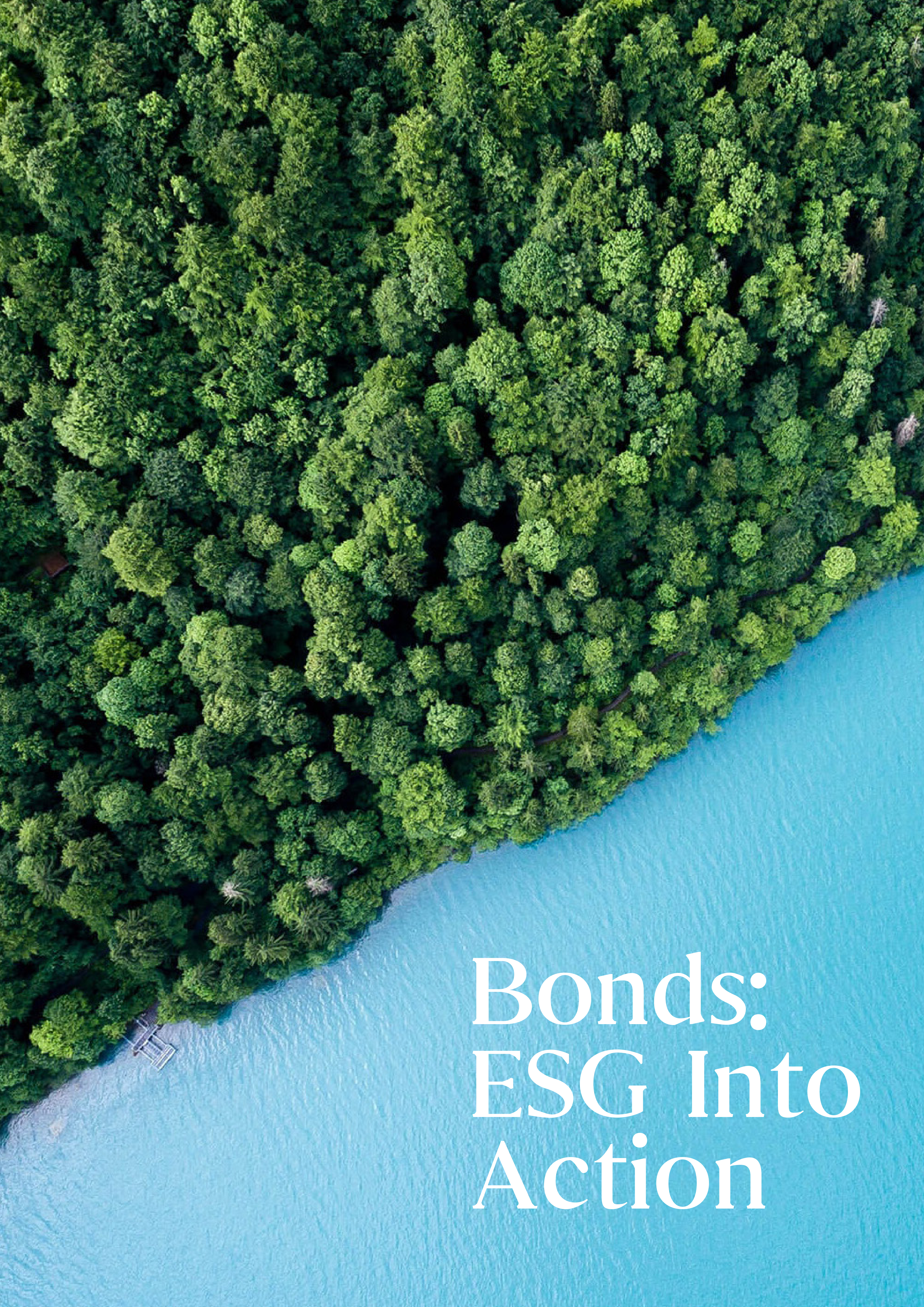
PIMCO

ESG INVESTING REPORT

Bonds: ESG Into Action

A company of Allianz



Bonds: ESG Into Action

Table of Contents

ESG: Why and how we drive change in bond markets

Emmanuel Roman
Managing Director
Chief Executive Officer

One of 30 CEOs invited to join the UN's Global Investors for Sustainable Development (GISD) Alliance to accelerate long-term investment into sustainable development.

Scott Mather
Managing Director
Chief Investment Officer, U.S. Core Strategies, Responsible for ESG Strategies

*Named the 2019 Investment Leader of the Year by Environmental Finance for outstanding leadership in advancing sustainable investing in bond markets.**

Founding member of the UN Global Compact CFO Taskforce for the Sustainable Development Goals

Like many investors all over the world, we are deeply concerned about the humanitarian and economic impact of the COVID-19 global health crisis – a pandemic that is disproportionately affecting the poorest and most vulnerable populations globally. Policymakers, in addition to trying to save as many lives as possible, are grappling with plummeting business and consumer activity amid near-term fears and longer-term uncertainties, and they are responding with dramatic monetary and fiscal actions to bolster industries, businesses, and individuals. In time, we expect global growth will gradually recover, but COVID-19 will leave long-term scars on many communities. And the pandemic emerged just as the world had endured a year of severe natural disasters and rising social fragmentation.

As one of the world's leading fixed income managers, we at PIMCO are focusing on these disruptive forces not only out of basic human compassion but because we believe that in order to maintain a robust economy – and therefore generate jobs and opportunity – growth has to be sustainable. If growth is pursued without regard for material environmental, social, and governance (ESG) risks, we believe the health of people and our planet may suffer; natural resources will become scarcer and out of reach for many; social unrest will become more disruptive, leading to extreme political outcomes; and a lack of governance principles may preserve abusive, inefficient, and unequal organizations or societies. As citizens of this world and as a leading capital allocator, we must engage in our area of expertise, bond markets, to help drive change. We believe the size of bond markets and recurring nature of debt issuance make fixed income investors a meaningful force in driving sustainable change.

With over $1.9 trillion of client assets under management, PIMCO is in a good position to engage with hundreds of companies and governments around the world. As a leading investor, we can help steer those companies and public offices toward a more sustainable growth model – for the benefit of all.

We believe that collaborating with and allocating capital toward issuers willing to improve the sustainability of their practices can generate a greater impact than simply excluding issuers with poor ESG metrics. Our approach seeks to be more inclusive and active, and we are conscious that change does not always come easily or smoothly. This is why, for us, an active, hands-on engagement program is key to driving change.

But we need more investors on board – more asset managers, more issuers, and more asset owners to push together in the same direction in order to bring cohesive change sooner. This report shares some of our engagement stories from the past year. We hope that you will be inspired by them and join us in bringing ESG past the rhetoric and into action.

Let's make it happen.

* The Environmental Finance's Sustainable Investment Awards seek to recognize and highlight the work of asset managers and key players incorporating ESG across all asset classes and winners are selected by an advisory panel consisting of industry experts chosen for their knowledge, objectivity and credibility along with the Environmental Finance editorial team, whom will review the submitted entry material. Judges score each entry individually and any conflict of interest will be removed, the judge's score will be confidential.

PIMCO, an ESG pioneer in fixed income

As a premier, active fixed income manager, for decades PIMCO has sought to evaluate every risk and opportunity – both financial and non-financial – for the investments we make on behalf of our clients. But as active investors we know it is not enough to rely on yesterday's performance or past credentials. We must continue to innovate and evolve to deliver for clients each day.

While our industry is only just beginning to harness the power of global capital markets as a driving force toward a more sustainable future, already over the past year we have seen a dramatic shift in activity: Sustainable bond issuance is rising, client questioning of ESG practices is only increasing and, most importantly, responsible investing is becoming more mainstream. At PIMCO, we launched our first dedicated climate bond strategy last year and are committed to launching new sustainably themed and ESG-focused strategies to meet increasing client demand.

In brief, and before we dive into our engagement stories,

This is who we are:

PIMCO AT A GLANCE

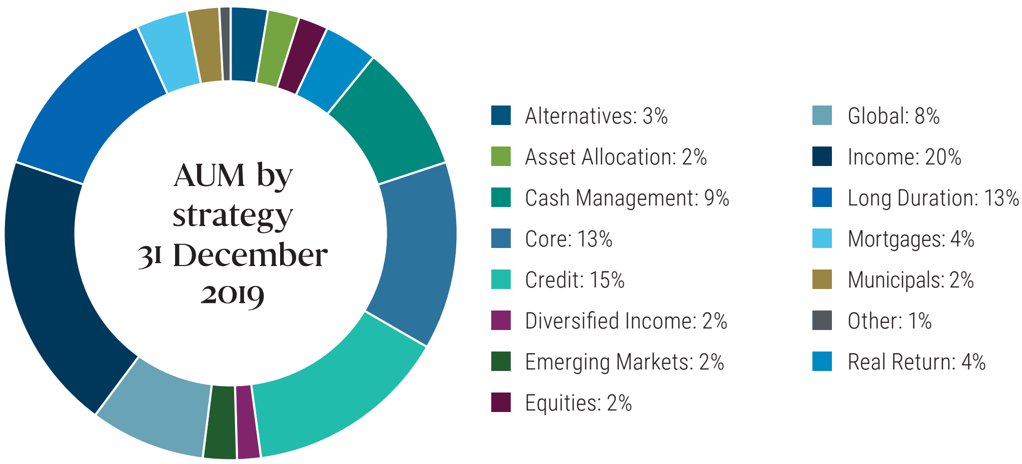
PIMCO is one of the world's premier fixed income investment managers. With our launch in 1971 in Newport Beach, California, PIMCO introduced investors to a total return approach to fixed income investing. In the nearly 50 years since, we have worked relentlessly to help millions of investors pursue their objectives – regardless of shifting market conditions. As active investors, our goal is not just to find opportunities, but to create them. To this end, we remain firmly committed to the pursuit of our mission: delivering superior investment returns, solutions and service to our clients. In 2017, we launched a global ESG Investment platform to help clients achieve their investment goals, while influencing positive change. The firm's size and long-lasting relationships with issuers have helped us be a leader in ESG engagement for fixed income.

“We launched our first dedicated climate bond strategy last year and are committed to launching new sustainably themed and ESG-focused strategies to meet increasing client demand.”

ASSETS UNDER MANAGEMENT (AUM) 31 DECEMBER 2019*

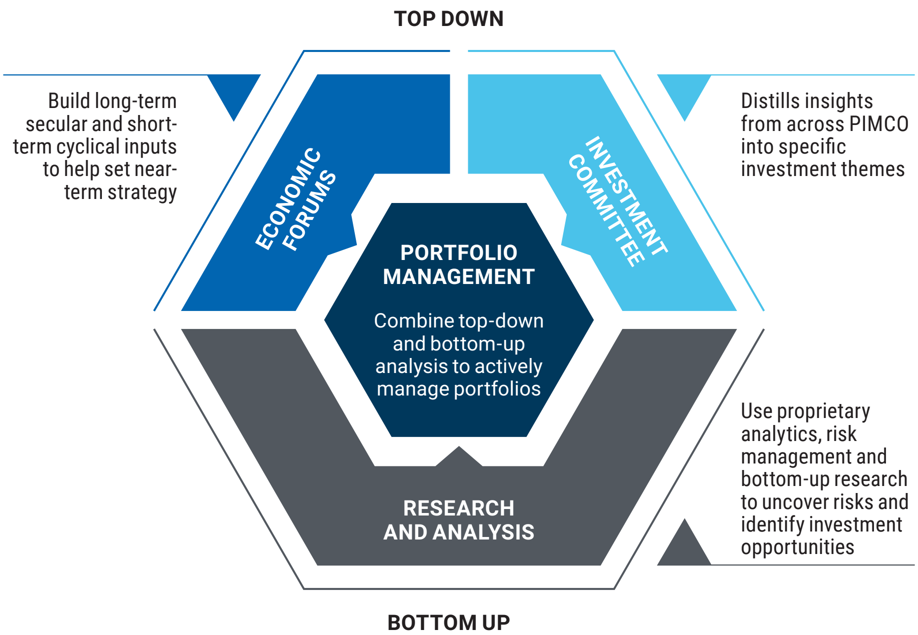
PIMCO is responsible for managing **$1.91 trillion** entrusted to us by:

- Central banks
- Sovereign wealth funds
- Public and private pension funds
- Financial and nonfinancial corporations
- Foundations and endowments
- Financial advisors
- Family offices
- Individual investors



OUR INVESTMENT PROCESS

Tested in virtually every market environment, our investment process helps our clients manage risks and pursue returns over meaningful time periods.



