interest rates. Moreover, the electric vehicle (EV) market has also faced mounting challenges that have questioned the pace of growth.

### Policy developments

Regarding international climate policy, we attended the 28th United Nations Climate Change Conference (COP28) and returned with a mixture of optimism and concern. While a lot of work lies ahead to realize many of the goals, the commitment to increasing renewables capacity, nuclear generation and efficiency targets, as well as reducing methane from the oil and gas supply chain, were notable.<sup>21</sup> Meanwhile, there were a number of important regional climate policy developments that unfolded in 2023, including progress in terms of climate regulation (e.g., in Europe via the EU 'Fit for 55' that contains revision to the carbon market and introduction of the Carbon Border Adjustment Mechanism), in addition to continued positive fiscal signals (in Europe via the Green Deal Industrial Plan and in the U.S. the Inflation Reduction Act). In the meantime, many governments are moving forward with a range of initiatives to propel green finance and enhanced climate risk assessments and disclosure from the finance sector.

### Potential investment implications

While certain trends were mixed – when looking at market or policy developments – we believe the drivers of green technologies remain durable overall and there is strong momentum for additional climate investment, as well as the corresponding labeled (e.g. green) bond issuances. This applies both to well-established categories such as renewable energy or energy efficiency, or more innovative technologies such as carbon capture and storage, clean hydrogen, or methane abatement, across the value chain and asset classes. This said, the headwinds previously mentioned serve as a reminder of the relatively disorderly nature of the energy transition, as well as the lingering uncertainties concerning the speed of the transition. We think this makes it even more important for asset managers to have a robust assessment of transition risks and analytical frameworks that allow the managers to assess the impact on investment theses.

<sup>21</sup> For more information on our feedback from the COP28 please see our blog <https://www.pimco.com/gbl/en/insights/cop28-climate-issues-share-center-stage-with-oil-and-gas>





## CARBON CAPABILITIES

We continuously look for a way to enhance and expand our capabilities to assess and manage climate risks, as well as measure and optimize the climate impacts of portfolios. For example, we deepened our research on topics such as scope 3 (indirect upstream and downstream emissions), carbon reporting beyond corporates (e.g., sovereign, securitized), and climate solutions (e.g., taxonomy alignment of capex and revenues)<sup>22</sup>. We will continue to expand our capabilities across asset classes as external data sources improve in quality and coverage.

A further overarching goal is to ensure that our frameworks and tools reflect market developments – as well as our clients’ preferences and needs – given the proliferation of external initiatives and methodologies.

While there are common global benchmarks, for example in relation to the Paris Agreement and net zero goal, the energy transition continues to unfold at a different pace in different regions. The regional and sectoral contexts coupled with idiosyncratic factors mean that there is no one-size-fits-all concerning the interpretation and implementation of a climate transition plan for an issuer or investor. We endeavor to reflect this in our engagement and recommendations for issuers or asset owners concerning best practices and the role of debt markets to advance the transition.

<sup>22</sup> For more information on our climate capabilities see our Global TCFD Report <https://www.pimco.com/gbl/en/documents/dca97fa8-18ab-429e-bbb7-2cd1e2afb678>





## SUMMARY OF PIMCO'S CLIMATE TOOLS, SOLUTIONS AND AREAS OF FOCUS

These practical nuances have become a focal point as 2023 was characterized by a broad shift from portfolio climate target setting to implementation at portfolio levels, particularly as it relates to the portfolio's greenhouse gas emissions reduction. This has resulted in a greater recognition of the complexity of the transition, and more questions around the effectiveness of different responsible investment approaches i.e. engagement relative to screening and exclusions.

| Approach   | Focus   | PIMCO tools and solutions  | Metrics  | Recent developments and areas of focus  |
|--|---|--|--|---|
| <b>Integration and risk management</b>                   | <b>Climate transition and physical risk assessments</b>   | <b>Proprietary scoring frameworks across fixed income sectors</b>  | Risk scores<br>Scenario analysis (value at risk)   | <ul style="list-style-type: none"> <li>• Incorporation of the latest climate scenarios</li> <li>• Structured products (e.g., ABS, MBS)</li> <li>• Transition plan assessments and engagement</li> <li>• Physical risks methodology enhancement</li> <li>• Publication of our first UK and Global TCFD reports</li> </ul>  |
| <b>Climate impact and investment solutions and tools</b> | <b>Portfolio's greenhouse gas emissions reduction and optimization</b><br><br><b>Alignment with the Paris Agreement and net zero transition finance</b><br><br><b>Climate solutions</b> | <b>Decarbonization and net zero framework</b><br><br><b>Engagement underpinned by our size and relationship with issuers</b><br><br><b>Proprietary scoring frameworks (GSSS-labeled bonds)</b> | Carbon footprint or weighted average carbon intensity<br><br>Paris alignment classification<br><br>Implied temperature rise<br><br>Climate transition improvers and leaders<br><br>Avoided emissions<br><br>Green exposure (revenues, capex) | <ul style="list-style-type: none"> <li>• Extension of the coverage to alts, CLO, private debt, structured, sovereign</li> <li>• Scope 3 expansion</li> <li>• Sectoral targets based on physical carbon intensity</li> <li>• Green bond carbon reporting</li> <li>• Carbon attribution</li> <li>• Carbon projections</li> <li>• Evaluations and engagement on real-economy emission reductions</li> <li>• Portfolio-level climate solutions measurement</li> <li>• Avoided emission fund reporting</li> <li>• Taxonomy eligibility and alignment evaluation</li> </ul> |





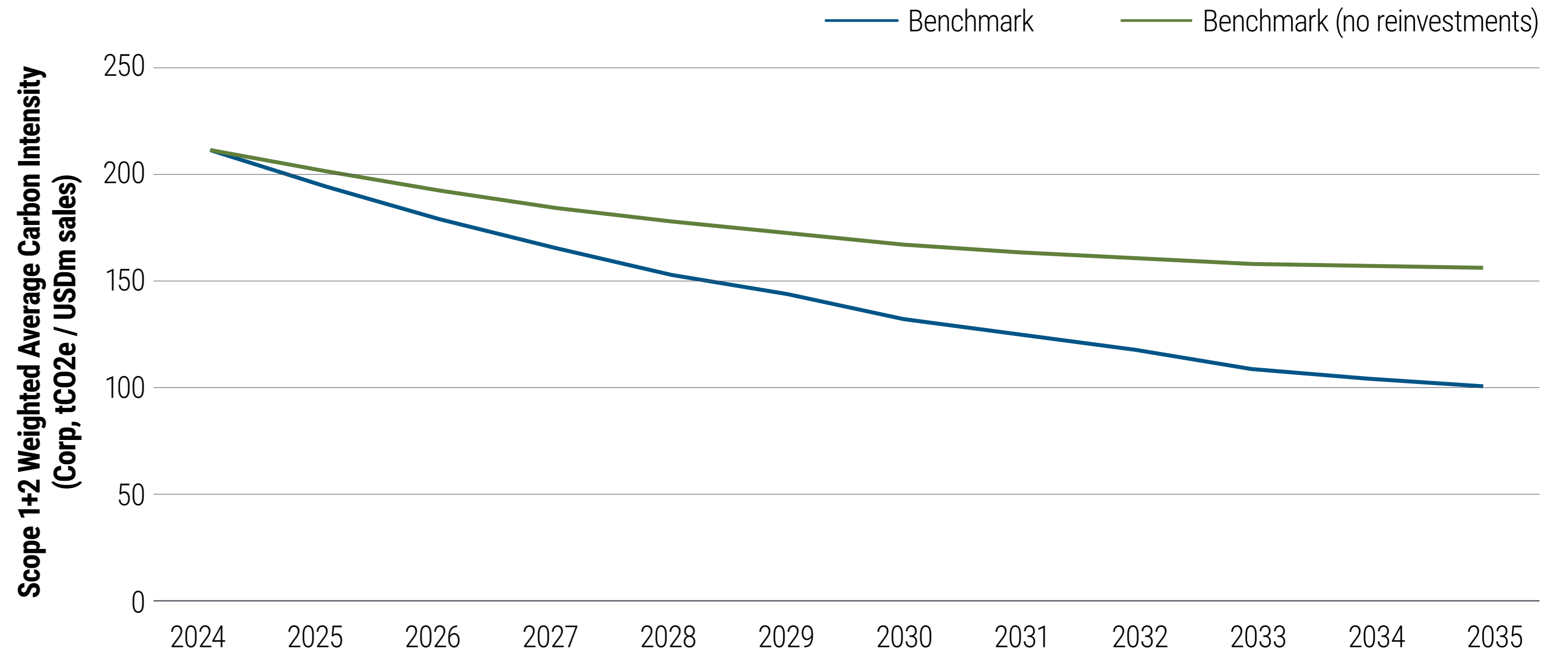
**CASE STUDY:**

**PIMCO PORTFOLIO CARBON PROJECTION TOOL**

To support our forward-looking analysis of transition risks and portfolio decarbonization targets, PIMCO has developed a proprietary portfolio carbon projection tool. Our methodology allows us to produce estimates of the potential future carbon emissions associated with a portfolio based on several scenarios and assumptions specifically relevant for fixed income (e.g., based on reinvestments into bonds from the same issuer or sector peers, considering issuer’s commitments or their historical emissions).

For example, the model output displayed in the chart highlights potential scope 1+2 weighted average carbon intensity decarbonization paths for the Bloomberg Global Aggregate Credit Index. The reinvestment of matured securities can significantly impact the rate of decarbonization for a portfolio and, if well-handled, creates an opportunity to advance a portfolio’s carbon targets while supporting real-economy emissions reductions (e.g., by shifting away from climate laggards to issuers implementing a credible transition plan).

**CARBON PROJECTIONS ILLUSTRATIVE EXAMPLE BLOOMBERG GLOBAL AGGREGATE CREDIT INDEX**



Based on scenarios which are not forecasts or predictions. The chart is an illustrative example for the Bloomberg Global Aggregate Credit Index as of 31 December 2023. PIMCO climate and carbon metrics and methodologies may change over time and may not be comparable to prior period metrics reported. The firm's proprietary methodologies are not verified by a third-party and may vary from other independent carbon discounting methodologies. PIMCO climate and carbon metrics and methodologies may change over time and may not be comparable to prior period metrics reported.

