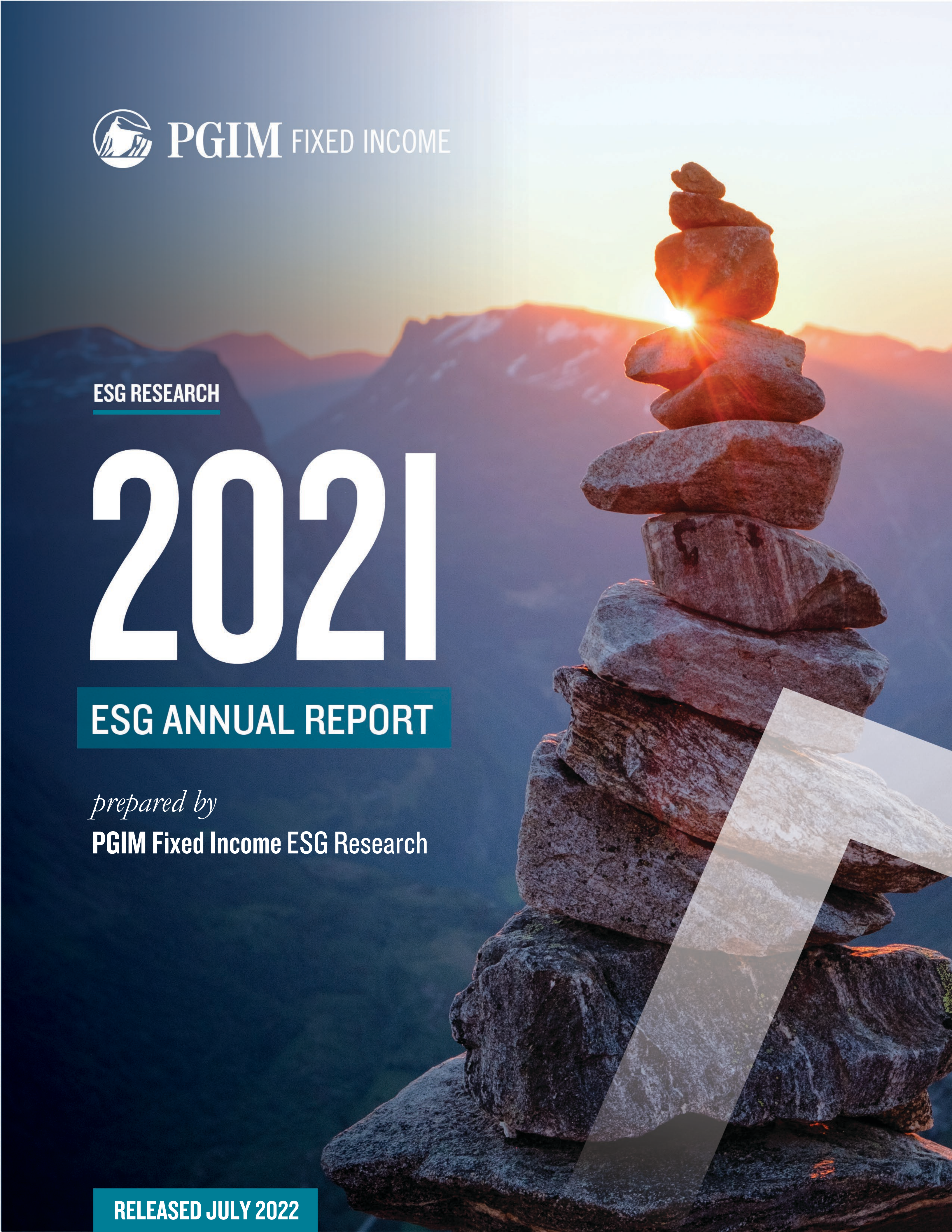

PGIM FIXED INCOME

ESG RESEARCH

2021

ESG ANNUAL REPORT

prepared by

PGIM Fixed Income ESG Research

RELEASED JULY 2022

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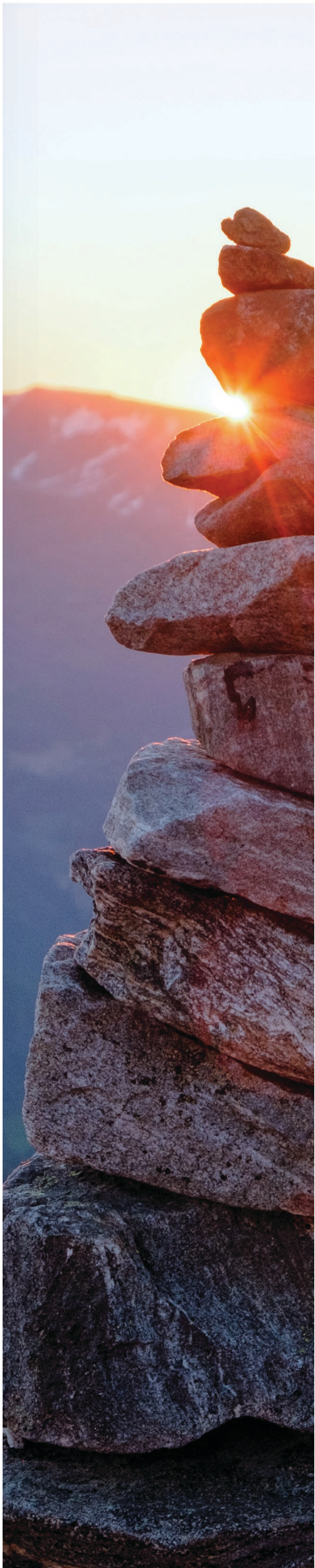