* This report is intended to cover 2019. Assets above include $14.6 billion in assets of clients contracted with Gurtin Fixed Income Management, LLC ("Gurtin'), an affiliate and wholly-owned subsidiary of PIMCO. Assets reflect those managed on behalf of third-party clients and affiliated assets. Most recent publically disclosed assets at time of publishing is $1.78 trillion including $15.3 billion in Gurtin assets as of 31 March 2020.

And this is why we build ESG portfolios:

1. **Growth must be sustainable:** For financial markets to prosper over the supersecular horizon, growth cannot come at the cost of society.

2. **It is our fiduciary duty to manage risk:** The long-term challenge of decarbonizing the economy certainly comes with risks, but it also offers opportunities for active investors. We recognize that ESG factors are increasingly essential inputs when evaluating global economies, markets, industries and business models. Material ESG factors are important considerations when evaluating long-term investment opportunities and risks for all asset classes, public and private markets.

3. **Bondholders have a voice to drive change:** We believe fixed income is an ideal asset class to drive meaningful ESG change. The global bond market is almost double the size of the equity market ($114 trillion vs. $69 trillion*), and unlike equity securities which are in perpetuity, bonds mature and companies need to refinance. By engaging with companies when they need to fundraise, investors can help push for sustainability commitments and accelerate change.

4. **The investment universe is evolving:** The economic disruption from poorly managed ESG risks is already being felt and the winners and losers of the transition to a net zero carbon economy are emerging. Ratings agencies increasingly report on bond issuers' ESG risks in a way that affects their cost of capital. This is met by increasing demand, as more and more consumers insist on products and brands that are more sustainable.

5. **Clients care about the urgency of climate change:** If emissions are not reduced by 2030, it may be too late to avoid the worst environmental effects of climate change according to United Nations Environment Programme (UNEP). As United Nations (UN) Secretary-General António Guterres said, "The climate emergency is a race we are losing, but it is a race we can win." We have a target; we have the resources; we need to commit to action.

Fixed income markets play a critical role in the ability to finance a more sustainable future – that's why we are investing in ESG.

* Source: Haver Analytics as of 30 September 2019

PEOPLE**

2800+

Employees located in key financial centers around the globe

260+

Portfolio Managers with an average of 16 years of experience

155+

Analysts and Risk Managers perform rigorous, independent research and analysis

17**

Locations Headquartered in Newport Beach, CA, with global offices throughout the Americas, Europe and Asia, including eight trading desks covering every time zone.

** Employee data excludes Gurtin fixed income management, LLC, except for total employees, which includes employees of Gurtin fixed income management, LLC, which PIMCO acquired in January 2019. 17 Global offices include offices from the Gurtin acquisition in January 2019.

PIMCO's View

We see the opportunity for bonds to drive meaningful change outside our window and across the globe.

NEWPORT BEACH, CALIFORNIA

For illustrative purposes only. Not a recommendation. Not intended to represent real bonds or projects.

How we bring ESG into action: 6 tools for ESG portfolios

Bondholders have six major tools to drive meaningful ESG change, but our distinct resource across all six is engagement: a voluntary agreement around a common goal that benefits all parties involved. In this section we discuss several specific examples of meaningful engagement.

We aim to have a best-in-class engagement program within fixed income. By investing in corporates and sovereigns willing to improve their ESG practices, we believe we can drive greater change than through exclusions alone. Our goal is not just to find the best opportunities in the market, but to create them for investors by engaging with issuers. Of course, PIMCO does not represent that our engagement was the sole factor driving the positive changes made by these companies, but we do believe that our engagement and our sizable active holdings have influence on the scope or timing of the commitments made by issuers as well as the disclosures that those issuers will report to investors.

“By investing in corporates and sovereigns willing to improve their ESG practices, we believe we can drive greater change than through exclusions alone.”

1

Engaging through new bond issuance

We encourage corporate and sovereign issuers to advance their efforts by issuing a green bond or even a bond linked to the United Nations' (UN) Sustainable Development Goals (SDGs). Here are some examples:

GLOBAL FINANCIAL INSTITUTION (STANDARD CHARTERED)

- **Background:** This Emerging Markets (EM)-focused bank approached PIMCO to discuss its nascent sustainable bond framework and planned CO_2 reductions in the lending book.
- **Engagement:** PIMCO provided guidance on setting sustainability targets and best practices for aligning Sustainability Bond use-of-proceeds with specific SDGs indicators and related disclosures.
- **Outcome:** In 2019, the company issued an SDG-aligned Sustainability Bond to fund lending to underserved populations in emerging markets via a mix of microfinance loans and project financing with a focus on Affordable and Clean Energy (SDG 7), Decent Work and Economic Growth (SDG 8), and Industry, Innovation, and Infrastructure (SDG 9).

U.S. HOSPITALITY REAL ESTATE INVESTMENT TRUST (REIT) (HOST HOTELS & RESORTS)

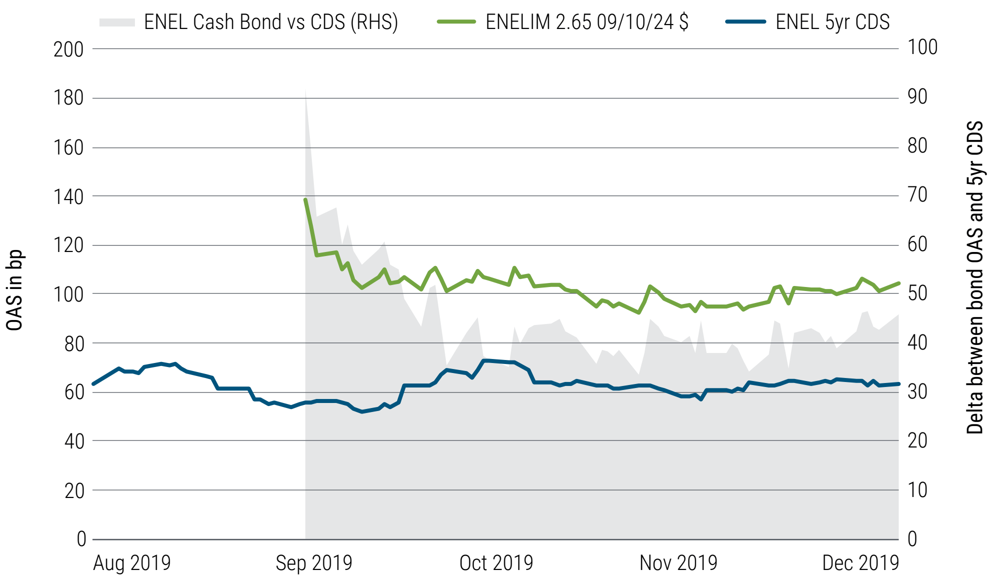
- **Background:** This issuer has delivered on its carbon intensity reduction target set for 2020 and has set a more ambitious renewable energy share target for 2025. Over 90% of its properties in the U.S. are covered by a green building environmental label, and it has made progress across other areas such as water or waste.
- **Engagement:** PIMCO encouraged further scenario analysis on physical and transition risks given their exposure to sea level rise. We also shared our expectations on green bond eligibility criteria (e.g., that proceeds should be limited to the top certification levels such as Leadership in Energy and Environmental Design (LEED) Gold and Platinum), disclosure, and a science-based climate target covering emissions across their value chain.
- **Outcome:** In 2019, the REIT issued an inaugural green bond devoted to LEED certified buildings. This was one of the first green bonds in the lodging REIT sector. The issuer acknowledged our expectations and is now considering integrating additional environmental data (e.g., context-based water goals) into their future green bond and broader sustainability disclosure, notably as part of their new 2025 environmental targets announced in December 2019.

The above case studies are presented for illustrative purposes only, as a general example of PIMCO's ESG research and engagement capability and are 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. All data is as of 31 December 2019, unless otherwise stated.

EUROPEAN UTILITY (ENEL)

- **Background:** Energy transition leader has demonstrated a clear focus on renewables and support of the science-based 2030 CO_2 intensity target of 125g CO_2/kWh by 2030 vs 369g in 2018.
- **Engagement:** PIMCO engaged with this company through the UN Global Compact (UNGC) for several years on their commitment to renewables and more recently through their participation in the UNGC symposium on SDG bonds – hosted at PIMCO's Newport Beach offices to encourage companies to issue SDG-linked bonds.
- **Outcome:** At the end of 2019, the company issued a 5-year "General Purpose SDG-linked Bond" in U.S. dollars (followed, later in the year, by a multi-tranche bond of the same type in Euros) – a first of its kind instrument where proceeds are used for general corporate purposes and future coupon payments are linked to their renewable growth strategy (25 basis point (bps) coupon step-up if targets are not achieved).

Figure 1: Enel option-adjusted spread (OAS) and delta between bond OAS and 5 year credit default swap (CDS)



Source: PIMCO. As of 31 December 2019.

PIMCO engaged with this company through the UN Global Compact (UNGC) for several years on their commitment to renewables

2

Encouraging positive impact

Some bond issuers are already committed to driving positive environmental and social impact in their businesses, and we want to encourage them to continue advancing their efforts. Here are some examples:

U.K. ELECTRIC AND GAS UTILITY (NATIONAL GRID)

- **Background:** We believe this company has acted as a leader in environmental risk management and climate commitments among regulated utilities. Their core activities of energy transmission and distribution play a central role in enabling the energy transition.
- **Engagement:** PIMCO engaged with senior leaders on multiple occasions, expressing the importance of setting an emission reduction policy to lead their peer group and to enhance disclosures based on EM standards.
- **Outcome:** The company subsequently announced a climate target of net zero direct emissions by 2050. This goal ratchets up earlier commitments by the company to cut direct emissions by 80% in 2050 (vs. 1990) and by 70% in 2030. With reference to leading sustainability disclosure frameworks (including SASB - Sustainability Accounting Standards Board and GRI - Global Reporting Initiative) and the matters identified as material to the group, National Grid intends to publish further disclosures that maximize relevance, understandability, and market comparability in 2020.

U.S. AGENCY MORTGAGE-BACKED SECURITIES (FANNIE MAE / FREDDIE MAC)

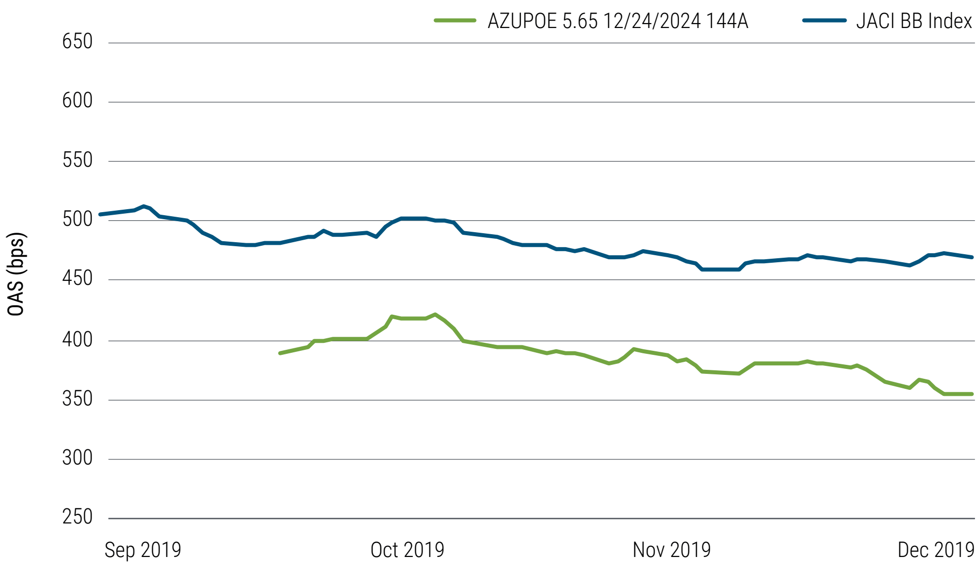
- **Background:** U.S. government-sponsored enterprises (GSEs) support homeownership by insuring pools of mortgages that are securitized for investors. Historically, the agencies have not incorporated Green/Sustainability factors in their underwriting or investor disclosures.
- **Engagement:** PIMCO engaged with the GSEs to encourage the development of expanded ESG disclosures on mortgage-backed securities (MBS) and commercial MBS (CMBS), including solar, energy efficiency, water consumption, etc., to enable better evaluation of pools by ESG investors. PIMCO also encouraged the issuance of specialized green pools with favorable environmental and social characteristics.
- **Outcome:** Freddie Mac announced that Delegated Underwriting and Servicing (DUS) loan pools will have increased Green disclosure, including ENERGY STAR® Score, Source Energy Use Intensity, EPA Water Score, Water Use Intensity, and Energy Score Date and Fannie Mae is exploring expanded disclosures for RMBS pools. PIMCO continues to engage with the agencies for improved Green MBS products and disclosures.