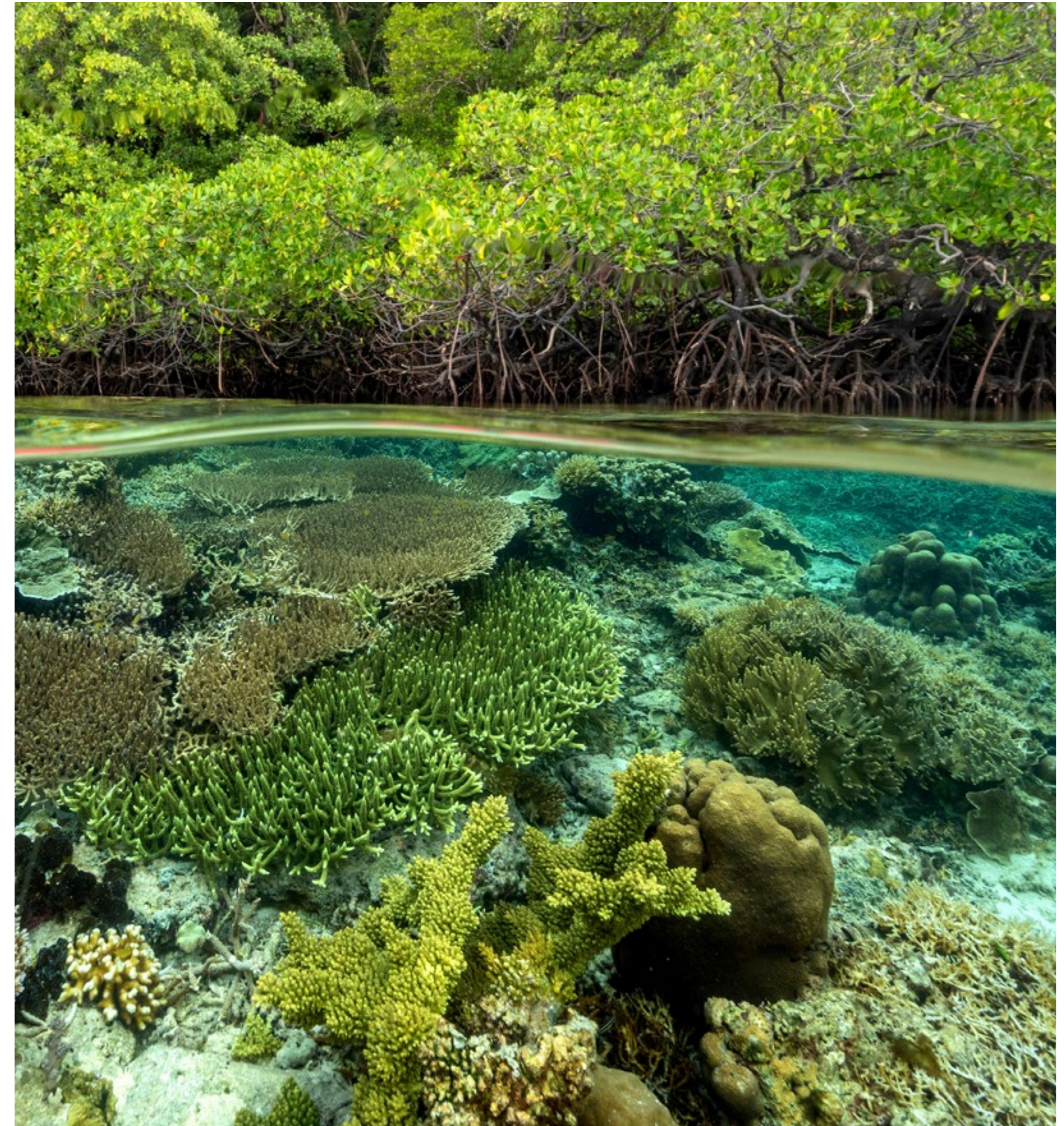


## BIODIVERSITY AND NATURE

The relevance of nature on the global sustainability agenda continues to increase.

One year after the adoption of the Kunming-Montreal Global Biodiversity Framework (GBF) by 196 governments, nature related topics gained unprecedented attention during the 2023 UN Climate Conference (COP28). The first global stocktake under the Paris Agreement included explicit references and efforts surrounding biodiversity, deforestation and forest degradation, nature-based solutions, ecosystems, oceans, and more. Other developments this year included the Taskforce on Nature-related Financial Disclosures (TNFD) launch of the final set of recommendations in the form of a risk management and disclosure framework, as well as the Network for Greening the Financial System (NGFS) publication of conceptual and technical guidance for the development of nature-related risk scenarios.

Natural capital – such as air, water resources, soils, raw materials, wildlife, biodiversity, and the oceans – is entrenched across almost all aspects of the economy. Companies, consumers, and governments alike all make use of and interact with nature. Similar to negative trends for climate change, natural capital is at risk of depletion over the long term. Given the close link between nature and economic stability, investors and the international agenda have increased efforts to assess, mitigate, and/or adapt to nature-related risks. For the past several years, PIMCO has deepened its research and engagement with corporate issuers on natural capital related topics as part of our ESG Assessment and Environmental Risk Framework.





## PIMCO’s analytical framework for natural capital

PIMCO has a Natural Capital Framework which builds on proprietary tools and resources to help further integrate these considerations into our investment process. This framework is supported by nature-related assessments to identify risks and opportunities from impacts (such as externalities or damages to natural capital) and dependencies (such as heavy reliance on natural capital).

- **Risks:** Heavy reliance on natural capital, typically not reported in corporate financial statements, can adversely affect businesses if depleted, resulting in physical risks; businesses with high impacts to natural capital might face stricter regulation causing transition risks.
- **Opportunities:** Increased data availability across supply chains provides more visibility per geography/location; differentiation across issuers’ sustainability strategies; and better risk assessment.

| Bloomberg Global Aggregate Credit Index |                           |                      |                |           |                     |        |                       |                            |                          |                            |             |                    |
|---|---------------------------|----------------------|----------------|-----------|---------------------|--------|-----------------------|----------------------------|--------------------------|----------------------------|-------------|--------------------|
| PIMCO Sectors                           | Impacts                   |                      |                |           |                     |        | Dependencies          |                            |                          |                            |             | PIMCO NatCap score |
|   | Land/Water/Sea Use Change | Resource Explotation | Climate Change | Pollution | Invasives and Other | Score  | Direct Physical Input | Enables Production Process | Mitigates Direct Impacts | Protection from Disruption | Score       | Score              |
| Banking                                 | Green                     | Green                | Green          | Yellow    | Light Green         | Green  | Yellow                | Yellow                     | Green                    | Green                      | Green       | Green              |
| Utilities                               | Orange                    | Orange               | Red            | Yellow    | Yellow              | Red    | Red                   | Red                        | Green                    | Red                        | Orange      | Red                |
| Food                                    | Light Green               | Yellow               | Red            | Yellow    | Green               | Yellow | Red                   | Yellow                     | Green                    | Yellow                     | Red         | Yellow             |
| Automotive                              | Green                     | Yellow               | Red            | Yellow    | Light Green         | Yellow | Yellow                | Yellow                     | Yellow                   | Yellow                     | Yellow      | Yellow             |
| Total                                   | Green                     | Yellow               | Orange         | Red       | Light Green         | Yellow | Red                   | Orange                     | Green                    | Light Green                | Light Green | Yellow             |

The table illustrates our proprietary scoring methodology, which examines sectors in the Bloomberg Global Aggregate Credit Index. Our score is comprised of both impacts and dependencies on nature. For impacts, we score sectors under the direct drivers of biodiversity loss identified by the Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services (IPBES). For dependencies, we follow ENCORE’s (the UN’s Exploring Natural Capital Opportunities, Risks and Exposure tool), looking at ecosystem services and grouping them by the functions they provide. To complement the sectorial analysis, we incorporate company-level data and engagement to differentiate between leaders, improvers, and laggards. Ultimately, the goal is to leverage this framework and score as part of our ESG assessments, and to inform our investment process.

Source: PIMCO. As of 31 December 2023. ENCORE, Science Based Targets Network, PIMCO. Green indicates minimal impact and dependency, while red implies a high potential impact and dependency. The underlying data builds on a SBTN materiality tool, which relies on the ENCORE database for direct impact of operations, and on EXIOBASE to derive upstream impact ratings. For dependencies, we incorporate the ENCORE dependency ratings. The sectorial scores do not include downstream ratings. The overall impacts and dependencies scores at sector level are based on the average of their respective thematic pillars scores. The natural capital score is then based on both impacts and dependencies scores. The portfolio level score is a weighted average of the company scores.





**CASE STUDY:**

**SOVEREIGN ASSESSMENT OF NATURE-RELATED RISKS**

In addition to corporate-related assessments, PIMCO is exploring expanding capabilities at the (sub) sovereign level on nature-related risks and opportunities. The framework aims to inform potential exposure of the underlying economy and industrial structure. For example, an economy with high concentration in industries with significant reliance on water availability could be more impacted in the event of water stress and drought. This approach further complements the Environmental pillar score of PIMCO’s proprietary sovereign quantitative model.

We dissect countries according to their economy and GDP sector composition and overlay this with the corporate heat-map of impacts and dependencies, to obtain signals in terms of potential exposures of sovereign countries to these themes. Our preliminary findings point to more material nature-related impacts and dependencies for emerging markets than for developed markets.

| Country                  | Drivers of Biodiversity Loss |                       |                |             |                     |        | Dependency Category   |                            |                          |                            |        | PIMCO NatCap score |
|--------------------------|------------------------------|-----------------------|----------------|-------------|---------------------|--------|-----------------------|----------------------------|--------------------------|----------------------------|--------|--------------------|
|                          | Impacts                      |                       |                |             |                     |        | Dependencies          |                            |                          |                            |        |                    |
|                          | Land/Water/Sea Use Change    | Resource Exploitation | Climate Change | Pollution   | Invasives and Other | Score  | Direct Physical Input | Enables Production Process | Mitigates Direct Impacts | Protection from Disruption | Score  |                    |
| EM LatAm country         | Red                          | Red                   | Red            | Red         | Green               | Red    | Red                   | Light Green                | Red                      | Red                        | Red    | Red                |
| EM Asia country          | Yellow                       | Orange                | Orange         | Yellow      | Red                 | Orange | Light Green           | Orange                     | Yellow                   | Yellow                     | Yellow | Orange             |
| Periphery Europe country | Light Green                  | Green                 | Green          | Green       | Orange              | Green  | Yellow                | Red                        | Green                    | Yellow                     | Yellow | Green              |
| Developed economy        | Green                        | Green                 | Green          | Light Green | Light Green         | Green  | Green                 | Green                      | Green                    | Green                      | Green  | Green              |

Source: As of 30 September, 2023. ENCORE, Science Based Targets Network, OECD, PIMCO. Green indicates minimal impact and dependency, while red implies a high potential impact and dependency. The underlying data builds on a SBTN materiality tool, which relies on the ENCORE database for direct impact of operations, and on EXIOBASE to derive upstream impact ratings. For dependencies, we incorporate the ENCORE dependency ratings. The sectorial scores do not include downstream ratings. We map corporate sectors to OECD data on gross domestic product (GDP) statistics from 2020 with sectorial breakdowns. The natural capital score is then based on both impacts and dependencies scores.





# Alternative credit and private investments

Consistent with PIMCO's Sustainable Investment Policy Statement and the firm's approach to ESG integration, PIMCO's alternative credit and private strategies assess ESG factors that may be relevant to potential investment opportunities. ESG-related risk factors present both risks and opportunities. Where applicable, the consideration of ESG factors is intended to optimize risk-adjusted returns. In this context, we may consider ESG-related factors as key inputs to the extent that PIMCO believes such factors to be relevant to the investment process and the evaluation of an investment's risk-adjusted returns over the long term. This includes but is not limited to: investment sourcing, due diligence, asset management & monitoring, and disposition decisions.





## ESG INTEGRATION FOR ALTERNATIVES

ESG factors are considered within the investment research and decision-making process where relevant.