The above case studies are presented for illustrative purposes only, as a general example of PIMCO's ESG research and engagement capability and are 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. All data is as of 31 December 2019, unless otherwise stated.

INDIAN RENEWABLE ENERGY COMPANY (AZURE POWER SOLAR ENERGY)

- **Background:** Indian solar energy producer with approximately 3.4 gigawatts (GW) in solar capacity considered financing project level debt with an additional green bond.
- **Engagement:** PIMCO engaged with the company prior to and after issuance to get a detailed breakdown of the use of proceeds, carbon emissions avoided and the carbon intensity of activities firmwide. We also sought evidence that the issuer had a broader sustainability strategy to mitigate risks related to environmental impact, biodiversity, business ethics, human capital, corporate governance and relationships with communities.
- **Outcome:** The company provided satisfactory responses to our questions, demonstrating strong momentum in terms of integration of sustainability in its business strategy and corporate governance. We plan to continue engaging with the issuer following the publication of its sustainability report and green bond reporting.

Figure 2: Azure Power Solar Energy (AZUOPOE) option-adjusted spread v J.P. Morgan Asia Credit Index (JACI) BB



Source: PIMCO. As of 31 December 2019.

PIMCO engaged with the company prior to and after issuance to get a detailed breakdown of the use of proceeds, carbon emissions avoided and the carbon intensity of activities firmwide

3

Addressing material ESG risks

As long-term investors, we believe our history in fixed income enables us to partner with bond issuers to address long-term risks such as climate readiness and sustainability. We believe we have partnered to make a difference in these cases:

MEAT PRODUCER (MINERVA)

- **Background:** The Amazon fires in 2019 coupled with Brazil's federal policy backdrop means heightened scrutiny and potentially higher ESG risks for issuers exposed to soft commodities sourcing, notably soy and cattle, that can be associated with deforestation in the Amazon basin.
- **Engagement:** We asked the issuer to clarify its stance on deforestation and sustainable sourcing policies and encouraged the issuer to commit to ambitious public net deforestation and sustainable sourcing practices. In particular, we encouraged certification, traceability systems, and a resource footprint.
- **Outcome:** The company shared detailed information on its sustainability commitments, third party audits of suppliers, certification via geospatial verifications, and traceability. We followed up to share our expectations on climate change beyond Carbon Disclosure Project (CDP) disclosures, including the importance of setting a carbon emission reduction target covering its entire value chain.

MEDIA COMPANY (IHEART MEDIA INC.)

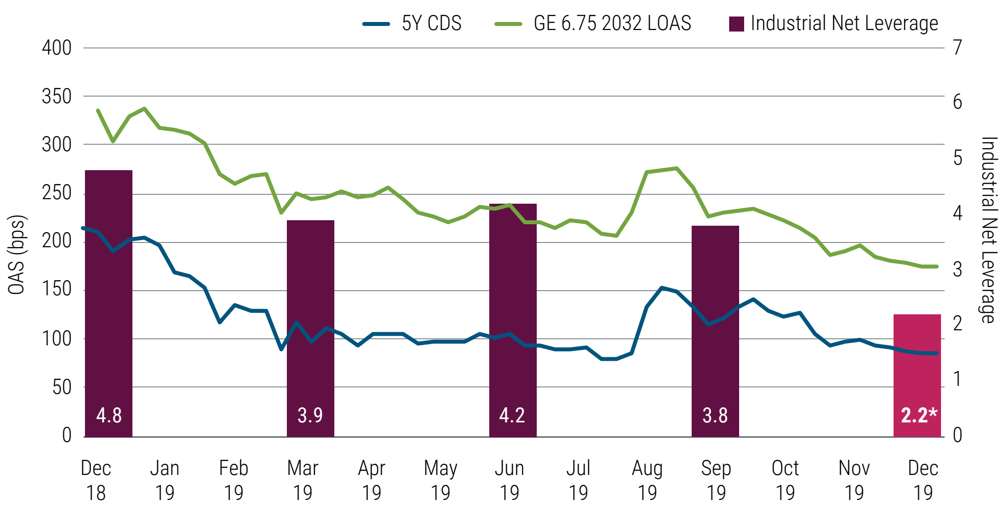
- **Background:** The company's broadcast listeners are a diverse group of people broadly matching U.S. demographics: approximately 40% being racial or ethnic minorities and 50%, women. We believe diversity of perspective is a key driver of audience growth and retention in media.
- **Engagement:** Our engagement focused on addressing social risks by encouraging the company to set a purpose statement for employees and executives to align with the demographics of its listeners, and to publish an annual impact report for all stakeholders.
- **Outcome:** The company published an updated purpose statement and social policies covering diversity, data security and privacy, community outreach, and disaster response. Additionally, the company is publishing an annual impact report to quantify the impact of local campaigns on social issues.

The above case studies are presented for illustrative purposes only, as a general example of PIMCO's ESG research and engagement capability and are 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. All data is as of 31 December 2019, unless otherwise stated.

INDUSTRIAL CONGLOMERATE (GENERAL ELECTRIC)

- **Background:** This large industrial has faced regulatory headwinds recently relating to accounting practices (revenue recognition, insurance reserving), as well as cash flow headwinds related to a leveraged balance sheet. The company has historically provided limited/incomplete disclosures to investors.
- **Engagement:** PIMCO engaged actively with senior executives to emphasize the need for asset sales, debt repayment and substantially improved disclosures. PIMCO also encouraged the issuer to support science-based targets and to set ambitious energy efficiency and carbon reduction targets.
- **Outcome:** The company completed more than $20 billion of deleveraging actions in 2019, sold a majority stake in its energy and oilfield services subsidiary, and substantially improved its disclosures, albeit with additional progress to be done.

Figure 3: General Electric (GE) deleveraging from 4.8x to 2.2x



* 2.2x Pro-forma for over $20bn in debt reduction in 2020, including the sale of BioPharma

Source: PIMCO. As of 31 December 2019.

PIMCO also encouraged the issuer to support science-based targets and to set ambitious energy efficiency and carbon reduction targets

4

Engaging with sovereign governments

When evaluating a sovereign issuer, we believe in the value of direct engagement with government officials and local leaders to shape our views. Our engagements include detailed discussions on credit and macroeconomic topics as well as ESG factors, such as social dynamics and environmental policies. In addition, we may also meet with local business leaders, non-governmental organizations and members of civil society to get a holistic sense of developments in the country. These are some of our examples:

SOUTH AMERICAN SOVEREIGN NATION (COLOMBIA)

- **Background:** This nation has a long history of political tension between the government and rebel forces, and while significant social tensions persist, the government has been making progress on a resolution with the rebels as well as implementing a set of ambitious environmental commitments.
- **Engagement:** In our dialogues with the government, we have done our part to encourage them along their path to environmental sustainability. We have shared that as foreign investors, it is important to see progress on their stated sustainability goals and to thoughtfully balance the trade-offs between conservation policy and concurrent pushes for greater economic development that relies on extractive industries.
- **Outcome:** While there is opportunity for improvement on a number key ESG factors, we are encouraged by the meaningful outcomes of their environmental sustainability agenda – they have emissions reduction and zero deforestation goals for 2030 and a carbon tax that has been in place since 2017, driving innovation in carbon pricing.

SOUTH ASIAN SOVEREIGN NATION

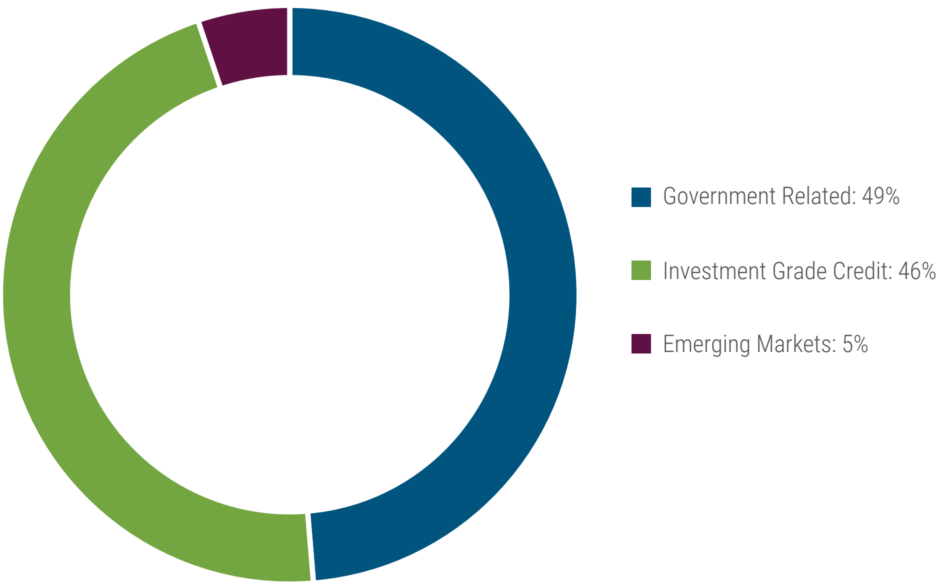
- **Background:** In late 2018, this nation saw political disruption as leaders openly clashed causing what many local and international observers called a constitutional crisis. As is the case with most sovereign issuers, governance is the most relevant ESG factor in our evaluation and engagement.
- **Engagement:** Our discussions with the government and local stakeholders emphasized the need for fiscal conservatism given the nation's high debt burden and vulnerable external indicators.
- **Outcome:** Eventually the Supreme Court stepped in to restore the previous government, but political instability risks persist and we remain concerned about the growing political fragmentation and increasing uncertainty.

The above case studies are presented for illustrative purposes only, as a general example of PIMCO's ESG research and engagement capability and are 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. All data is as of 31 December 2019, unless otherwise stated.

CENTRAL AFRICAN SOVEREIGN NATION

- **Background:** This nation demonstrates poor environmental practices and little readiness to leverage private and public investment to improve. There are low levels of labor market efficiency and productivity, as well as low standards of government transparency and corruption control.
- **Engagement:** The government has shown limited willingness to engage with investors to improve disclosure on ESG-related concerns as well as transparency, which is a prerequisite to meaningful engagement.
- **Outcome:** The limited willingness to engage with investors, corruption allegations involving government officials, and high external debt all indicate significant left-tail risks that concern us as sovereign investors.

Figure 4: The importance of a sovereign ESG engagement program: Government related securities are nearly half the market value of the Bloomberg Barclays MSCI Green Bond Index, USD Hedged



As of 31 December 2019. Source: Bloomberg.

Government related securities are nearly half the market value of the Bloomberg Barclays MSCI Green Bond Index, USD Hedged

5

Establishing climate targets

As climate action becomes a mainstream talking point for corporate and sovereign issuers, it is the job of active managers to identify those with innovative approaches to sustainability. Here are some examples:

GLOBAL TELECOMMUNICATIONS COMPANY (VERIZON)

- **Background:** This issuer has demonstrated commitment to specific climate targets, such as lowering its carbon intensity by 50% by 2025 and increasing energy needs met by renewable energy to 50% by 2025. They also issued one of the first green bonds in the telecommunications industry.
- **Engagement:** PIMCO engaged with the company in 2019 on its climate strategy to enhance its environmental credentials in line with advanced practices and green bond reporting (e.g., plans to disclose carbon emissions on a lifecycle basis).
- **Outcome:** The company committed to publish its first green bond report in early 2020, to setting a science-based target (Scope 1, 2, 3 emissions*) by September 2021, and to be carbon neutral (Scope 1 & 2) by 2035.

FOREST PRODUCT AND PAPER COMPANY (SUZANO)

- **Background:** The company produces papers from forest materials, so the careful management of natural resources is core to its business. Environmental risks such as deforestation present clear threats to the company's sustainability profile.
- **Engagement:** PIMCO engaged to understand the details of its green bond allocation, carbon emissions disclosure and strategy across the value chain. We also emphasized the importance of sustainable sourcing and strong public commitments to curb deforestation and promote conservation.
- **Outcome:** The issuer is considering setting a science-based carbon emission reduction target, reporting according to the Task Force on Climate-related Financial Disclosures (TCFD) recommendations and the suitability of the High Carbon Stock (HCS) Approach, a tool to assist companies with their efforts to remove deforestation from their supply chain.