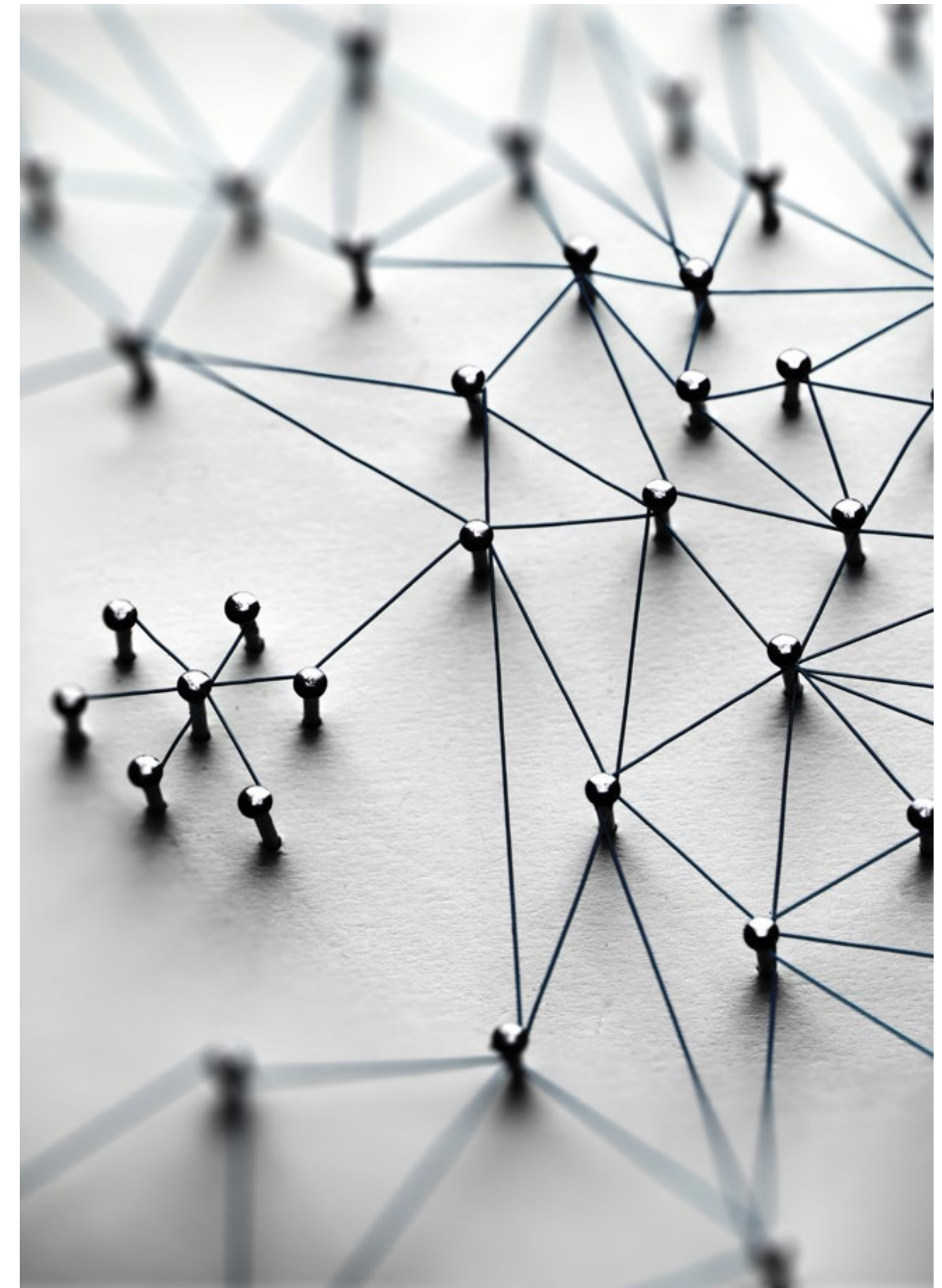
### Determination of ESG factors and materiality:

PIMCO prioritizes ESG factors that are material to investment risk and return considerations, and/or are designated as relevant by specific clients or mandates. PIMCO defines “material” ESG factors as those determined to potentially impact the financial or operating performance of the investment. Furthermore, the degree of materiality may vary for each ESG factor based upon dynamics specific to a particular investment including time frame, likelihood of occurrence, and the scale of impact on financial performance during the investment period.

### ESG research process:

Guided by sector-specific ESG factors, sector specialists integrate material ESG considerations into the investment due diligence process across relevant transactions, identifying appropriate financial risks/opportunities and associated risk mitigation measures and/or value-creation opportunities.

PIMCO’s ESG analysts support sector specialists as needed, providing guidance in areas identified during the due diligence process. For relevant transactions, material ESG considerations, along with relevant KPIs, are presented in the deal memorandum to the respective Alternatives Investment Committee to facilitate effective and informed decision making.







## REAL ESTATE

PIMCO invests in a variety of real assets including commercial, residential, and infrastructure investments. In addition to the overarching materiality framework which underpins our alternatives approach, we have developed specific and proprietary tools for assessing material risks generally which arise from investing in real assets. This framework includes specialized research and analysis related to physical and transition climate risks, energy usage and efficiency, as well as affordability and access.



## RESEARCH TOOLS, DATA, AND ANALYSIS

### Credible data is the foundation for a robust sustainability platform.

As discussed earlier in this report, access to reliable data that is aligned with market best practices has historically been one of the biggest challenges to sustainable investing. At PIMCO, we have developed a scalable, proprietary platform that acts as a central source for sustainability-related data and analytic requests related to ESG.

Some of the internal tool's current capabilities include:

- Portfolio and risk reporting: allows portfolio managers to efficiently access portfolio analytics and monitor risk metrics
- Client analytics and reporting: designed to provide automatically generated standardized reporting
- Carbon attribution: identifies drivers of performance from a sustainability perspective
- Carbon projection: shows potential emissions pathways over a period of a portfolio based upon assumptions





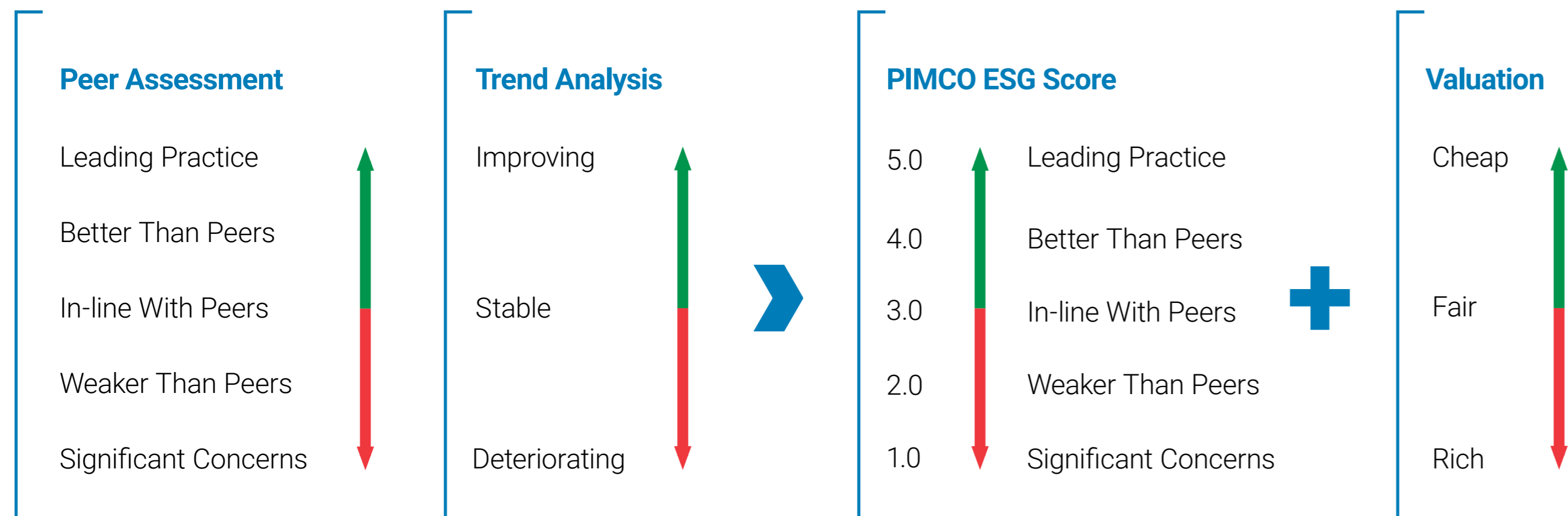
## ESG SCORING FRAMEWORKS

Over the past decade, PIMCO has leveraged our deep research expertise to develop proprietary ESG scoring frameworks across asset classes. This enhanced research process incorporates a detailed ESG assessment that complements the traditional ratings assigned by analysts, enabling us to evaluate corporate, sovereign, securitized, and municipal issuers, as well as green, social, sustainability, and sustainability-linked bond issuances where applicable.

PIMCO assesses the ESG profile of issuers with the goal of separating leading or improving issuers from those less advanced in their sustainability journeys

– in addition to analyzing an issuer’s forward-looking trend to determine how ESG performance is changing over time.

Analysts review ESG performance based on a wide variety of inputs, which can include regular engagement with executive management. In determining the efficacy of ESG practices, PIMCO uses proprietary methods developed and refined in-house. The resulting assessments are often distinct. ESG rating methodologies and issuer scores are updated regularly and made available to portfolio managers across the firm.



**For Illustrative Purposes only. Source: PIMCO**

<sup>23</sup> Sustainable Strategies are strategies with client-driven sustainability requirements. For these strategies, PIMCO actively incorporates sustainability principles (i.e. excluding issuers fundamentally misaligned with sustainability factors, evaluating issuers using proprietary and independent ESG scoring) consistent with those strategies and guidelines. Further information is available in PIMCO’s Sustainable Investment Policy Statement. For information about funds that follow sustainability strategies and guidelines, please refer to the fund’s prospectus for more detailed information related to its investment objectives, investment strategies, and approach to sustainable investment.

### Corporates

Using industry-specific frameworks, analysts review their assigned companies’ ESG-related performance to assign separate scores for “E”, “S”, and “G”, based on information available in public filings, recent news and controversies, in addition to regular engagement with company management teams. These scores are subsequently combined using a weighted average, applying sector-specific weights across the three pillar scores, resulting in a proprietary ESG score. Furthermore, in cases where an investment is made in an issuer’s ESG-labeled debt, the issuer’s ESG score may be subject to a positive adjustment depending on the quality of the relevant ESG labeled bond. In determining the efficacy of an issuer’s ESG practices, PIMCO will use its own proprietary assessments of material ESG issues. The resulting assessments are proprietary to PIMCO and often distinct from those provided by ESG rating providers.

### Sovereigns

We have developed a standalone ESG scoring framework that provides valuable input into our sovereign risk scenario assessments and serves as an input for relative value decisions in portfolios that follow sustainability strategies and guidelines.<sup>23</sup>

### Securitized

PIMCO has built robust ESG scoring frameworks across a wide spectrum of securitized assets, including both agency and non-agency mortgage-backed securities, commercial mortgage-backed securities, asset-backed securities, and collateralized loan obligations.

### Municipals

We consider issuer-level ESG factors across municipal bond issuers to better understand the risks and opportunities inherent in our bond selections. The municipal market is vast and diverse, with issuers ranging from states and cities, to enterprises such as higher education institutions, airports, and continuing care facilities. Analysts use proprietary frameworks to evaluate material ESG risks specific to each municipal sector, and to identify ESG leaders within each sector.





## PIMCO'S PROPRIETARY ESG BOND SCORING FRAMEWORK

In addition to asset class-specific ESG scoring frameworks, PIMCO also evaluates GSSS-labeled bonds. We map these bonds across a spectrum based on strategic fit, potential impact, as well as red flags and reporting, to produce PIMCO's proprietary impact score for green, social, sustainability, or sustainability-linked bonds. Scoring begins at the

time of issuance and includes continued research coverage to improve the security selection processes. Ongoing monitoring of GSSS-labeled bonds gives investors a better understanding of the risks and opportunities inherent in the security, and also allows comparison of ESG scores between different issuers and across sectors.

### Strategic Fit

**Alignment** of the issuers' climate/ environmental/social strategies with the bond's objectives and use of proceeds



### Impact Assessment

Evidence of significant **positive outcomes** compared to "business as usual" by the issuer



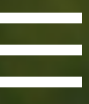
### Red Flags and Reporting

Screening for "**red flags**" and **controversies** and analysis of **reporting** and **process** (misalignments to market standards, e.g., Green Bond Principles)

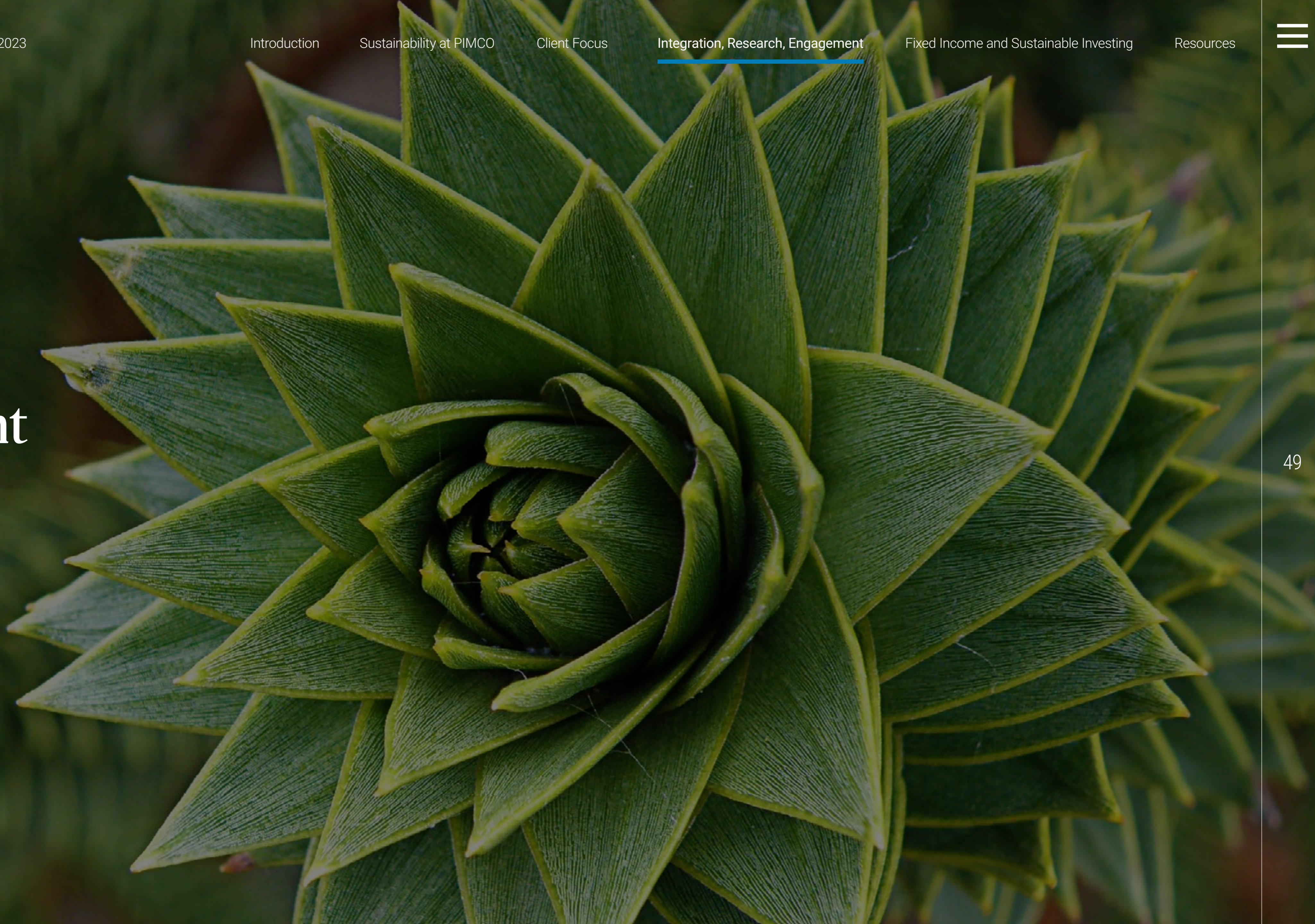
For Illustrative Purposes only. Source: PIMCO







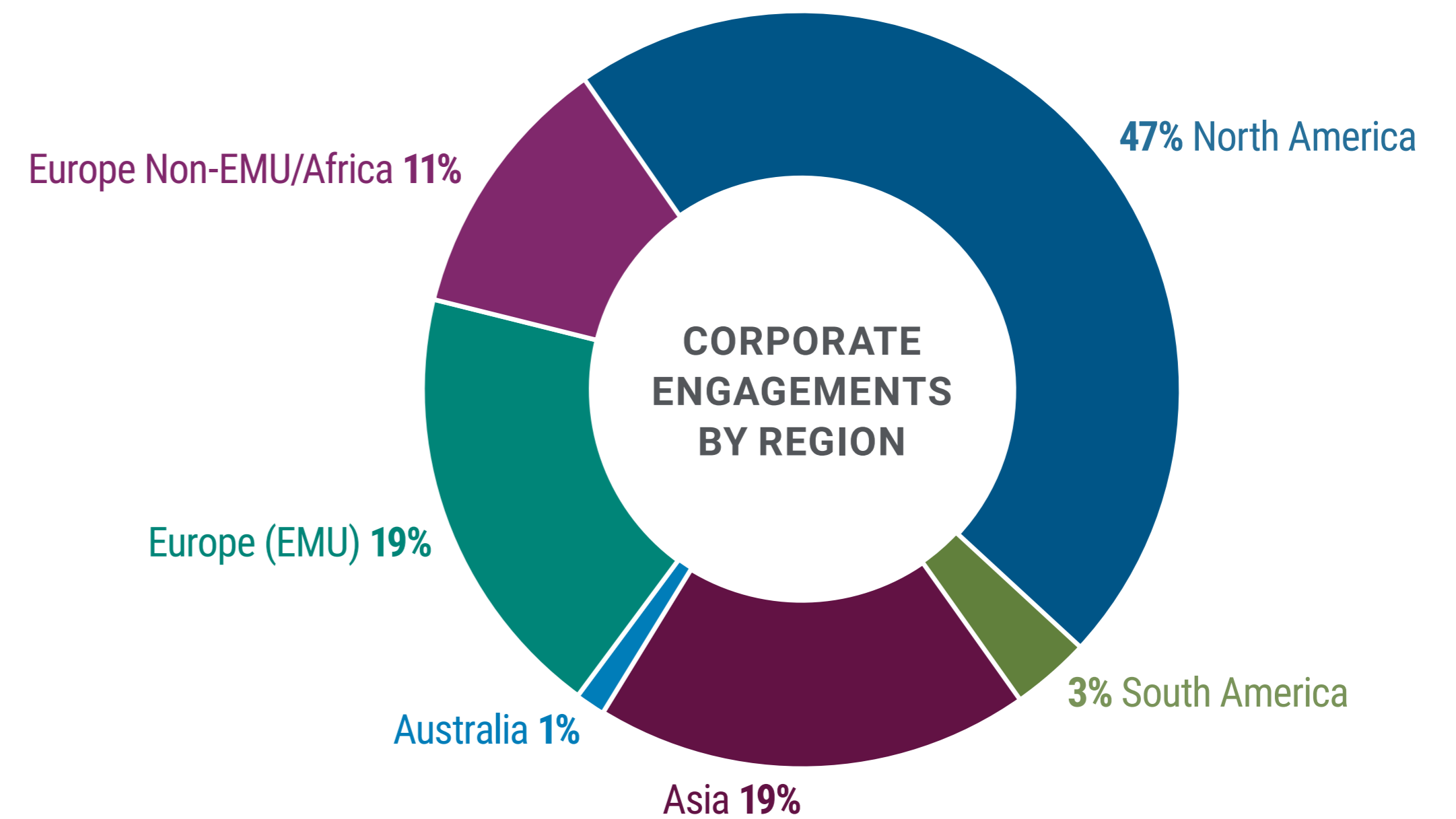
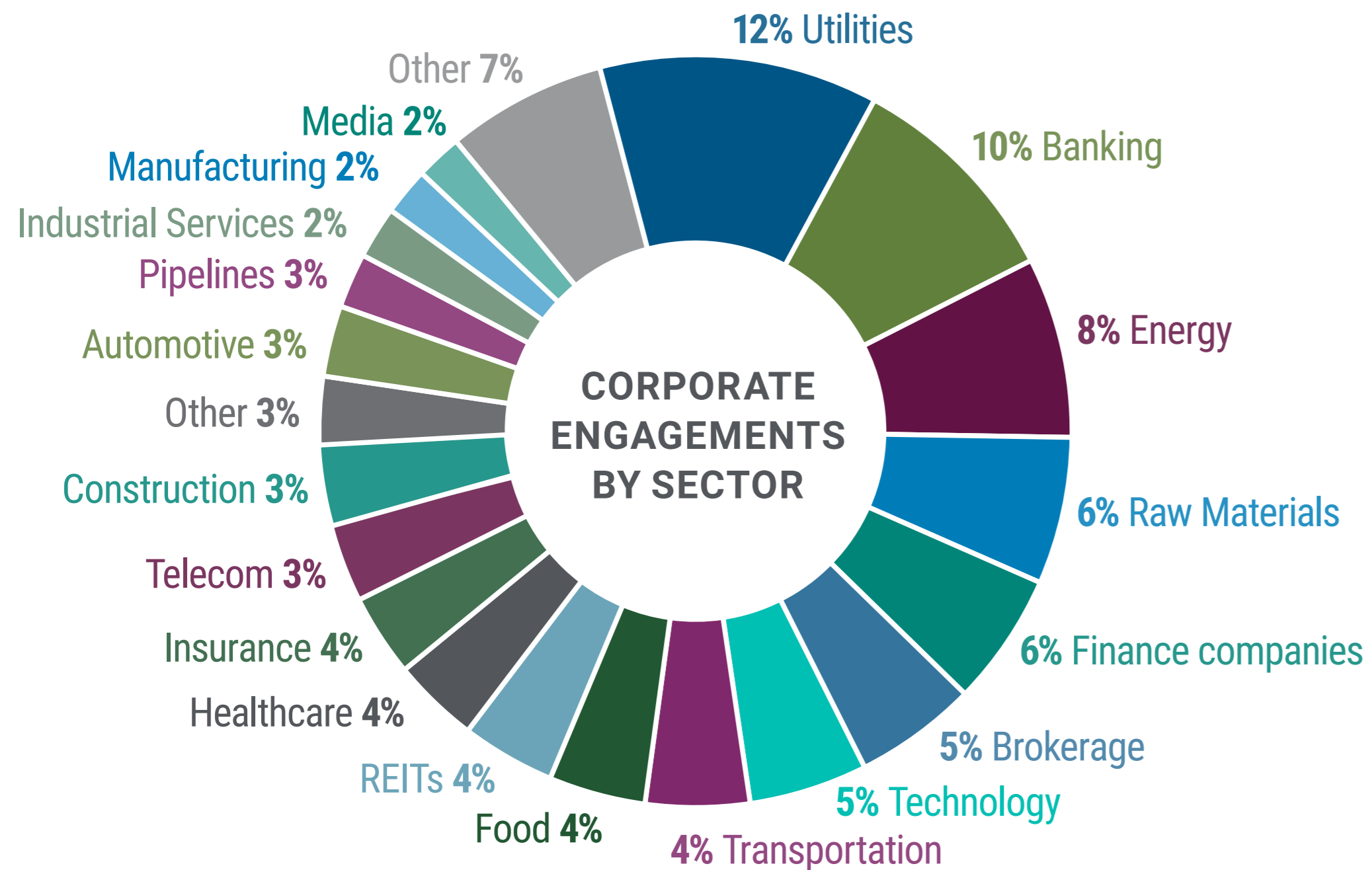
# Engagement in action





## ENGAGEMENT DATA AND CASE STUDIES

In practice, we engage with issuers on a variety of topics, including improving risk management and operational efficiency, expanding the GSSS universe, and improving data quality and disclosure. We believe that our engagement and our sizable active holdings may influence the scope or timing of issuers' objectives, as well as the disclosures that they report to investors.