PIMCO engaged with the company in 2019 on its climate strategy to enhance its environmental credentials in line with advanced practices and green bond reporting

* The Greenhouse Gas Protocol defines Scope 3 emissions as all indirect emissions in the value chain of a company not captured in Scope 2, indirect emissions from the generation of purchased energy, or Scope 1, direct emissions from owned or controlled sources.

The above case studies are presented for illustrative purposes only, as a general example of PIMCO's ESG research and engagement capability and are 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. All data is as of 31 December 2019, unless otherwise stated.

U.S. INDEPENDENT POWER PRODUCER (VISTRA ENERGY)

- **Background:** The issuer has a leading presence in the U.S. residential market. While its installed capacity and energy mix are dominated by fossil fuels, notably gas and coal, it had not set a carbon emission reduction target and advanced energy transition plan at the time of the release of its 2018 Sustainability report.
- **Engagement:** In the context of the CA100+ initiative**, PIMCO co-led the engagement with the issuer along with other investors to encourage the company to set ambitious carbon emission reduction targets and align its disclosure with the TCFD recommendations.
- **Outcome:** The company unveiled a long-term carbon emission reduction target and fleshed out its climate governance and support for carbon pricing. We will continue to follow up regarding the opportunity for a more detailed climate risk disclosure and ambitious strategy in the future.

ASIAN ELECTRIC UTILITY

- **Background:** Our ESG assessment identified a lack of alignment between the firmwide climate strategy and the environmental objectives of its green bond, specifically the pace and visibility of its transition from coal to low-carbon sources of energy.
- **Engagement:** We engaged in 2019 to highlight the importance of setting goals in line with the Paris Agreement***.
- **Outcome:** While the information provided along with its inaugural green bond issuance did not meet our expectations, we will continue to monitor the company's progress on setting concrete targets for phasing out coal generation or greenhouse gas emissions.

** Climate Action 100+ is an investor initiative to ensure the world's largest corporate greenhouse gas emitters take necessary action on climate change.

*** The Paris Agreement is the global accord to limit the global temperature rise by year 2100 to 1.5°C – 2°C above pre-industrial levels.

PIMCO co-led the engagement with the issuer along with other investors to encourage the company to set ambitious carbon emission reduction targets

6

Collaborating with industry groups

In order to drive a more globally coordinated ESG effort, we partner closely with key industry groups:

UNITED NATIONS (UN) INITIATIVES

- **UN Global Compact (UNGC):** PIMCO is a highly engaged participant in the UN Global Compact, which is the world's largest corporate sustainability initiative, encompassing over 10,000 companies in 160 countries. We support the ten principles of the Global Compact with respect to human rights, labor, environment, and anti-corruption and we are committed to incorporating them into our strategy, culture, and day-to-day operations.
- **UNGC SDG Finance Lab:** We partner with the UNGC to routinely assemble financial experts to develop instruments with the potential to direct private finance toward the SDGs. The goal is to improve the risk/return profile of SDG Instruments to attract institutional investors.
- **UN Global Compact CFO Taskforce for the SDGs:** Scott Mather, PIMCO CIO of U.S. Core Strategies, in partnership with the UN Global Compact and energy utility ENEL, will co-chair this two-year project with the aim of mobilizing hundreds of CFOs to tackle the financing needs around the SDGs.
- **Global Investors for Sustainable Development (GISD) Alliance:** Launched by UN Secretary-General Guterres in October 2019, the alliance consists of 30 CEOs who will focus on accelerating long-term investment into sustainable development. In partnership with investors, governments and multilateral institutions around the world, the GISD will deliver concrete solutions to scale-up long-term finance and investment which will specifically contribute to the realization of the SDGs.

PRINCIPLES FOR RESPONSIBLE INVESTMENT (PRI) INITIATIVES

- **The PRI is the world's leading proponent of responsible investment:** It works to understand the investment implications of environmental, social and governance (ESG) factors and to support its international network of investor signatories in incorporating these factors into their investment and ownership decisions. The PRI is supported by, but not part of, the United Nations.
- **PRI Bondholder Engagement Working Group:** This group is comprised of around 15 asset owners and managers who support the PRI by sharing their knowledge and experience in using bondholder engagement as a tool to help investors manage and mitigate investment risks related to ESG factors. Role includes exploring, defining, and identifying trends in bondholder engagement, and publishing guidance for investor implementation.

- **PRI Fixed Income Advisory Committee:** This steering committee is comprised of asset owners and managers who oversee work streams related to raising awareness and understanding of responsible investing, helping investors develop robust processes for implementing the PRI, engaging with credit rating agencies on ESG integration, and identifying and share best practices among PRI signatories.
- **PRI Sovereign Working Group (SWG):** As a working group, we provide practical guidance for ESG integration and effective engagement in sovereign debt investing, by i) analyzing material ESG risks and opportunities for sovereign bonds, ii) identifying main obstacles to further integration practices, and iii) establishing rationale and boundaries to bondholder engagement.
- **PRI SDG Advisory Committee:** This committee advises the PRI Association Executive on what activities PRI should undertake to stimulate, support and potentially monitor signatories who seek to align their investment strategy, policy, asset allocation, mandates, selection processes, investment decisions or active ownership with the ambitions of the SDGs.
- **PRI Assessment Report:** As a signatory of the PRI, PIMCO received an A+ rating (highest score) from our annual Assessment Report in 2019. We score A+ across every single indicator, highlighting our evolution and strong improvement in sustainable investing. We were one of the few managers who received an A+ rating for integrating ESG factors into fixed income investing.

Figure 5: PIMCO's 2019 PRI assessment report

Principles for Responsible Investment Assessment Report	2019	
	PIMCO	Median
Strategy & Governance	A+	A
Fixed Income – Sovereigns, Supranationals, Agencies (SSA)	A+	B
Fixed Income – Corporate Financial	A+	B
Fixed Income – Corporate Non-Financial	A+	B
Fixed Income – Securitized	A+	C

Source: PRI assessment report limited to asset managers signed up to the Principles for Responsible Investment (PRI) and based on how well ESG metrics are incorporated into their investment processes.

PRI Transparency Reports 2019 are available at https://www.unpri.org/signatories/transparency-reports-2019/4506.article.

For methodology, please refer to About PRI Assessment: https://www.unpri.org/signatories/about-pri-assessment

Past performance is no guarantee of future results.

Additional initiatives we partner with and support

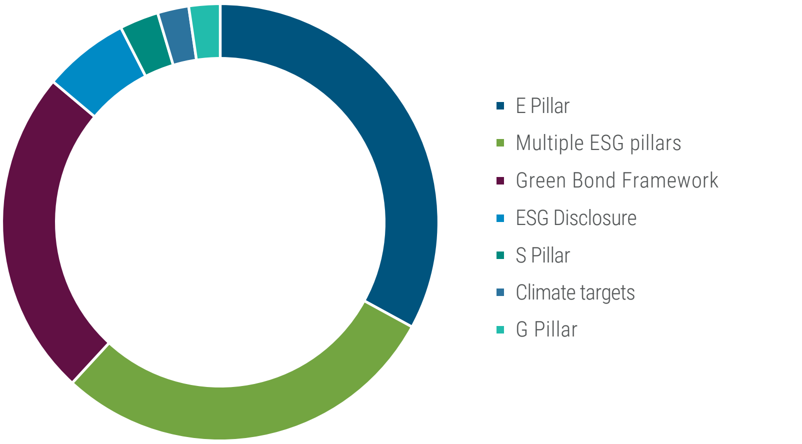
- **Climate Action 100+:** This is an investor initiative to ensure the world's largest corporate greenhouse gas emitters take necessary action on climate change.
- **Task Force on Climate-related Financial Disclosures (TCFD):** This task force within the Financial Stability Board (FSB) has created a set of non-binding, voluntary recommendations for better climate-related financial disclosures. We support the recommended disclosure in order to measure and respond to climate change risks, and encourage firms to align their disclosures with investors' needs. *(PIMCO's own climate-related disclosures appear later in this report)*.
- **Sustainability Accounting Standards Board (SASB):** We are a founding member of the SASB's Investor Advisory Group (IAG) comprising asset owners and managers who recognize the need for consistent, comparable, and reliable disclosure of material and decision-useful ESG information. The group participates in the ongoing standards development process and encourages companies to participate in the development process.
- **Carbon Disclosure Project (CDP):** Organization that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts.
- **Institutional Investors Group on Climate Change (IIGCC):** The IIGCC is the membership body for investor collaboration on climate change and the voice of investors taking action for a prosperous, low carbon future.
- **Transition Pathway Initiative (TPI):** TPI is a global initiative led by asset owners and supported by asset managers. Aimed at investors and free to use, it assesses companies' preparedness for the transition to a low-carbon economy, supporting efforts to address climate change. TPI data and tools help inform our assessment of climate risks and engagement with bond issuers.
- **Climate Bonds Initiative (CBI):** CBI is 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. Partnering with CBI is an exciting development in the context of our efforts to promote robust and innovative investment criteria and products to help advance the Paris Agreement on climate change.
- **International Capital Market Association (ICMA):** PIMCO has a seat on the Green Bond Principles (GBP) and Social Bond Principles (SBP) Executive Committee that helps shape the evolution of the green bond and social bond markets.

PIMCO's engagement efforts in numbers

PIMCO credit research analysts engage regularly with the companies that they cover, discussing topics with company management teams related to corporate strategy, leverage, and balance sheet management, as well as ESG-related topics such as climate change targets and environmental plans, human capital management, and board qualifications and composition. While we do not track every regular engagement every PIMCO credit research analyst has with an issuer, members of our dedicated ESG credit analyst team do track substantive ESG-focused engagements with issuers that are being considered as investments for our ESG portfolios.

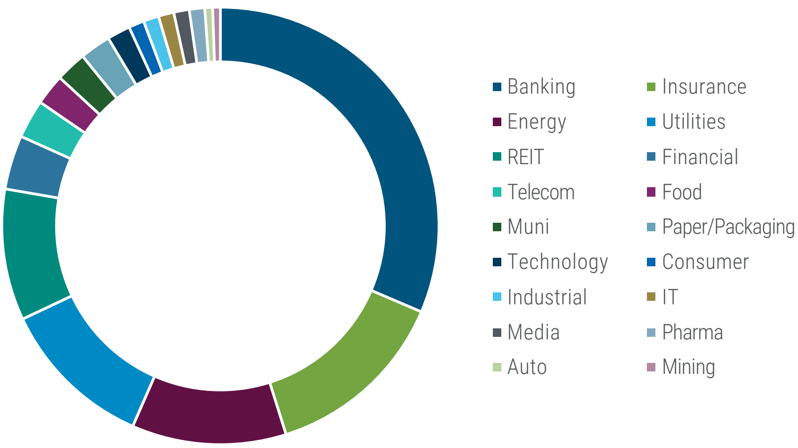
In 2019, we engaged with over 175 issuers of the securities held in or considered for our ESG portfolios. The majority of our engagement activities focused on environmental risks and green bond frameworks:

Figure 6: ESG engagement by topic (2019)



in
2019
we engaged with over
175 issuers

Figure 7: ESG engagement by industry (2019)



Source: PIMCO. As of 31 December 2019.

Details of PIMCO's ESG process

An ESG focus pervades PIMCO's firmwide investment process and culture, including the ESG risk assessments we undertake when formulating our top-down macroeconomic outlook and the ESG factors integrated in our bottom-up credit research. ESG research informs our broader portfolios, and we also manage dedicated ESG strategies.

ESG AT PIMCO – FIRMWIDE INTEGRATION

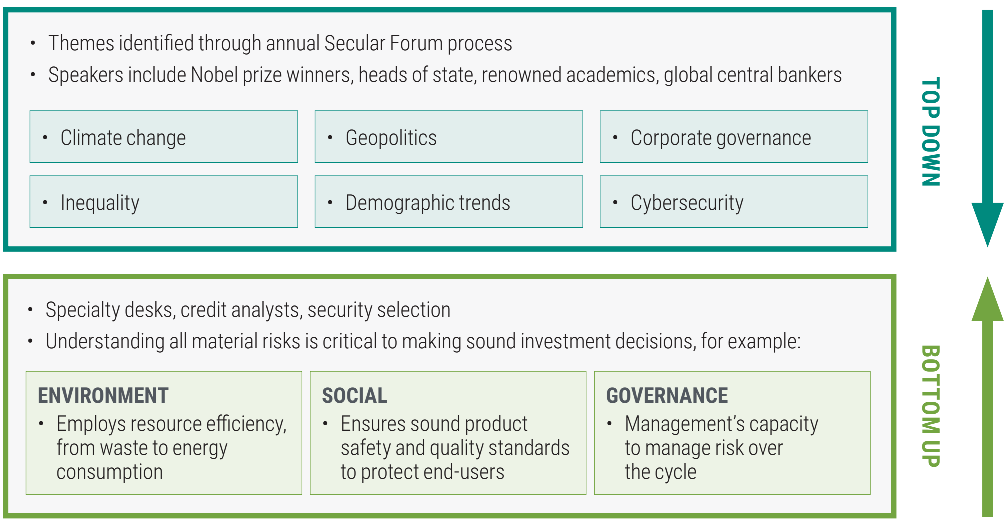
ESG RISK ASSESSMENT IN MACROECONOMIC OUTLOOK (TOP DOWN)

At the firmwide level, PIMCO has sought to evaluate every risk and opportunity – both financial and non-financial – for the investments we make on behalf of our clients before the term "ESG" was coined to draw attention to certain historically non-financial risks. Our process emphasizes rigorous analysis of broad secular trends, which are at the core of both global ESG trends and long-term asset returns. PIMCO has developed a robust platform specialized in supporting ESG-focused investment solutions based on our belief that ESG integration is essential to optimizing risk-adjusted returns over the long term. For this reason, our investment process evaluates ESG risk factors from both the top down (i.e., macro) and the bottom up (i.e., issuer- and security-specific) in a process that encompasses our broad assets under management.

From the top down, the first and most important step in PIMCO's process is to identify the major long-term themes that will affect the global economy and financial markets. PIMCO believes that such analysis is fundamental to making sound investment decisions. The firm's annual Secular Forums are devoted to identifying and analyzing these longer-term trends, and the analysis of ESG-related issues fits directly into that process.

PIMCO blends its macro analysis with detailed bottom-up work. The firm's global credit research team and portfolio managers aim to evaluate ESG-related issues as part of their credit analysis and capital allocation decision-making processes.

Figure 8: ESG factors integrated



Source: PIMCO. **For illustrative purposes only.**

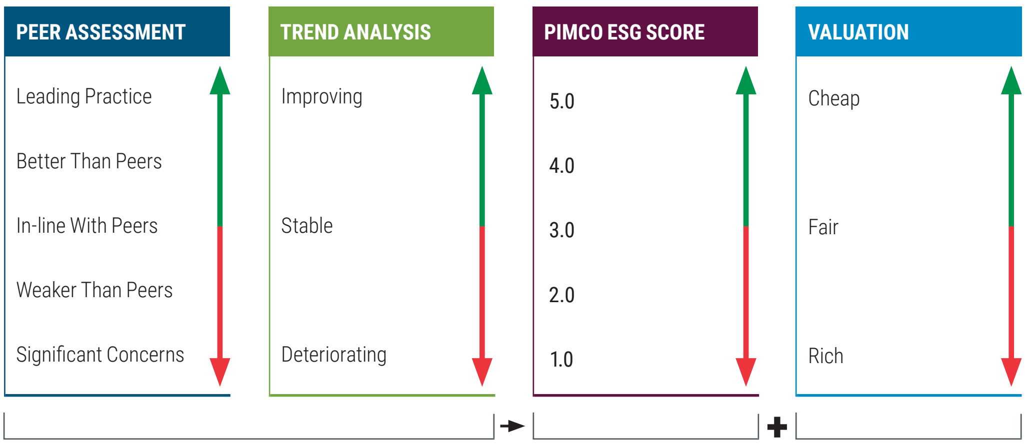
ESG RESEARCH INTEGRATED INTO CREDIT RESEARCH (BOTTOM UP)

We believe best practice within ESG integration is to systematically assess ESG risks and opportunities across broad PIMCO investments, regardless of whether the investments are considered for an ESG-labeled portfolio. The asset management industry takes several approaches to ESG integration, ranging from separate teams of ESG researchers, to ESG research responsibility fully absorbed by the primary investment research team.

At PIMCO, the firm's global credit research team and portfolio managers aim to evaluate ESG-related issues across the issuers that we cover as part of their analysis. For example, our credit research templates capture the PIMCO View and Recent Trends across each of the three E, S, and G categories and also flag "Significant ESG Concerns" as part of a holistic research report.

We have developed a proprietary ESG scoring system: Each issuer is assigned three separate numerical scores from 1 to 5 (with 5 being the highest) for their environmental, social, and governance 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 vary based on industries as each industry is assigned a different factor weight. We use the MSCI and other ratings for reference, but we make our own assessment based on our independent analysis of the industry and relevant ESG factors. Each factor is assessed on whether we believe the issuer is leading, in-line with, or weaker than peers, and our credit analysts also include a forward-looking view of each issuer's ESG outlook, indicating improving, stable, or deteriorating outlook. We currently have ESG scoring in place for corporate issuers (Investment Grade and High Yield), sovereigns (Developed and Emerging Markets), securitized issuers, and municipal issuers.

Figure 9: PIMCO's ESG scoring system



Source: PIMCO. **For illustrative purposes only.**

The firm relies primarily on internal research for decision-making; however, PIMCO also rigorously consumes external research from Bloomberg, MSCI, Reuters, S&P, Sustainalytics, and others. External research helps PIMCO understand and anticipate the views and opinions of market participants, and gauge market sentiment and trends. The research and analysis provided by external data providers is one of many factors in PIMCO's ESG analysis of issuers, the outcome of which is a proprietary ESG assessment and score which may differ significantly from that of other providers.

PIMCO'S ESG DEDICATED PORTFOLIOS

For investors seeking greater ESG orientation in their portfolios, we built a platform of ESG-dedicated solutions that focus on delivering financial returns while making positive environmental and social change. The platform builds on PIMCO's core ESG process detailed above, and then adds a number of sustainability-specific features focused in three areas: exclusions, evaluation, and engagement.

Figure 10: PIMCO's three-step approach to building ESG dedicated portfolios

EXCLUDE

We exclude – by governing terms and in practice – issuers fundamentally misaligned with sustainability principles.

EVALUATE

Using our proprietary and independent ESG scoring system, we seek to optimize portfolios to emphasize issuers with industry-leading ESG practices.

ENGAGE

We believe that collaborating with and allocating capital toward issuers willing to improve the sustainability of their business practices can generate a greater impact than simply excluding issuers with poor ESG metrics and favoring those with strong metrics.

Source: PIMCO. **For illustrative purposes only.**

"For investors seeking greater ESG orientation in their portfolios, we built a platform of ESG-dedicated solutions that focus on delivering financial returns while making positive environmental and social change."

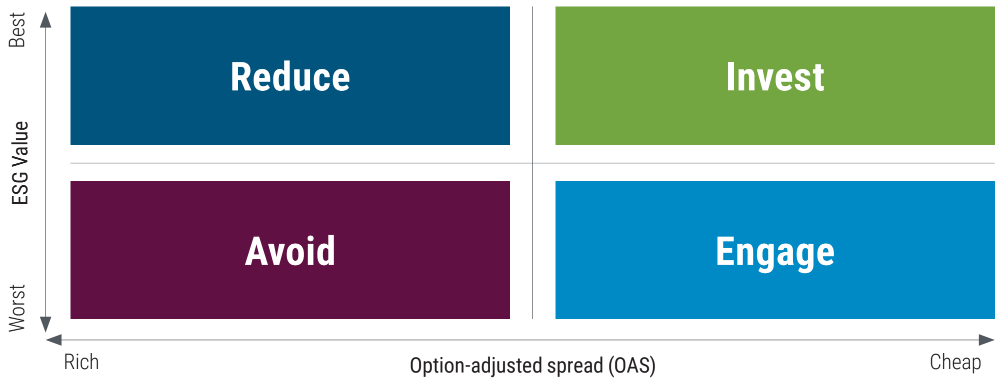
PORTFOLIO MANAGEMENT OF ESG DEDICATED PORTFOLIOS

For ESG dedicated portfolios, PIMCO credit analysts highlight ESG assessments in their credit research notes, alongside PIMCO's internal credit ratings and recommendations for portfolio managers to consider when they are evaluating the financial attractiveness of an investment. Analysts' ESG views include narrative assessments and rationales for material factors that have the potential to affect investment performance. These assessments can be relevant in shaping investments in our portfolios.

For example, the manager of an ESG dedicated portfolio may decide to switch between two companies with similar fundamental risk profiles trading at comparable spread levels based on their relative ESG scores. The illustration in figure 11 separates potential investments into four quadrants:

1. **Invest** in issuers trading at attractive valuations and with strong ESG profiles;
2. **Engage** with companies trading cheaply, but which have weaker ESG profiles;
3. **Reduce** exposures to companies trading at unattractive valuations despite strong ESG profiles; and
4. **Avoid**/sell companies with unattractive valuations and weak ESG profiles.

Figure 11: ESG dedicated portfolio construction



Source: PIMCO. **For illustrative purposes only.**

Climate Risk Management and TCFD

In support of the Task Force on Climate-related Financial Disclosures (TCFD), which we signed in June 2019, here we outline PIMCO's process for monitoring and managing climate risk in investment portfolios. This includes governance, strategy (including oversight and integration), the risk management framework, and finally our climate-related metrics and targets (including climate solutions investment exposure, carbon emissions, scenario analysis, and impact measurement).

Source: TCFD

GOVERNANCE

I Roles and responsibilities

STRATEGY

II Climate risk integration

RISK MANAGEMENT

III Framework to identify, assess, and manage climate risks (PIMCO's seven climate tools)

METRICS AND TARGETS

IV Paris Agreement alignment of sample PIMCO portfolios

V Climate solutions investment exposure of sample PIMCO ESG portfolio

VI Carbon emissions of sample PIMCO ESG portfolio

VII Scenario analysis of sample PIMCO ESG portfolio

PIMCO TCFD Summary

Governance	**Roles and responsibilities**	
	• ESG Leadership team and Executive Committee overseeing climate risks	
Strategy	**Climate risk integration**	
	• Climate-related risks and opportunities types and relevance across fixed income asset classes • Integration of climate risks into PIMCO's investment and risk frameworks firm-wide • Climate risks and impact embedded into PIMCO's ESG portfolios as part of our 3-step approach of exclusion, evaluation and engagement • Contribution to industry initiatives focused on the implementation of TCFD's recommendations	
Risk management	**Framework to identify, assess, and manage climate risks (PIMCO's seven climate tools)**	
	• PIMCO's analytical frameworks for assessing and managing climate risks, from top down to bottom up: - Climate Macro Tracker - Portfolio Climate Risk Heat Map - Issuer Climate Risk Score - Portfolio Energy and Technology Mix Measured Against the Paris Agreement - Portfolio Carbon Intensity Analysis - Green Bonds Score - Engagement with Issuers on Climate Change	
Metrics and targets	**Climate-focused investment exposure of sample PIMCO portfolios**	
	• Selected examples of indicators: - Exposure to issuers with Paris Agreement aligned targets - Exposure to green, social, and sustainability bonds - Carbon intensity - Portfolio energy mix compared to the current global energy mix and to different IEA scenarios for 2025	

Source: PIMCO as of 31 December 2019. **For illustrative purposes only.**

PIMCO recognizes that climate change will likely have a profound impact on the global economy, financial markets, and issuers

I. GOVERNANCE – ROLES AND RESPONSIBILITIES

The ESG Leadership team, including Scott Mather, PIMCO's CIO U.S. Core Fixed Income and the CIO responsible for ESG strategies, manages PIMCO's ESG investment process that seeks to factor in climate change risks across selected portfolio management teams, from credit and sovereign research to mortgage and municipal analysis. Firmwide, PIMCO's Executive Committee is fundamentally in charge of PIMCO's strategic direction and management.

II. STRATEGY – CLIMATE RISK INTEGRATION

PIMCO recognizes that climate change will likely have a profound impact on the global economy, financial markets, and issuers, and we have developed tools and methods that seek to incorporate over time relevant climate risk evaluations in our investment decisions as per applicable investment guidelines or business considerations.

The pace of change is swift: Risks and opportunities related to climate change may materialize in unexpected ways, and it can affect investments across asset classes, including a wide range of fixed income securities: corporate credit, mortgage-backed securities, sovereign and municipalities. The impact on financial markets and bond prices may be abrupt and sudden, and as investors we must stay vigilant and flexible.