Source: ESG engagement activities by PIMCO analysts, Jan 1-Dec 31, 2023. Other includes retail, entertainment, consumer services, consumer products, EM sovereigns, local governments, developed sovereigns, municipals, mortgages, and other sectors.

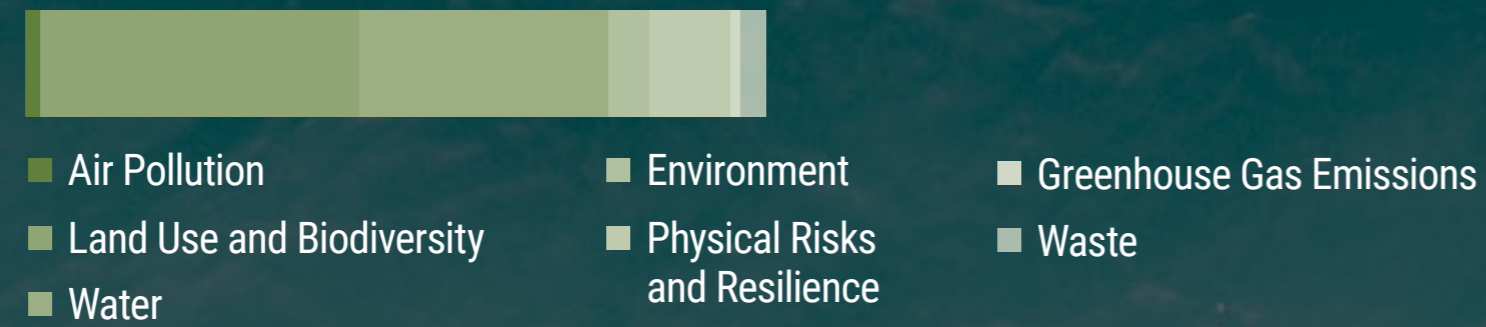




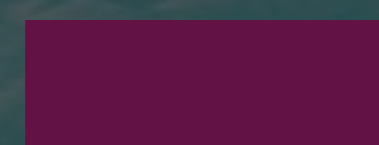
# Engagement data

## % OF CORPORATE ENGAGEMENTS BY TOPIC

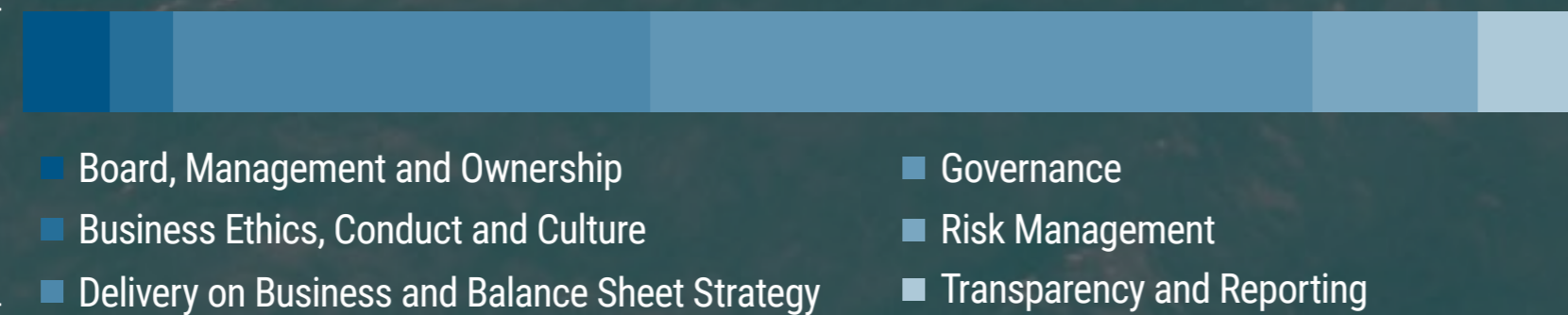
Environment  
22%



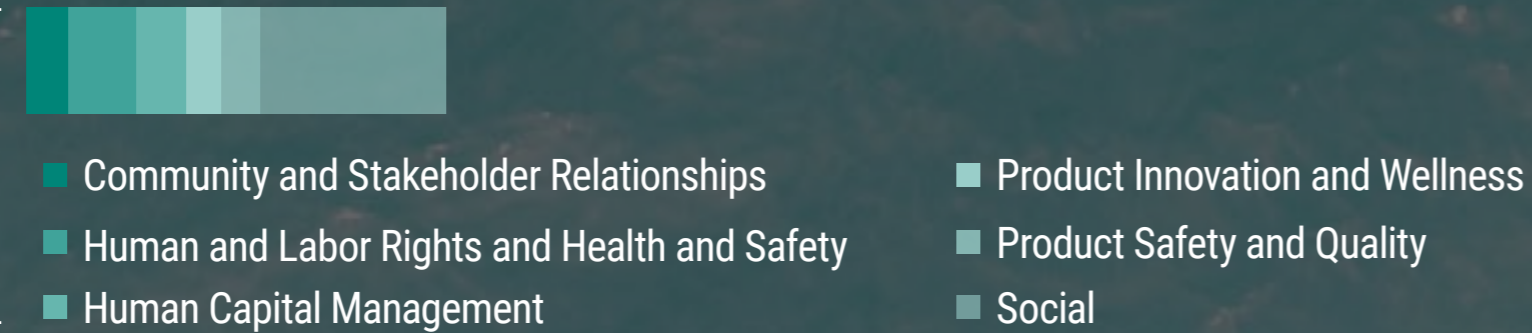
ESG Bonds  
5%



Governance  
61%



Social  
12%



Source: ESG engagement activities by PIMCO analysts, Jan 1 - Dec 31, 2023. Environment, Social and Governance within each pillar refer to engagements that address a combination of topics.







## CASE STUDY:

# AFRICAN MULTILATERAL DEVELOPMENT BANK

## Background

PIMCO engaged with the issuer on its sustainability bond issuance in 2021, its company wide sustainability strategy, and exposure to fossil fuels and climate policy. The issuer has also been working on several projects in African countries, including a solar power plant, a biomass power plant, an electricity supply hybridization project, a low emission transport system, and a hydro-agricultural development.

## Engagement

PIMCO discussed building an operational roadmap to identify and report on their green energy assets and the assets linked to the transition. Additionally, we encouraged the issuer to align with the Paris Agreement.

## Progress to date

The company has updated its environmental policy to reflect its 25% allocation of total bank financing to low-carbon and climate-resilient projects.

**The example above is presented for illustrative purposes only**, as a general example of PIMCO's ESG research and engagement capability and is not intended to represent any specific portfolio's performance or how a portfolio will be invested or allocated at any particular time. PIMCO's ESG processes may yield different results than other investment managers' and a company's ESG rankings and factors may change over time. Source: PIMCO. All data is as of 31 December 2023, unless otherwise stated.







## CASE STUDY: EUROPEAN COUNTRY

### Background

For the past two years, PIMCO has actively engaged the issuer, suggesting improvements as part of their green bond framework and clarity on their broader climate strategy. The issuer also proactively engaged PIMCO on potentially issuing social, sustainability, or sustainability-linked bonds.

### Engagement

PIMCO suggested improvements to the country's green bond framework, including stricter selection criteria aligned with EU policies, stronger fossil fuel exclusions, and enhanced impact reporting. For social bonds, PIMCO emphasized that any issuance should align with government policies, be relevant, inclusive, and clearly define and address the needs of vulnerable populations. PIMCO also supported a potential sustainability-linked bond issuance tied to ambitious targets backed by comprehensive policies and sufficient historical data, including interim sustainability performance targets, and recommended step-up in coupons rather than step-down. Finally, we shared PIMCO's Best Practice Guidance for Sovereign Sustainable Bond Issuance.

### Progress to date

In 2023, the country updated its green bond framework, making changes that were consistent with PIMCO's suggestions.

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**CASE STUDY:**

**EUROPEAN FOOD AND BEVERAGE COMPANY**

The company obtained the validation from SBTi of the following target: reduce absolute scope 1 and 2 GHG emissions 25% by 2030 from a 2020 base year

- The company also committed to reduce absolute scope 3 GHG emissions 12.5% within the same timeframe.\*
- The target boundary includes biogenic emissions and removals from bioenergy feedstock.
- PIMCO shared various best practice recommendations on transition plan, scope 3, physical risks, human rights, deforestation, or biodiversity.

2021

**PIMCO discussed the company's current GHG emissions reduction targets**

- This covered scopes 1, 2, and 3, and the ongoing process to get approval for more comprehensive, science-based targets by the end of 2021.
- PIMCO also highlighted the company's intent to link loan margins to KPIs, the inclusion of ESG KPIs in their debt structure, and their plans to establish a bond curve and secure SBTi targets (external validation) before considering sustainability-linked bonds (SLBs).

2022

**The company committed to a 1.5°C aligned SBTi target, with a forthcoming deforestation policy and advanced AI for supply chain mapping to tackle deforestation risks**

- Importantly, the company materially increased its transparency on its exposure and actions taken to reduce deforestation risks in its supply chain, such as engagement with suppliers to trace the coffee sourcing regions.
- In addition to their FLAG target on green coffee pending SBTi validation, engagement with suppliers has led to 60% of the cost footprint for other critical inputs being certified as SBTi-aligned.
- The company has expanded the scope of its scope 3 disclosure to provide a more complete picture of its carbon footprint and measures to reduce their footprint.
- Despite a dip in responsibly sourced tea due to a recent acquisition, a program with Rainforest Alliance is on track to meet the 100% goal by 2025.

2023

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## CASE STUDY: EUROPEAN UTILITY

### PIMCO'S ESG and credit teams engage with the company

Based on the strength of their renewable energy targets and broader greenhouse emission reduction strategy.

### PIMCO contributed to establishing sustainability-linked bond principles

- As a member of the ICMA's Principles Executive Committee, PIMCO contributed to the drafting of ICMA's SLBP in June 2020 and later coordinated the SLB working group, leading to the publication of additional best practice resources in 2021 (Q&A, KPI registry).
- In 2020, the company boosted its 2030 greenhouse gas emission reduction target from 70% to 80%.

### In 2022, 63% of the company's gross debt at the end of 2022 was sustainability debt

- The company's installed renewable capacity accounts for 67% of its total installed capacity.
- Energy produced by renewable sources accounted for 49.4% direct greenhouse gas emissions from power generation (measured in gCO<sub>2</sub>eq/kWh) decreased by 37% in 2022 compared to 2017.
- The company's decarbonization roadmap was certified by the Science Based Targets initiative (SBTi) as consistent with limiting global warming to 1.5°C, hence aligned to the most ambitious temperature goal of the Paris Agreement adopted by the United Nations in 2015.