When evaluating climate-related risks and opportunities of specific sectors and issuers, we begin with two broad categories:

1 Transition risks (e.g., tighter regulations on carbon emissions) and

2 Physical risks (e.g., how the rising intensity and frequency of extreme weather events affects critical assets and natural resources used by the issuer)

PIMCO aims to systematically integrate relevant climate factors into our top-down (i.e. longer term macro and socio-economic view) process through our annual Secular forum. Further, we also seek to integrate relevant climate factors into our bottom-up assessment as well. PIMCO's Global Advisory Board, which comprises macroeconomic thinkers and former policymakers, typically provides insight on global economic, political and strategic developments and their relevance for financial markets. During our Secular forum, the firm formulates its outlook for global bond markets over the next three to five years and, as relevant for such considerations or discussion may consider relevant ESG factors into such outlook. Selected members of the investment staff are assigned secular topics to monitor and climate change may be one of them. This was the case during our 2019 Secular Forum which included a focus on climate-related shocks.

PIMCO has set up a Climate Risk Working Group, which includes representatives from various teams such as Economist, Risk, Analytics, Client Solutions, Credit and Portfolio Management. This group is focused on embedding climate-related risk into existing PIMCO core stress-testing tools, portfolio risk profiling and research. This includes a focus on scenario analysis based on emerging methodologies and guidelines, such as those seeking to model the potential impact on bond prices (value at risk) in the event of an extreme and sudden climate transition or failure to act.

In PIMCO's ESG portfolios, we embed climate change into our 3-step approach of exclusion, evaluation and engagement to assess both portfolio's contribution to climate change and the impact of climate change from a credit risk perspective.

We support the TCFD and engage with issuers for enhanced corporate disclosure on climate change. We also partake in a range of industry initiatives that are linked to the implementations of the TCFD, such as IIGCC's Paris Aligned Investment Initiative or the Bank of England's Climate Financial Risk Forum's scenario analysis working group.

III. RISK MANAGEMENT – FRAMEWORK TO IDENTIFY, ASSESS, AND MANAGE CLIMATE RISKS (PIMCO'S SEVEN CLIMATE TOOLS)

PIMCO's climate research is led by credit analysts – the experts in their market sectors – who build on the structure of our broader ESG specialist desk for coordination and consistency. Climate risk now features in our proprietary ESG scores for the issuers we evaluate. In this way, PIMCO leverages the expertise of our analyst teams, while harmonizing climate risk analysis across asset classes and sectors. Our ESG scores inform broad PIMCO portfolios, not only ESG-focused portfolios with specific sustainability objectives.

To help analysts evaluate climate risk, PIMCO's ESG specialists designed seven proprietary tools (see figure 12), drawing on our decades of experience in fixed income analysis. The insights these tools provide are intended to help portfolio managers to better manage and mitigate climate-related credit risks and align ESG dedicated portfolios with the Paris Agreement targets – as always, working within specific portfolio objectives and guidelines. (The Paris Agreement is the global accord to limit the global temperature rise by year 2100 to 1.5°C – 2°C above pre-industrial levels.)

These analytical frameworks serve the whole spectrum of PIMCO's ESG-specific and broader investment strategies and enable PIMCO's ESG dedicated strategies to align with the recommendations of the TCFD.

Figure 12: PIMCO's seven climate tools for risk analysis and management

OBJECTIVE	TOOL #	FOCUS	PIMCO TOOL NAME	KEY QUESTION
Lower credit risk	1	Economic Impacts (Top-down)	Climate Macro Tracker	How to assess and decrease portfolio exposure to financial risks brought about by climate change
	2	Credit Risk Impacts (Bottom-up)	Portfolio Climate Risk Heat Map	
	3		Issuer Climate Risk Score	
Reduce carbon emissions	4	Brown Bonds	Energy and Technology mix compared with the Paris Agreement (IEA Scenarios)	How to reduce portfolio exposure to activities contributing to global warming
	5	Carbon Intensity	Portfolio Carbon Intensity Analysis	How to reduce portfolio's carbon footprint
	6	Green Bonds	Green Bonds Score	How to increase portfolio's exposure to activities that help mitigate global warming
Both objectives	7	Engagement	Expectations toward issuers on climate change	How to influence companies' strategy

Source: PIMCO as of November 2019. **For illustrative purposes only.**

Climate Tool #1: Climate Macro Tracker

To ensure we have a robust long-term, top-down perspective on climate risk, PIMCO designed and developed our own **Climate Macro Tracker (Tool #1)**. This tool monitors the broad momentum in climate change across key themes and scenarios, and measures the gap between the real-world metrics and global climate goals.

From a macro perspective, climate-related risks to the global economy are real and alarming. By some estimates, climate change could result in multitrillions of dollars of economic losses and a large negative impact on global GDP, in addition to the profound impact on communities and ecosystems (sources: OECD, CRO Forum). Along with the challenges and risks, we also keep an eye on climate-related macro trends (regulations, energy, and technology, for example) likely to create business and investment opportunities.

Climate Tool #2: Portfolio Climate Risk Heat Map

PIMCO's **Tool #2, the Portfolio Climate Risk Heat Map**, gives a high-level overview of exposure to climate risk (both transition and physical) among relevant sectors and assets. It illustrates a "heat map" of select corporate sectors' exposure, from low risk (green) to high risk (red), along with examples of relevant climate risks within each sector. Looking across the range of risks in a portfolio helps a portfolio manager assess and fine-tune exposures.

Climate Tool #3: Issuer Climate Risk Score

PIMCO's **Issuer Climate Risk Score (Tool #3)** assesses climate change risks for a wide range of relevant sectors and issuers. In the auto sector, for example, we explore climate change in the broader context of stricter legislation covering air pollution, while for the food and agriculture sectors, carbon risks should not, in our view, be disentangled from steps taken by issuers to mitigate the underlying commodities' water or land footprint.

As with the heat map (Tool #2), the climate risk scores are divided into transition risks and physical risks. Our transition risk scores are typically favorable for the most carbon-efficient issuers and for those proactively seeking to align with the Paris Agreement in light of their respective business and geographical contexts. The transition risk score draws on metrics such as the issuer's current and future carbon emissions using a lifecycle approach and recognized methods such as the science-based target approach as well as business mix outlook (e.g., revenues, capital expenditures) considering technology pathways enabling issuers to align with the limits on rising temperatures.

Example A: Corporate credit (Energy)

For instance, PIMCO's fundamental analysis of credits in the energy sector closely examines companies' exposure to different types of energy sources, environmental and regulatory risks to the business activities, the relative cost positions of companies and their commitments, and steps taken to diversify into low-carbon sources of energy.

Ultimately, we look to map the likely winners and losers, notably based on scenario analysis and the extent to which long-term climate risks are reflected in our credit views and bond prices, and, if they are not, what this could mean for issuers' credit quality considering bond characteristics (e.g., duration) over time.

Example B: Sovereign credit

Our sovereign credit climate score comprises a host of metrics that capture each country's exposure and readiness to cope with climate change, connecting environmental with economic variables. Energy-intensive and fossil-fuel-dependent economies are much more likely to be affected by the transition to cleaner energy, but the pace will be key to each sovereign's ability to manage the transition risks, as well as their savings buffer and reforms to shore up growth from other sectors. Conversely, rising temperatures and physical climate risks are likely to disproportionally affect the credit risk of developed and smaller countries.

Example C: Real estate and mortgage-backed securities

In general, we believe the real estate sector needs to step up its efforts to improve buildings' energy efficiency via more extensive upgrades of existing properties. Our environmental assessment for real estate examines practices in terms of green buildings and like-for-like carbon emissions, energy intensity reductions, and reduction of physical risks.

Looking across subsectors, our climate scores for REITs (real estate investment trusts) suggest that malls and offices are generally the most advanced in their practices and trajectories. And within mortgage-backed securities (MBS), we see geographical diversity as a key edge against material losses prompted by extreme weather events.

Example D: Municipal bonds

PIMCO's municipal climate score considers a variety of factors to assess the economic vulnerability associated with climate risks, as well as the ability and willingness of states and local governments to adapt and achieve sustainable initiatives.

In the municipal market, high physical risks are generally concentrated around coastal communities with elevated incidents of storms and flooding, while high transition risks reflect economies with larger exposures to the energy and mining sectors.

Climate Tool #4: Portfolio Energy and Technology Mix Measured Against the Paris Agreement

We complement our sector-based and bottom-up analysis of carbon risks with a portfolio tool that monitors the carbon impact of corporate holdings across a portfolio and seeks ways to mitigate emissions beyond exclusion screens.

PIMCO's **Energy and Technology mix compared with the Paris Agreement (Tool #4)** assesses the average technology and energy mix of a portfolio compared with global energy scenarios modeled by the International Energy Agency (IEA), including the potential impact of green bonds, considering their specific environmental features and issuer-level data. The output is a comparison of PIMCO's ESG portfolio with current and future IEA estimates of Paris-aligned portfolios. See **figure 16** in metrics and targets section for an example.

Climate Tool #5: Portfolio Carbon Intensity Analysis

Moreover, as part of PIMCO's **Portfolio Carbon Intensity Analysis (Tool #5)**, we have developed high-level portfolio screens that allow comparison of carbon intensity of different portfolios and benchmarks based on the weighted average sum of both direct greenhouse gas emissions and greenhouse gas emissions due to purchases of electricity, heating, and cooling (i.e., scope 1 + scope 2 emissions in tonnes of carbon dioxide equivalent, or tCO_2e / revenues in USD (weighted based on percentage of market value)). See **figure 15** in metrics and targets section for an example.

Climate Tool #6: Green Bonds Score

Green bonds and other debt instruments geared toward sustainability are proliferating in the global marketplace. Our ESG process integrates analysis of debt instruments geared toward climate solutions via our proprietary **Green Bonds Score (Tool #6)**.

We assess green bond instruments both prior to and after issuance, mapping them across a spectrum based on strategic fit, potential impact, red flags, and reporting, resulting in PIMCO's impact score for green, social, or SDG bonds. PIMCO's green bond scores aid the investment process and security selection, providing us with proprietary differentiation among green bond issuers and frameworks. See **figure 14** in metrics and targets section for an example.

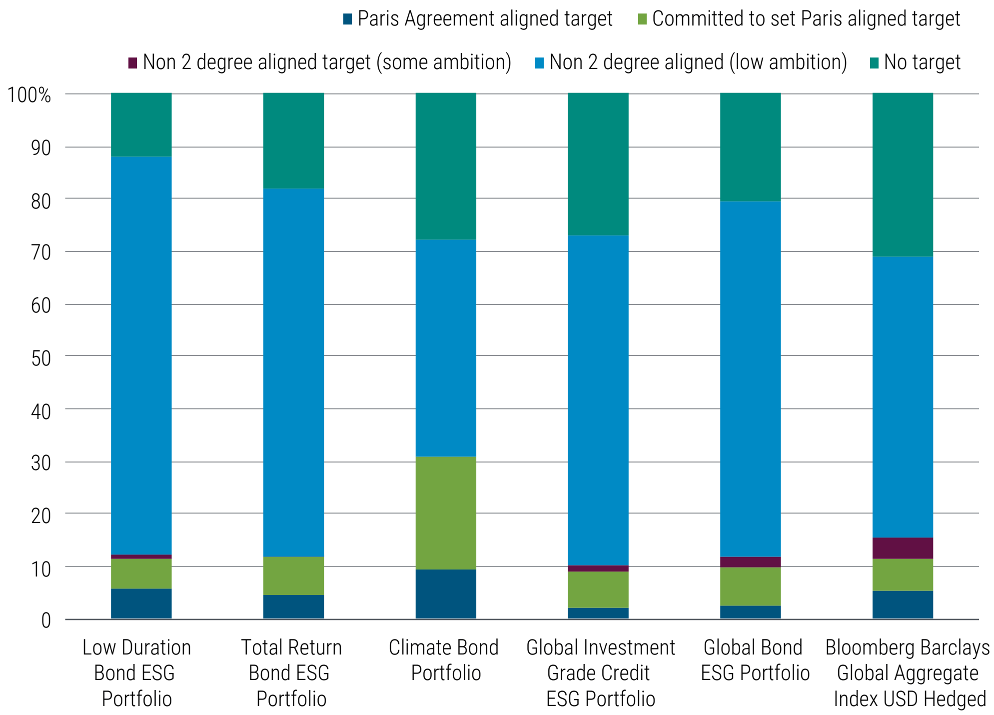
Climate Tool #7: Engagement with Issuers on Climate Change

As demonstrated earlier in the report, we engage with bond issuers both to bolster their Paris Agreement alignment and to help them improve their management of the underlying credit risks, moving from awareness to readiness, and ultimately commitment to science-based targets **(Tool #7: Engagement with Issuers on Climate Change)**.

This is informed by analytical tools that enable us to monitor corporate issuers' level of ambition to reduce their carbon emissions relative to pathways consistent with the Paris Agreement. See **figure 13** in metrics and targets section for an example.

IV. METRICS AND TARGETS – PARIS AGREEMENT ALIGNMENT OF SAMPLE PIMCO PORTFOLIOS

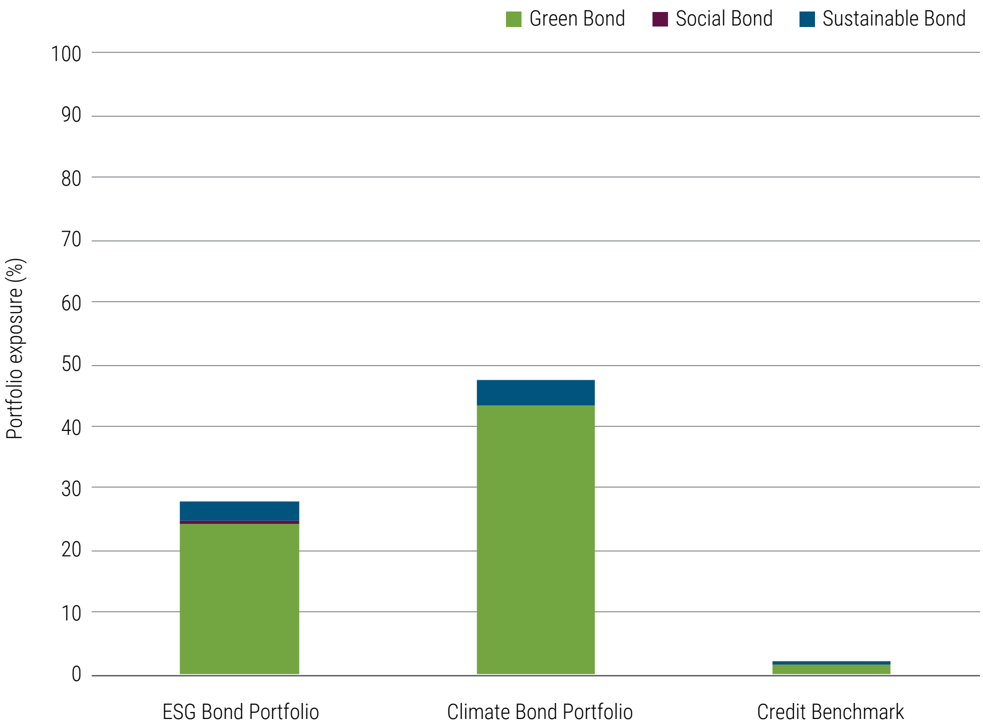
Figure 13: Sample portfolios' exposure to issuers with Paris Agreement aligned targets



Source: TPI, MSCI, SBT, Bloomberg, PIMCO as of 31 December 2019. **For illustrative purposes only**. The Paris Agreement is the global accord to limit the global temperature rise by year 2100 to 1.5°C – 2°C above pre-industrial levels. The Bloomberg Barclays Global Aggregate Index (USD Hedged) is being shown as an example of the broad global bond market The index may materially vary from the composition of the portfolios. The portfolio structure is a representation of a sample portfolio and no guarantee is being made that the structure of the portfolio will remain the same or that similar returns will be achieved. 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.

V. METRICS AND TARGETS – GREEN, SOCIAL, AND SUSTAINABILITY BOND EXPOSURE OF SAMPLE PIMCO PORTFOLIOS

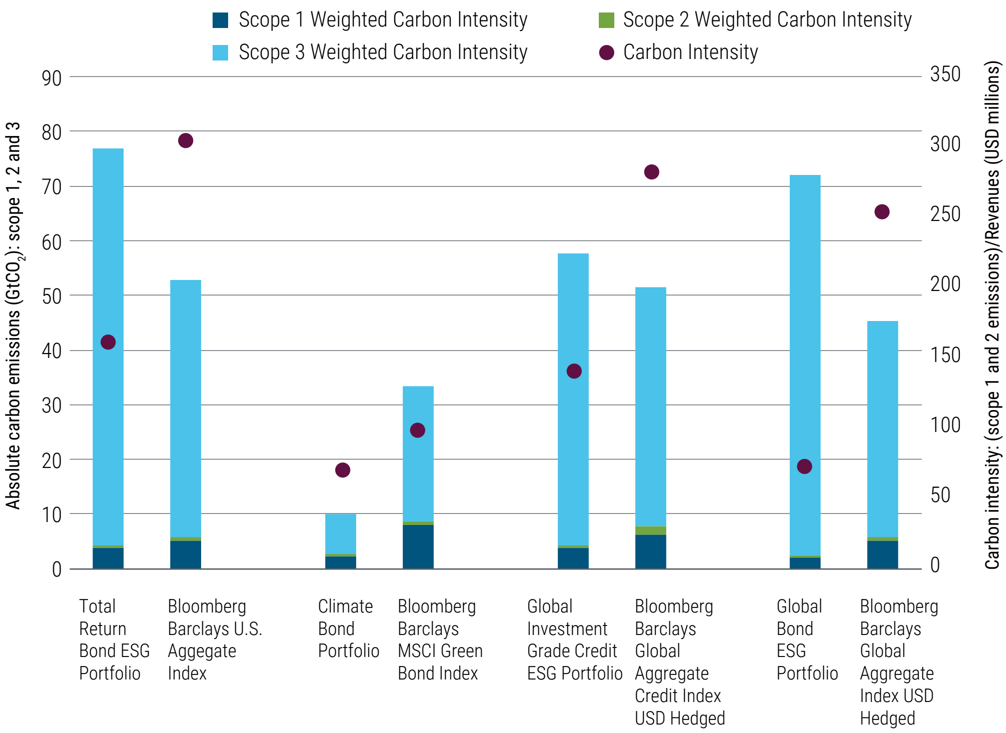
Figure 14: Sample portfolios' exposure to green, social, and sustainability bonds (portfolios versus benchmark)



Source: PIMCO, Bloomberg as of 31 December 2019. **For illustrative purposes only**. Based on Bloomberg definitions that the issuer or underwriter must clearly and publically demonstrate in issuance documentation that 100% of all proceeds will be used to finance or refinance acceptable green projects or activities (including issuers that may not comply with the Green Bond Principles). ESG Bond Portfolio is an ESG global investment grade credit portfolio. Climate Bond Portfolio is an ESG global multi-sector credit fixed income portfolio with a concentration on climate change solution providers. These portfolios are being shown to illustrate difference between an ESG portfolio and a climate themed portfolio, Credit Benchmark is the Bloomberg Barclays Global Aggregate Credit Index (USD Hedged) and it is shown as an example of the broad global credit market. The index may materially vary from the composition of the portfolios. The portfolio structure is a representation of a sample portfolio and no guarantee is being made that the structure of the portfolio will remain the same or that similar returns will be achieved. 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.

VI. METRICS AND TARGETS – CARBON EMISSIONS OF SAMPLE PIMCO PORTFOLIOS

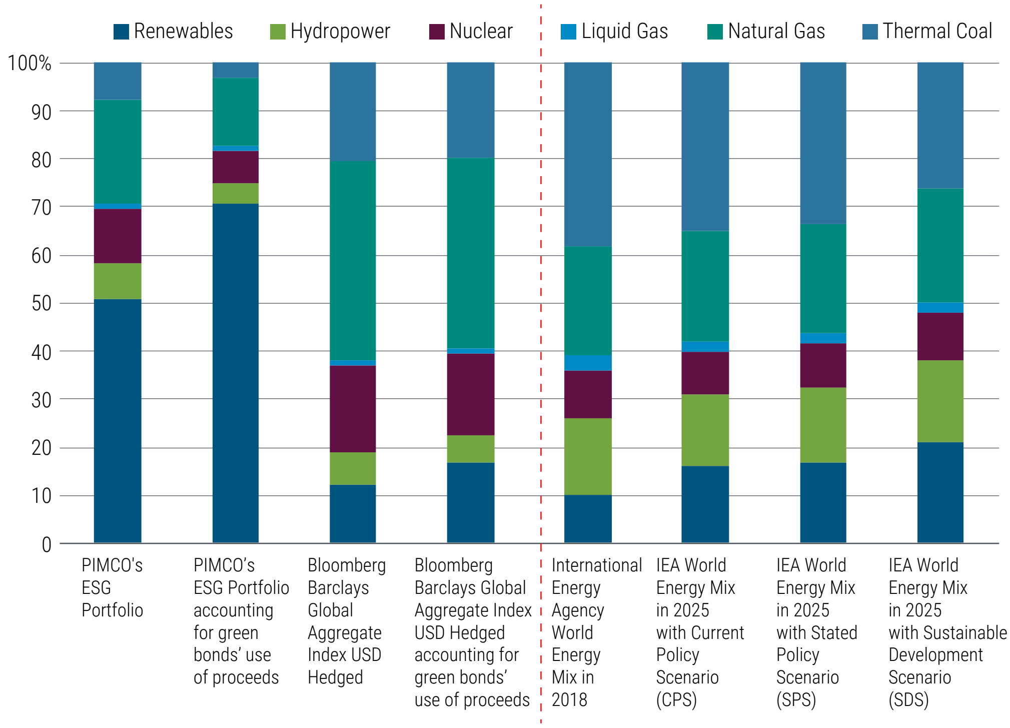
Figure 15: Carbon intensity in sample PIMCO portfolios



Source: PIMCO, Bloomberg, MSCI as of 31 December 2019. **For illustrative purposes only**. The Greenhouse Gas Protocol defines Scope 3 emissions as all indirect emissions in the value chain of a company not captured in Scope 2, indirect emissions from the generation of purchased energy, or Scope 1, direct emissions from owned or controlled sources. Data coverage for carbon intensity: c. 91% of the Corporate PMV (Percentage Market Value) of the funds. These portfolios are being shown as a sampling of our ESG portfolios with enough corporate credit exposure to meaningfully represent the portfolio given the underlying data is only for corporate credit. The Indexes shown serve as the benchmark for the respective sample portfolio. The index may materially vary from the composition of the portfolios. The portfolio structure is a representation of a sample portfolio and no guarantee is being made that the structure of the portfolio will remain the same or that similar returns will be achieved. 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.

VII. METRICS AND TARGETS – SCENARIO ANALYSIS OF SAMPLE PIMCO ESG PORTFOLIO

Figure 16: PIMCO's sample ESG portfolio energy mix compared to the current global energy mix and to different International Energy Agency (IEA) scenarios for 2025



Source: PIMCO, MSCI and IEA data from the World Energy Outlook 2018. All rights reserved. www.iea.org/statistics. License: www.iea.org/t&c. As of 31 December 2019, unless otherwise indicated. **For illustrative purposes only**. Note: "PIMCO's ESG Portfolio" refers to the current weighted average energy mix of the 5 sample portfolios following the Total Return Bond ESG Strategy, Low Duration Bond ESG Strategy, Global Bond ESG Strategy, Global Investment Grade Credit ESG Strategy, and Climate Bond Strategy. "PIMCO ESG Portfolio, accounting for green bonds' use of proceeds" adjusts green bond issuer data to reflect the energy mix of the use of proceeds. IEA CPS refers to the Current Policy Scenario (no changes in policies from today, i.e., business as usual), IEA SPS to Stated Policies Scenario (existing policy frameworks and today's announced policy intentions) and IEA SDS to Sustainable Development Scenario (aligned with the UN Sustainable Development Goals and 2°C trajectory). For corporate bonds only. The indexes are being shown as an example of the broad global bond market The indexes may materially vary from the composition of the portfolios. The portfolio structure is a representation of a sample portfolio and no guarantee is being made that the structure of the portfolio will remain the same or that similar returns will be achieved. 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.