2017

### PIMCO becomes a member of the PRI SDG Advisory Committee and UN Global Compact

As part of this work, PIMCO discusses the potential for SDG-related financing structures.

2018

### PIMCO anchors the first sustainability-linked bond (SLB) for the power sector

- PIMCO shared comments with the company on the SLB structure and served as the anchor investor to the deal.
- In 2019, the company's direct GHG emissions per kWh were reduced by more than 36% compared to 2007.
- The company launched the world's first general purpose SDG-linked bonds in U.S. markets for \$1.5 billion and in European markets for €2.5 billion, embedding its climate strategy into its sustainable finance model.
- Moreover, the company obtained validation of its greenhouse gas emission reduction target by the Science Based Targets initiative (SBTi), as consistent with greenhouse gas reductions required to keep global warming to well below 2°C.

2019

2020

2021

### 2021 PIMCO Assumes Co-Chair of the CFO Coalition for the SDGs

The coalition pledges to align significant amounts of investment and financing towards SDG outcomes, while focusing on the energy transition.

2022

2023

### PIMCO engaged on progress made in its carbon targets and challenges

This included the contribution of the different drivers, and providing recommendations on its sustainability-linked bonds progress reporting.





## CASE STUDY: LATIN AMERICAN COUNTRY

### Second Quarter: PIMCO’s emerging markets sovereign credit team engaged issuers on their financing, budget priorities, and their pandemic response

- The ESG team continued to collaborate with Debt Management Offices (DMOs) to discuss climate targets/goals and proposals for the upcoming Nationally Determined Contributions (NDCs) following the first commitments for the Paris Agreement.
- PIMCO also encouraged the government to facilitate a conversation with their NOC across different ESG areas and especially on their role in the country’s energy transition.

### PIMCO engaged the government on their labeled bond issuance

- This included sharing best practices and recommendations for their impact and allocation reporting.
- We also encouraged the issuer to consider expanding their allocation to environmental categories, especially water and renewable projects.

2021

2022

2023

### Fourth Quarter: PIMCO launched a collaborative engagement with the National Oil Company’s (NOC) CFO, environmental team, and the country’s Finance Ministry

- This enabled insights into NOC’s approach to energy transition, health and safety, climate goals, and biodiversity.
- The discussion focused on NOC’s role in the country’s energy transition, its targets and strategy to reduce methane emissions, and health and safety processes.

### The government started to allocate to green projects

PIMCO continues to provide feedback on their impact and allocation reports.





## CASE STUDY: U.S. AUTOMOBILE MANUFACTURER

### Background

PIMCO engaged with the company's financial and ESG team (including CFO) to discuss the company's ESG goals and their appetite for sustainable bonds.

### Engagement

PIMCO also met with the issuer's Treasurer alongside the company's pension team. The discussion focused on opportunities to further the company's sustainability strategy in terms of perception, evaluation, and ratings by asset managers and external parties. PIMCO discussed climate leader/laggard inputs and considerations, the importance of science-based targets, materiality for sustainability changes to business plan, and reporting.

### Progress to date

Subsequently, the company issued its inaugural green bond, proceeds of which are mainly used to support its electric vehicles (EVs) strategy. In January 2023, PIMCO engaged with the company on GHG emissions. In April, PIMCO was happy to see the company's strong support for the EPA's proposed GHG LDV and MDV standard. The company published targets endorsed by SBTi in line with a "Well-below 2°C" scenario (WB2DS) and began developing their vehicle pathway for 1.5C. PIMCO continues to track progress against their 2035 interim target in the report.

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## CASE STUDY: U.S. FOOD COMPANY

### Background

Investors in this multinational food company collaborated on engagement focused on human and labor rights in the company's supply chain, with an emphasis on child labor prevention, transparency, and access to a grievance mechanism and workers representation.

### Engagement

PIMCO has recommended that the company strengthen its commitment to human rights and improve its disclosure practices regarding communications with unions, where applicable. This approach is aimed at fostering a fair and equitable workplace. The company has also been encouraged to improve transparency around its grievance mechanisms and to provide detailed reports on the resolution of grievances. This can demonstrate its proactive stance in addressing workforce concerns, thereby mitigating workforce stoppages and reducing the risk of negative headlines. Additionally, PIMCO recommended that the company evaluate how broader industry trends like climate change and automation affect its workforce. This forward-thinking approach not only benefits the workforce but also aligns with investors' interests by safeguarding the company's reputation and ensuring its resilience in the face of industry shifts.

### Progress to date

In response to child labor risks identified in 2022, the company took decisive steps, assembling a cross-functional team, revising contracts with sanitation providers to include audit rights, terminating contracts where child labor was found, and launching an "18+ campaign" to combat child labor. They also established a child labor task force and are considering support measures for affected children. Further, the company is considering the broader implications of its business practices, looking to understand and mitigate the social impacts of industrywide changes on its workforce, including the potential effects of technological advancements and environmental challenges.

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## CASE STUDY: U.S. TELECOMMUNICATIONS PROVIDER

### Background

A major player in the communications industry, the company has a large workforce and is committed to diversity and inclusion for its employee base.

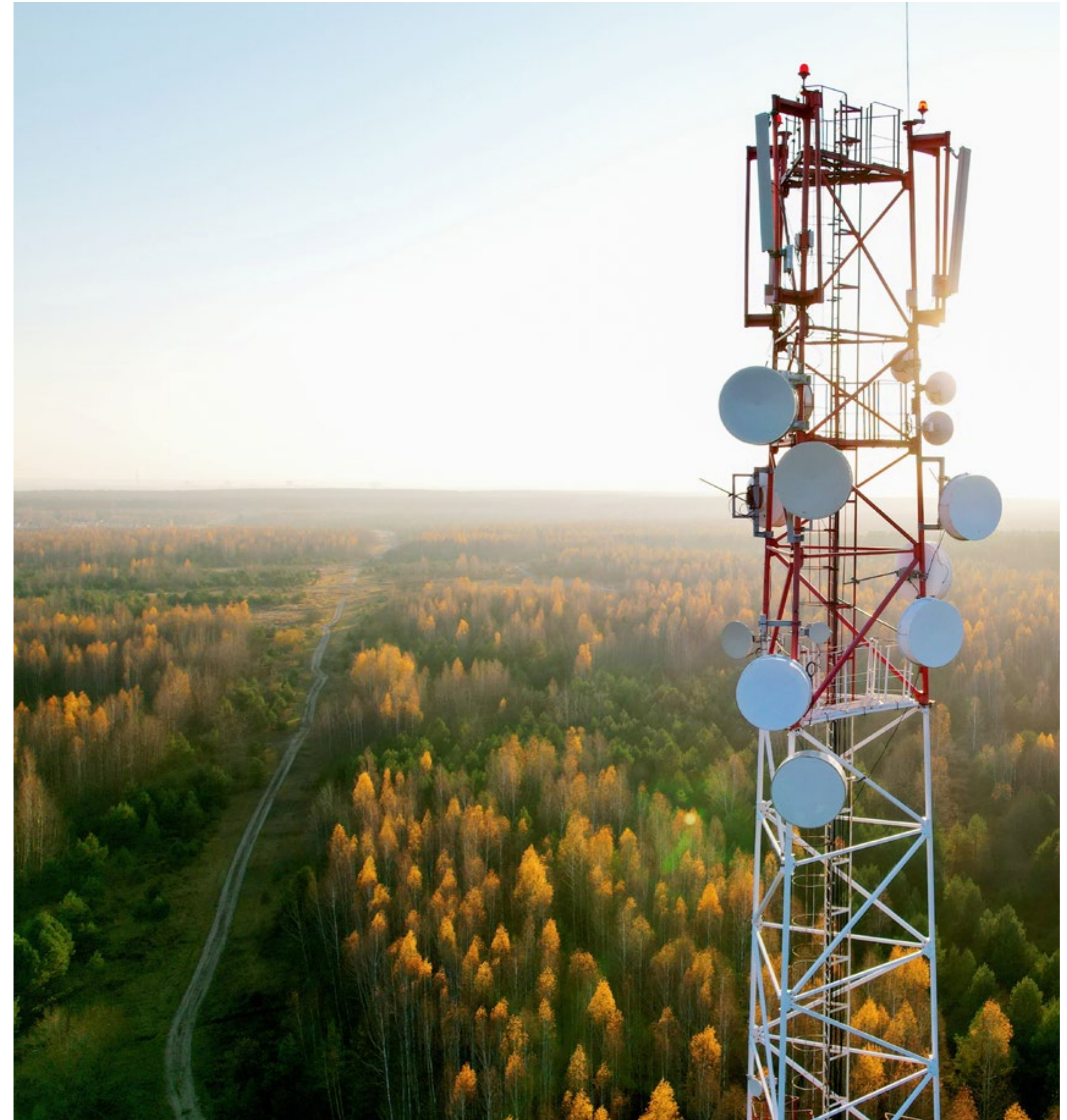
### Engagement

PIMCO has held multi-year engagements with the issuer on a variety of sustainability topics, including the company's climate strategy, balance sheet strategy, human capital commitments and best practices for ESG labeled bond issuance. Most recently, discussions have centered on social and governance issues that are material to the sector related to labor and workforce management, such as diversity, inclusion, and labor relations, as well as data privacy and security. PIMCO recommended greater transparency related to workforce breakdown and linking ESG metrics with executive compensation, as well as incorporating the company's workforce management approach in its upcoming sustainability report.

### Progress to date

The company enhanced disclosure related to their diversity and inclusion policy, including the addition of workforce breakdown by position, gender and ethnicity. The improved disclosures are in line with PIMCO recommendations for best practices.

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**CASE STUDY:  
U.S. UTILITY**

In November, the company service areas experienced the second deadliest wildfire in U.S. history

2018

2019

2020

2021

2022

2023

In December, the CPUC (California Public Utility Commission) concluded that the company is responsible for the wildfire due to failure in maintaining power line safety

- Facing billions of potential liabilities, the company filed for bankruptcy in January, and the CEO at the time stepped down.
- MSCI also issued a “Fail” status for the issuer on UN Global Compact.

The company pleaded guilty in the Camp Fire case

Following its exit from bankruptcy, the company conducted a system-wide climate vulnerability assessment and started setting climate adaptation targets.

The company appointed a new CEO

PIMCO engaged with the company on the status of safety certification and operational enhancement.

PIMCO held engagements with the company on physical risk and visited the company at one of its sites where undergrounding distribution work was being undertaken

- PIMCO made recommendations on climate vulnerability assessment. PIMCO also held discussions with MSCI regarding their methodology.
- Subsequent to PIMCO’s involvement, the company met its climate resilience targets and committed to future multi-year targets, and MSCI removed its “Fail” UN Global Compact status on the issuer.

The company issued its first sustainability bond with part of the proceeds dedicated to climate change adaptation

PIMCO continued the discussion with the issuer and made recommendations on climate adaptation as the company continued to strengthen climate resilience and rebuild its financial strength and reputation.



# THEMATIC ENGAGEMENT

## Methane emissions abatement in oil and gas production



**OIL & GAS SECTOR:  
~700 ENGAGEMENTS SINCE 2020**

### Rationale

Methane emissions can put both invested capital and the climate at risk. These emissions could be costly for U.S. producers under new regulation domestically and abroad. Methane emissions jeopardize the status of gas as a cleaner energy source than coal, which, in turn, may limit access to global gas export markets. The IEA estimates ~40% of methane emissions from fossil fuel operations could have been avoided at no net cost in 2023. The IEA further states that a 75% cut in methane from fossil fuel operations by 2030 may limit global warming to 1.5 °C. Limiting warming should reduce the effects of climate physical risks, including severe weather event impacts to infrastructure and changing weather patterns on agriculture, among others.