Figure 17: Examples of SDG and ESG metrics assessed in 2019

	Environmental	**Social**	**Governance**
SDG by Pillar			
	Climate change: 	Human capital: 	Corporate governance: 
	Resource efficiency and natural capital: 	Product health, quality and safety: 	Conduct, culture, and business ethics: 
Asset Class			
Corporates	Climate change: Lifecycle carbon intensity Adoption of science-based carbon emission reduction targets Exposure to physical and transition risk from climate change Use of renewable energy	Human capital management: Employee turnover Employee engagement and sentiment Frequency and duration of work stoppages Number of hours training provided per employee, type of training provided	Business ethics: Balance sheet discipline Board & management quality, diversity Regulatory risk
	Resource efficiency and natural capital: Exposure to regions under water stress and water consumption rates Waste intensity and recycling rates Sustainable sourcing certifications	Human and labor rights: Number of supplier audits (Tier 1 & Sub-Tier 1) Share of employees earning national living wage or above Transparent reporting of suppliers for sensitive materials	Conduct, culture, and business ethics: Completion rates for ethics training Presence of material controversies
Sovereigns	Climate change: GHG emissions per capita, GDP per energy input, % of fossil fuels vs. renewable energy, Notre Dame Global Adaptation Initiative Country Index, Yale Environment Indicator	Health and safety: Life expectancy (at birth and beyond age 65), mortality rate, health score Human capital management: Gini coefficient, WEF Higher Education & Training Score, WEF Labour Market Score	Strong institutions: Political stability, government effectiveness, corruption control, rule of law

	Environmental	Social	Governance
Munis	Water: Drinking water contamination/treatment/ recycling, water intensity (consumption per revenue), recharge protocol	Human capital management: Graduation rates, unemployment rate, population composition trends, availability of affordable housing	Strong institutions: Accreditation issues, pension funding discipline, constitutional protection against impairment of pensions, prohibitions on taxing authority
	Climate change: Carbon intensity per capita, EPA consent decrees, % of renewable energy	Health and safety: Obesity rate, poverty rate	Delivery on balance sheet strategy: Budget impasses, accounting deficiencies, reporting violations
Securitized	Climate change: Specialty lending in solar panels and EVs	Human capital management: Homeownership rates, access for underserved communities	Conduct and culture: Responsible lending standards

Source: PIMCO. **For illustrative purposes only.**

Corporate Responsibility

PIMCO's core mission is to deliver attractive investment returns, solutions, and service to our clients; to accomplish this mission we strive to foster a high performance culture – one in which we demonstrate our values to clients, colleagues, and the community.

Our corporate responsibility effort comprises three pillars:

PURPOSE AT PIMCO

Our community engagement platform focuses on hunger (SDG 2) and gender equality (SDG 5) with the belief that these are fundamental issues critical to human development and sustainable global economic growth.

SUSTAINABILITY INITIATIVES

We promote sustainability efforts within our operations and business practices related to the environment, human rights, anti-corruption and labor.

INCLUSION, DIVERSITY, AND CULTURE

We seek to heighten employees' appreciation for diverse perspectives and skills to support a culture of inclusion and acceptance so that our people and clients continue to thrive.

INCLUSION, DIVERSITY, AND CULTURE SPOTLIGHT

OUR EMPLOYEE RESOURCE GROUPS

Our volunteer-driven employee groups are critical voices in fostering a more diverse and inclusive PIMCO. All PIMCO colleagues are welcome to join and get involved with any of our groups:

Families	provides meaningful support to employees as they **integrate career and caregiving responsibilities**
Multicultural	**celebrates the ethnic and cultural diversity** of our employees and facilitates a culture of inclusion by raising awareness of the breadth of experiences amongst our team
PRIDE	fosters a culture that **enables all employees to be their authentic selves**, regardless of sexual orientation, gender identity or gender expression
VETERANS	contributes to the success of the firm by **supporting veterans' transition to civilian life and work** through networking and mentoring initiatives
Women	focuses on gender equality and on the **attraction, development, retention and engagement of women** at all stages of their careers
Social	increases **collaboration and encourages a culture of connectivity** amongst colleagues while fostering increased appreciation for diverse skills and perspectives
MyWellbeing	focuses on **improving mental and physical health** and general wellbeing

PURPOSE AT PIMCO SPOTLIGHT

PIMCO Gives

We donate to high performing non-profit partners to support critical on-the-ground services and innovative opportunities around the globe.

PIMCO Acts

We invest our time, skills and expertise to drive meaningful impact in the communities where we work and live.

PIMCO Advocates

We take leadership on behalf of the category as thought leaders, strategic partners and in support of our clients.

HUNGER & GENDER EQUALITY

- **Focus up Partnership: GFN**
- **Focus up Partnership: Gender Equality**
- Community Giving/Grants
- Bill Gross Award
- Disaster Relief
- Employee Match
- Employee Choice Awards

The Global FoodBanking Network®

- Global Month of Volunteering
- **Share the Harvest**
- Local Volunteering
- Pro Bono Programs
- Board Placement Program
- Team Building Events

- IMPACT2030
- UN SDGs
- **Girls Who Invest**
- Women & Investing
- CEO Action for Diversity & Inclusion
- External Partners

girls who invest

THE CIVIC 50 WINNER 2016–2019

THE CIVIC 50 POINTS OF LIGHT

PIMCO has been named to the Points of Light Civic 50, a ranking of the 50 most community-minded companies in the U.S.

FOUNDING PARTNER — IMPACT 2030

PIMCO is a founding member of IMPACT 2030, a private sector-led coalition that is committed to mobilizing employee volunteers to achieve the UN Sustainable Development Goals (SDGs) by the year 2030. We align our Purpose at PIMCO strategic initiatives around **SDG 2 Zero Hunger** and **SDG 5 Gender Equality**.

We are a recipient of the **IMPACT2030 2019 Innovation Award** recognizing the impact of Purpose at PIMCO's work.

2 ZERO HUNGER

5 GENDER EQUALITY

Source: PIMCO. **For illustrative purposes only.**

The Civic 50 recognizes the 50 most community-minded companies in the nation each year as determined by an annual survey. We also report best practices each year to provide a framework for good corporate citizenship. The Civic 50 honorees are public and private companies with U.S. operations and revenues of $1bn or more. They rank only their U.S. community engagement programs, as outlined on their website: https://www.pointsoflight.org/the-civic-50/. This award is open to all companies with $1B or more in revenue. This award was not paid for by PIMCO.

The IMPACT2030 Innovation Award launched in 2018 and anchored by Sustainable Development Goal (SDG) 17, Partnership for the Goals, the IMPACT2030 Innovation Awards highlight best-in-class approaches to connecting the skills, passion, expertise of their people toward advancing the SDGs through innovative pro bono, skills-based and hands-on employee volunteer programs. PIMCO was nominated and selected for this award by IMPACT2030 for aligning philanthropy and volunteerism with SDG 2. PIMCO did not pay for this award. https://www.impact2030.com/impact/docRepo/impact2030/files/4241569343303IMPACT2030_InnovationinHumanCapital_19.09.25.pdf

Publications

- **PIMCO Climate Bond Strategy: Investing in Sustainable Solutions**
  PIMCO Climate Bond Strategy aims to help foster the transition to a net zero carbon economy while seeking positive financial returns.
  DECEMBER 2019
- **SDG Bonds: Their Time Has Come**
  The emergence of bonds linked to sustainable development goals signals that fixed income markets have entered a new phase.
  OCTOBER 2019
- **UN Climate Summit: Business and Investors Lead on Action**
  Businesses and investors are moving ahead with progressive actions despite policy vacuums.
  SEPTEMBER 2019
- **Three ESG Takeaways from PRI in Person 2019**
  This year, in Paris, we were excited to participate as an industry expert and to engage with attendees on ESG (environmental, social, and governance) investing in fixed income.
  SEPTEMBER 2019
- **Managing Climate Risk in Investment Portfolios: PIMCO's Approach**
  We designed seven proprietary tools to assess, manage, and help mitigate climate-related risks in our portfolios, and to harness potential opportunities in the evolving market landscape.
  JULY 2019
- **ESG Investment Management: Responsibility, Research, Results**
  We believe ESG investing no longer needs to be an either/or paradox – either financial return or sustainable development. Investors can pursue both.
  MAY 2019
- **Navigating ESG: What to Demand and What to Avoid**
  An in-depth look at how ESG is integrated into traditional asset management.
  MAY 2019
- **Impact Investing: Imagining the Next Evolution in Economies and Finance**
  Impact investing is anchored in a fundamental belief that over the long term, healthy societies and healthy markets go hand-in-hand.
  FEBRUARY 2019
- **Dispatch from Davos: Retooling Globalization**
  By better embedding sustainability considerations into markets and business and investing, globalization could become a more stable, sustainable and inclusive process.
  FEBRUARY 2019
- **PIMCO's Environmental, Social and Governance (ESG) Investment Policy Statement**
  This ESG Investment Policy Statement details PIMCO's commitments to: the integration of ESG factors into our broad research process, sustainable investment solutions offered to our clients, our engagement with issuers on sustainability factors and our climate change investment analysis. This statement is designed to apply broadly to our firm's long-term investment process and to our dedicated ESG investment solutions. This statement is reviewed at least annually and is updated periodically to reflect material changes.

Conclusion

We firmly believe active management is the most effective and responsible way to invest sustainably in fixed income.

As we enter this new decade, we are ambitious in our efforts to actively engage more bond issuers and continue to lead industry groups. We will be back next year to report on our progress. We hope you'll stay engaged with us along the way.

We invite investors to consider allocating a portion of their bond portfolios to the rapidly expanding ESG and climate bond market, particularly if their long-term objectives include targeting the the UN's Sustainable Development Goals (SDGs) and driving the transition to a net zero carbon economy, as well as the potential for attractive investment returns and thoughtful risk management.

To stay informed on how we as bondholders are bringing ESG into action, please see our latest thought leadership and investment strategies at PIMCO | ESG Investing in Fixed Income.

"We will be back next year to report on our progress. We hope you'll stay engaged with us along the way."

Disclosures

All data is as of 31 December 2019, unless otherwise noted.

The terms "cheap" and "rich" as used herein generally refer to a security or asset class that is deemed to be substantially under- or overpriced compared to both its historical average as well as to the investment manager's future expectations. There is no guarantee of future results or that a security's valuation will ensure a profit or protect against a loss.

Socially responsible investing is qualitative and subjective by nature, and there is no guarantee that the criteria utilized, or judgment exercised, by PIMCO will reflect the beliefs or values of any one particular investor. Information regarding responsible practices is obtained through voluntary or third-party reporting, which may not be accurate or complete, and PIMCO is dependent on such information to evaluate a company's commitment to, or implementation of, responsible practices. Socially responsible norms differ by region. There is no assurance that the socially responsible investing strategy and techniques employed will be successful. **Past performance is not a guarantee or reliable indicator of future results.**

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. **Sovereign securities** are generally backed by the issuing government. Obligations of U.S. government agencies and authorities are supported by varying degrees, but are generally not backed by the full faith of the U.S. government. Portfolios that invest in such securities are not guaranteed and will fluctuate in value. 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. **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. **Mortgage- and asset-backed securities** may be sensitive to changes in interest rates, subject to early repayment risk, and while generally supported by a government, government-agency or private guarantor, there is no assurance that the guarantor will meet its obligations. **REITs** are subject to risk, such as poor performance by the manager, adverse changes to tax laws or failure to qualify for tax-free pass-through of income. Income from **municipal bonds** for U.S. investors is exempt from federal and may be subject to state and local taxes and at times the alternative minimum tax. **Management risk** is the risk that the investment techniques and risk analyses applied by PIMCO will not produce the desired results, and that certain policies or developments may affect the investment techniques available to PIMCO in connection with managing the strategy. Investors should consult their investment professional prior to making an investment decision.

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 suitable 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. Strategy availability may be limited to certain investment vehicles; not all investment vehicles may be available to all investors. Please contact your PIMCO representative for more information.

This material contains the opinions of the manager and such opinions are subject to change without notice. This material has been distributed for informational purposes only and should not be considered as investment advice or a recommendation of any particular security, strategy or investment product. Information contained herein has been obtained from sources believed to be reliable, but not guaranteed.

PIMCO as a general matter provides services to qualified institutions, financial intermediaries and institutional investors. Individual investors should contact their own financial professional to determine the most appropriate investment options for their financial situation. This is not an offer to any person in any jurisdiction where unlawful or unauthorized. | **Pacific Investment Management Company LLC**, 650 Newport Center Drive, Newport Beach, CA 92660 is regulated by the United States Securities and

CMR2020-0227-440684

pimco.com/esg

PIMCO

67402