Source: <https://www.iea.org/reports/global-methane-tracker-2024/methane-emissions-in-a-15-0c-pathway>

### Approach

- Routine engagements with:
  - CFO/Treasurer/ESG staff
  - Subject Matter Experts
  - EPA/Regulators
- We encourage the following:
  - Set methane reduction targets
  - Improve measurement and reporting
  - Commit to the Oil & Gas Methane Partnership (OGMP)

### Outcomes

- 27 portfolio companies have committed to the highest ambition for measurement (OGMP).
- Comment letter to the EPA helped to shape measurement and reporting requirements in a way which benefits investors, issuers and environment.

### PIMCO at COP28 in Dubai

- On the stage and in meeting rooms, PIMCO’s delegation engaged on the topic of methane emission reductions for the oil and gas sector.
- Speaking with scientists, asset allocators, national oil companies, international oil companies, structuring agents and the general audience, we discussed the extent to which debt capital markets may play a role in scaling funding for methane abatement projects, while keeping within a 1.5 degree pathway.



PIMCO’S Global Head of Commodities joins National and International Oil Company CEOs on a panel during “Energy Day” at COP28 to discuss the need for methane abatement for the sector.

**The example above is presented for illustrative purposes only**, as a general example of PIMCO’s ESG research and engagement capability and is not intended to represent any specific portfolio’s performance or how a portfolio will be invested or allocated at any particular time. PIMCO’s ESG processes may yield different results than other investment managers’ and a company’s ESG rankings and factors may change over time. Source: PIMCO. All data is as of 31 December 2023, unless otherwise stated.





# Fixed Income and Sustainable Investing



## SUSTAINABLE ECONOMIC ACTIVITIES

### A forward-looking approach to capturing thematic and secular trends

Central to our view of sustainability is that investors seeking to finance improved environmental, social, and economic outcomes should employ the use of forward-looking signposts and indicators to channel capital to issuers with growing momentum toward delivering sustainable gains.

At PIMCO, we view this approach as investing in sustainable economic activities, including both the energy transition and reducing global systemic inequalities.

More specifically, we believe investors seeking to make positive – and equitable – sustainability gains may consider investments in:

1. Dedicated instruments, such as green, social, sustainability, and sustainability-linked bonds
2. Issuers that derive revenues from environmentally and socially sustainable business models and end-markets
3. Issuers with strong sustainability track records and those with ambitious and authentic targets to achieve improvement in sustainable operations
4. Issuers with linkages to emerging and frontier markets at various stages of their sustainability transition, as well as issuers in high-income countries that have achieved environmental and social leadership

The volume and complexity of regulations, standards, and methodologies that govern sustainability criteria continue to grow, improve, and deepen as issuers globally make progress. To help build consensus and work toward global targets, forward looking analysis is required to identify securities from issuers who are deepening their commitment to sustainable economic and environmental growth across asset classes. At the center of our sustainable development screening is the view that equitable, sustainable development gains must include investing in issuers with links to emerging and frontier markets at various stages of their sustainability transition, as well as issuers in high-income countries that have achieved environmental and social leadership.





## MARKET LEADER PURSUING INFLUENCE AND SUSTAINABLE CHANGE

PIMCO aims to be a leader in providing solutions to the global movement of investors seeking to align with the SDGs.



### PIMCO Chairs GISD's Outreach and Engagement Working Group; CEO Involvement

- Goal is to develop strategic policy recommendations and tools to increase global investment towards the SDGs in ways that deliver investment returns and positive environmental and social outcomes.



### PIMCO Global Head of Credit Research Co-Chairs UN Global Compact Initiative

- Aims to mobilize 1000 corporate CFOs to increase SDG-oriented investment and financing, by 2025.
- CFO Coalition interactions allow PIMCO to directly dialogue with leading global companies that are committed to SDG-aligned investment and financing.



### PIMCO invited by UNDP's Under-Secretary-General to join the SDG Impact Steering Committee in 2021

- PIMCO gains deep insights into the UN's work and activities vis-à-vis national sustainable development strategies.
- PIMCO is a member of a new working group advancing a special initiative on sovereign SDG Bonds.



### PIMCO Chief of Sustainable Development member of U.S. Network Board

- The U.S. Network Board strategizes on pathways to advance corporate sustainability within the U.S. business community, while also exchanging learnings and lessons with the UNGC's 70+ national networks.



### PIMCO has been a signatory of the PRI since 2011; actively involved several working groups:

- Co-Chair, PRI's SDG Advisory Committee.
- Member of PRI's Sovereign Debt Committee.
- Member of PRI's Human Rights Working Group and "Advance" Initiative.



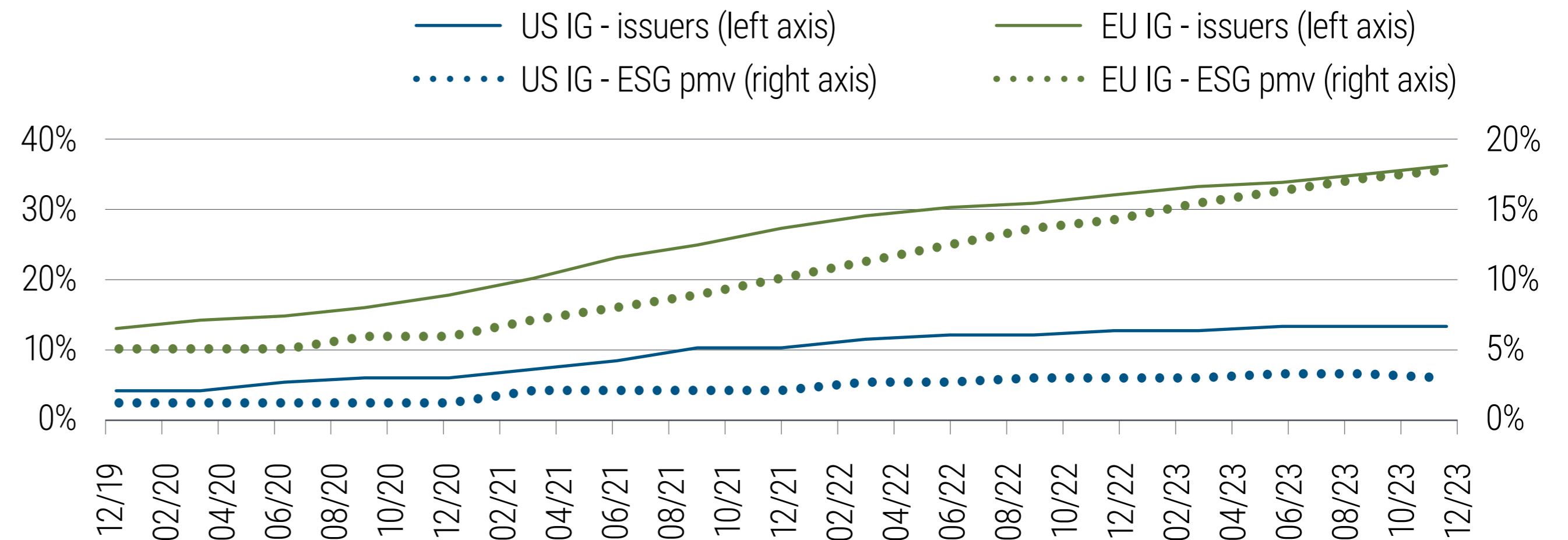
# THE ROLE OF FIXED INCOME IN SUSTAINABLE INVESTING

## Analytical capabilities and tools

PIMCO’s deep fixed income expertise applies to the analysis of GSSS labeled bonds. We track market technicals and relative value to unveil potential investment signals for our portfolios. For example, we have a proprietary relative value tracker; on a daily basis this evaluates the discount or premium (also known as “greenium”) between ESG labels and traditional bonds across corporate, sovereign, and securitized markets. We also expanded the model to capture the relative value difference across issuers based on sustainability characteristics, including their climate commitments, carbon emissions intensity, and ESG scores.

In terms of market structure, on a weekly basis, we closely monitor new issuance and secondary market trends. By doing so, we can dissect how the ESG labeled bond market is developing. For instance, while 2021 remains the year with the largest absolute volume of ESG labeled bond issuance, we complement the absolute analysis by also examining activity on a relative basis and in the context of the outstanding investment universe. As a result, despite the lower absolute issuance in 2022 and 2023, we see a continuous increase in the ESG representative share within corporate fixed income indices. Moreover, we also expect a marginally larger share of traditional bonds exiting some fixed income indices this year, versus GSSS labeled bonds, which speaks to an additional factor that potentially increases the ESG representative share within fixed income indices.

### SHARE OF ESG ISSUERS AND PERCENT MARKET VALUE (PMV) GSSS BONDS



As of 31 December 2023. Source: PIMCO, ICE indices. US IG refers to the ICE BofA US Corporate Bond Index (COA0), and EU IG refers to the ICE BofA EMU Corporate (ER00).





## CASE STUDY: SUSTAINABILITY-LINKED BONDS TRACKER

Sustainability-linked bonds (SLBs) are an exciting portion of the ESG labeled bond universe. They fund the operations of issuers that explicitly link sustainability objectives across their business with financing conditions, which in turn can have investment implications based on the potential additional compensation in the form of coupon step-ups. PIMCO has developed a proprietary SLB tracker to evaluate, on a periodic basis, those outstanding bonds that have an upcoming Key Performance Indicator (KPI) testing date on the potential of coupon step-ups and relative value across the investment universe. This tool is critical to portfolio managers, as a growing portion of outstanding SLBs approach deadlines for their sustainability KPIs, potentially triggering coupon step-ups.

However, GSSS bonds are only one part of the ESG-investible universe, as many issuers with favorable ESG profiles continue to issue traditional debt. For PIMCO, this means that we will continue to maintain a balanced focus on communication and research for conventional bond investment.

### SUSTAINABILITY-LINKED BONDS (SLBs) WITH A Q4 2023 / Q1 2024 TARGET DATE (ILLUSTRATIVE)

| Issuer                   | No. of SLBs | Sustainability Performance Targets and Target Year   |
|--------------------------|-------------|--|
| <b>Utility A</b>         | 10          | GHG Emissions Intensity (Scope 1): g/KWheq by Dec. 2023  |
| <b>Investment firm B</b> | 1           | SBTi validation: 100% validation for portfolio companies by Dec. 2023<br>Workplace Gender Diversity: 28% by Dec. 2026<br>Female Representation on Board of Portfolio Companies: 36% by Dec. 2026 |
| <b>Automotive C</b>      | 2           | GHG Emissions (Scope 1, 2): 80% absolute emissions reduction by Dec. 2025<br>GHG Emissions Intensity (Scope 1, 2): 20% reduction by Dec. 2023  |
| <b>Utility D</b>         | 1           | Water Usage Intensity: 168 m3/yr./subscriber by Dec. 2023<br>GHG Emissions Intensity (Scope 1, 2): 24 tCO2eq./M€ by Dec. 2023  |
| <b>Basic Materials E</b> | 1           | Sulphuric Oxide Emissions: 44% reduction by Dec. 2023  |
| <b>Utility F</b>         | 1           | GHG Emissions (Scope 1): 57% reduction by Dec. 2023  |
| <b>Capital goods G</b>   | 2           | GHG Emissions (Scope 1, 2): 23.7% reduction by Dec. 2023<br>GHG Emissions Intensity (Scope 3: Use of Sold Products): 23% reduction by 2023   |
| <b>Beverage H</b>        | 2           | Recycled Plastic Input Proportion: increase to 20% by December 2023  |
| <b>Real Estate I</b>     | 1           | GHG Emissions (Scope 1, 2): 20% reduction by Mar. 2024<br>Average SAP score for Energy Efficiency: at least 72 by Mar. 2024<br>Affordable Housing Construction: 4,000 by Mar. 2024               |

\* Progress is calculated as: (baseline value – recent performance data) / (baseline value – expected value in target year). For illustrative purposes only.





# Resources

**Related documents**

**Education**



The information contained herein is as of December 31, 2023 unless otherwise noted.

This report contains examples of the firm's internal ESG engagement and research capabilities. The data contained within the report may be stale and should not be relied upon as investment advice or a recommendation of any particular security, strategy or investment product. In selecting case studies, PIMCO considers multiple factors, including, but not limited to, whether the example illustrates the particular investment strategy being featured and processes applied by PIMCO to making investment decisions. Information contained herein has been obtained from sources believed to be reliable, but not guaranteed.

Environmental ("E") factors can include matters such as climate change, pollution, waste, and how an issuer protects and/or conserves natural resources. Social ("S") factors can include how an issuer manages its relationships with individuals, such as its employees, stakeholders, customers and its community. Governance ("G") factors can include how an issuer operates, such as its leadership, pay and incentive structures, internal controls, and the rights of equity and debt holders.

Sustainable Strategies are strategies with client-driven sustainability requirements. For these strategies, PIMCO actively incorporates sustainability principles (i.e. excluding issuers fundamentally misaligned with sustainability factors, evaluating issuers using proprietary and independent ESG scoring) consistent with those strategies and guidelines. Further information is available in PIMCO's Sustainable Investment Policy Statement. For information about funds that follow sustainability strategies and guidelines, please refer to the fund's prospectus for more detailed information related to its investment objectives, investment strategies, and approach to sustainable investment.

There is no assurance that the socially responsible investing strategy and techniques employed will be successful.

**All investments contain risk and may lose value.** Investing in the **bond market** is subject to risks, including market, interest rate, issuer, credit, inflation risk, and liquidity risk. The value of most bonds and bond strategies are impacted by changes in interest rates. Bonds and bond strategies with longer durations tend to be more sensitive and volatile than those with shorter durations; bond prices generally fall as interest rates rise, and low interest rate environments increase this risk. Reductions in bond counterparty capacity may contribute to decreased market liquidity and increased price volatility. Bond investments may be worth more or less than the original cost when redeemed. Investing in **foreign denominated and/or domiciled securities** may involve heightened risk due to currency fluctuations, and economic and political risks, which may be enhanced in emerging markets. **Mortgage and asset-backed securities** may be sensitive to changes in interest rates, subject to early repayment risk, and their value may fluctuate in response to the markets perception of issuer creditworthiness; while generally supported by some form of government or private guarantee there is no assurance that private guarantors will meet their obligations. **High-yield, lower-rated, securities** involve greater risk than higher-rated securities; portfolios that invest in them may be subject to greater levels of credit and liquidity risk than portfolios that do not. **Equities** may decline in value due to both real and perceived general market, economic, and industry conditions. **Derivatives** may involve certain costs and risks such as liquidity, interest rate, market, credit, management and the risk that a position could not be closed when most advantageous. Investing in derivatives could lose more than the amount invested. **Private credit** involves an investment in non-publically traded securities which may be subject to illiquidity risk. Portfolios that invest in private credit may be leveraged and may engage in speculative investment practices that increase the risk of investment **loss. Structured products** such as Collateralized Debt Obligations (CDOs), Constant Proportion Portfolio Insurance (CPPI), and Constant Proportion Debt Obligations (CPDOs) are complex instruments, typically involving a high degree of risk and intended for qualified investors only. Use of these instruments may involve derivative instruments that could lose more than the principal amount invested. The market value may also be affected by changes in economic, financial, and political environment (including, but not limited to spot and forward interest and exchange rates), maturity, market, and the credit quality of any issuer. **Diversification** does not ensure against loss. **Management risk** is the risk that the investment techniques and risk analyses applied by an investment manager will not produce the desired results, and that certain policies or developments may affect the investment techniques available to the manager in connection with managing the strategy.

**ESG investing is qualitative and subjective by nature**, and there is no guarantee that the factors utilized by PIMCO or any judgment exercised by PIMCO will reflect the opinions of any particular investor, and the factors utilized by PIMCO may differ from the factors that any particular investor considers relevant in evaluating an issuer's ESG practices. In evaluating an issuer, PIMCO is dependent upon information and data obtained through voluntary or third-party reporting that may be incomplete, inaccurate or unavailable, or present conflicting information and data with respect to an issuer, which in each case could cause PIMCO to incorrectly assess an issuer's business practices with respect to its ESG practices. Socially responsible norms differ by region, and an issuer's ESG practices or PIMCO's assessment of an issuer's ESG practices may change over time. There is no standardized industry definition or certification for certain ESG categories, for example "green bonds"; as such, the inclusion of securities in these statistics involves PIMCO's subjectivity and discretion. There is no assurance that the ESG investing strategy or techniques employed will be successful. Past performance is not a guarantee or reliable indicator of future results.

PIMCO's credit research analysts assess the Environmental, Social, and Governance ("ESG") profile of corporate, municipal, and sovereign issuers relative to peer issuers with a goal of separating leaders from laggards. Using industry specific ESG frameworks, analysts review issuers' ESG performance based on information available in public filings, recent ESG news and controversies, as well as through engagement with company management teams. Analysts assign three separate numerical scores from 1 to 5 (with 5 being the highest) to their environmental, social and governance-based business practices. The score in each category is related to an issuer's rank relative to industry peers, and the relative weights of the E, S, and G scores in the composite score vary based on industries, as each industry is assigned a different factor weight. For example, the environmental category has the greatest weight for issuers in extractive industries (e.g., oil, gas, and mining), the social category has the greatest weight for pharmaceutical issuers, and the governance category has the greatest weight for financial issuers. Analysts also include a forward-looking ESG trend assessment, which recognizes companies whose ESG performance is significantly improving or deteriorating. These factors are combined to create a proprietary composite ESG issuer score.

PIMCO's credit research analysts also assess green, social, sustainability, and sustainability-linked bonds (collectively "ESG bonds") at an issuance level, including prior to and after issuance. Utilizing PIMCO's proprietary ESG Bond Framework assessment, credit analysts evaluate such instruments starting with the strategic fit, assessing the alignment of the issuers' ESG-related strategies with the bond's objectives and use of proceeds, key performance indicators (KPIs), and the evidence of significant positive impact of the activities compared to "business as usual". We continuously screen for "red flags" and controversies through this process and assess the degree of reporting by the issuer to analyze misalignment with key market standards, such as the Green Bond Principles. These factors result in a proprietary ESG bond score ranging from 1 to 5 (with 5 being the highest). PIMCO does not score all ESG bonds. Unassessed ESG bonds receive a default score of 3. ESG bonds holdings in PIMCO portfolios are then assigned a score that combines the issuer's ESG score and the ESG bond score. Specifically, an ESG bond holding receives the ESG issuer score plus an adjustment ranging from 0 up to 1.0 point, depending on the type of ESG bond (use of proceeds or sustainability-linked) and the quality of the ESG bond according to PIMCO's proprietary assessment. Holdings of securitized ESG bond issuances (asset-backed securities, collateralized loan obligations, collateralized mortgage obligations, collateralized debt obligations, and mortgage pass through securities) receive the ESG issuer score and are not adjusted.

We use MSCI and other third-party ratings for reference but make our own assessment based on our own, independent analysis of the industry and relevant ESG factors. PIMCO's resulting assessments are proprietary and distinct from those provided by ESG rating providers. Inclusion of a proprietary PIMCO ESG rating creates a conflict of interest because PIMCO and its affiliates benefit when PIMCO assigns a particular security a high score or assigns a benchmark index or security a low score.

**Weighted Average Carbon Intensity** is intended to reflect how an issuer's greenhouse gas (GHG) emissions (expressed as tonnes of CO2 equivalent (tCO2e)) compares to its overall revenues. The carbon intensity of the securities portfolio is defined as the weighted average carbon emissions (Scope 1 + Scope 2 emissions tCO2e)/Revenues in USD of corporate bond holdings only in the portfolio (for issuers with available data). Absolute carbon emission analysis takes the total emission per issuer into consideration. PIMCO applies emissions values of the parent to subsidiaries where MSCI data is not available. As defined by the U.S. Environmental Protection Agency (EPA), Scope 1 emissions are direct GHG emissions that occur from sources owned or controlled by a company (for example, company vehicles and facilities), and Scope 2 emissions are indirect GHG emissions from the purchase of electricity, steam, heating or cooling. Data used by PIMCO to calculate carbon intensity is (i) sourced from MSCI based on data reported by companies, a company specific model, or an industry specific model (MSCI's methodology is available here: <https://www.msci.com/index-carbon-footprint-metrics>), or (ii) estimated by PIMCO for "use of proceeds" bonds not covered by MSCI (green and sustainability bonds). PIMCO's estimates generally apply absolute emissions of the issuer's parent company/companies to its subsidiaries.



**Carbon Discounting Methodology:** In its calculation of carbon metrics for ESG labeled bonds, PIMCO applies a proprietary carbon discounting methodology which generally can include the consideration of: i) publicly available information disclosed by an issuer/ company, ii) third-party data sources, and/ or iii) internal proprietary assessments, as applicable. Green bonds and sustainability bonds issued by select electric utility companies adjust a company's carbon metrics by subtracting at a proportion equal to the contribution of eligible renewable energy projects to the proceeds allocation (i.e. the portion allocated to renewable energy projects are treated as having zero carbon emissions and, therefore, zero carbon intensity). For green or sustainability bonds where proceeds are allocated to eligible green or social projects other than renewable energy or are issued by companies in non-electric utility sectors, carbon metrics are directly passed through from the company level to these bonds with no adjustments. To the extent possible, PIMCO utilizes an issuer's public disclosure, such as post-issuance allocation report, when calculating the allocation of proceeds to renewable energy projects. In some cases, PIMCO may leverage third-party data to source such information. In the case of absent or incomplete disclosure, PIMCO uses several assumptions to estimate the allocation of proceeds to renewable energy projects for the respective utility sector, such as the potential allocation split across eligible green projects communicated by the issuer or the average allocation to renewable energy for the industry. PIMCO climate and carbon metrics and methodologies may change over time and may not be comparable to prior period metrics reported. The firm's proprietary methodologies are not verified by a third-party and may vary from other independent carbon methodologies.

**Carbon Footprint** refers to the calculation of the total GHG emissions (scope 1 and scope 2) of corporates in the portfolio normalized by the bond exposure of corporates in the portfolio and expressed as a carbon dioxide equivalent. Statements concerning financial market trends or portfolio strategies are based on current market conditions, which will fluctuate. There is no guarantee that these investment strategies will work under all market conditions or are appropriate for all investors and each investor should evaluate their ability to invest for the long term, especially during periods of downturn in the market. Outlook and strategies are subject to change without notice. Investors should consult their investment professional prior to making an investment decision.

The issuers referenced are examples of issuers PIMCO considers to be well known and that may fall into the stated sectors. References to specific issuers are not intended and should not be interpreted as recommendations to purchase, sell, or hold securities of those issuers. PIMCO products and strategies may or may not include the securities of the issuers referenced and, if such securities are included, no representation is being made that such securities will continue to be included.

It is not possible to invest directly in an unmanaged index.

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