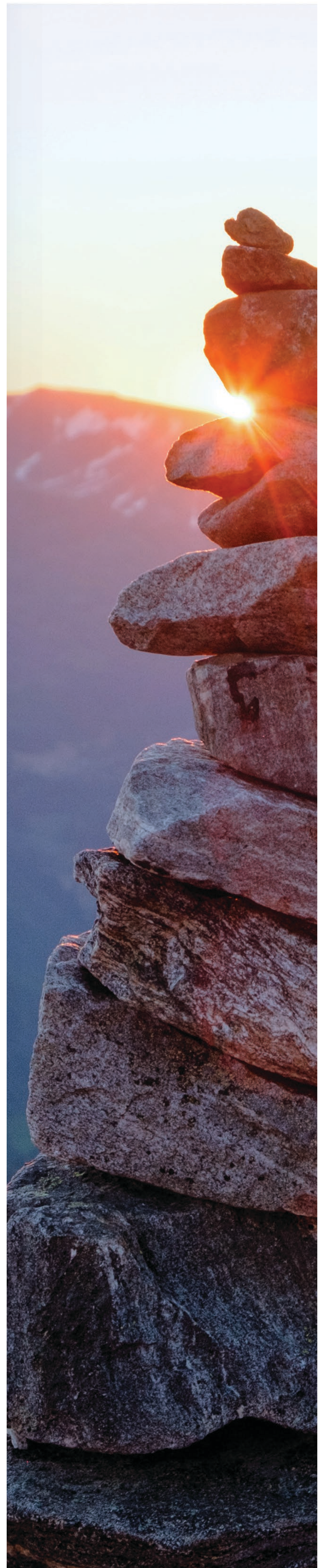

FOREWORD

This past year brought a number of global challenges that have tested us, not only as members of society but as investors as well. Current events demonstrate the need to continue evaluating and evolving our approach to Environmental, Social and Governance (ESG) and our commitment to clients' environmental and societal goals is underscored by the ongoing evolution in our approach to ESG as described in the 2021 PGIM Fixed Income Annual ESG Report.

With the increase in data availability and regulatory requirements, we enhanced our engagement tracking, analytics, and ESG reporting standards. In anticipation of further ESG-related debt issuance, we also extended our assessment frameworks for green, social, and sustainability bonds and sustainability-linked instruments. Additionally, we have been developing solutions to address clients' growing commitments to Net Zero.

Our commitment to clients requires enhanced infrastructure, and we continue to expand the global ESG analyst team under newly-appointed co-heads of ESG research, both of whom hosted the first episode of our recently launched podcast, "Fixed on ESG." The scale of this evolution also requires efficiency, and we recently streamlined our governance structure to include two committees: an ESG Policy Committee, which focuses on high-level decisions and oversight, and an ESG Ratings Sub-Committee, which oversees our expanding ESG research efforts.

We believe that our emphasis on research demonstrates its importance in our investment process and that this research enhances our ability to provide clients with clear choices in expressing their ESG policies, views, and beliefs. In traditional portfolios, we believe evaluating credit-material ESG factors for each issuer can potentially lead to higher risk-adjusted excess returns. For clients seeking an additional step in pursuing their environmental and societal goals, our ESG Impact Ratings are available and reflect our view of the issuer's impact on the environment and society, as well as whether we believe its debt is appropriate for investment in portfolios which apply ESG Impact Rating constraints.

ESG is multifaceted with a lot of shifting regulatory constructs from numerous regulatory bodies; however, we are committed to helping our clients navigate these challenges and achieve their ESG ambitions through constant improvement. In addition to future editions of our annual report, we'll continue publishing materials that provide perspective on our approach and demonstrate our steadfast commitment to aiding clients' progress towards their ESG objectives.

Sincerely,

MIKE LILLARD, CFA

Head of PGIM Fixed Income

ABOUT PGIM FIXED INCOME

PGIM Fixed Income is a global asset manager offering active solutions across fixed income markets for institutional clients, affiliated insurance companies, mutual funds, and managed accounts, as well as specialised products and customised solutions.

PGIM Fixed Income's culture is centred around mutual respect, trust in each other, collegiality, teamwork, meritocracy, intellectual honesty, transparency, and an unwavering commitment to our clients.

Our business model is aligned with our mission to provide consistent, superior risk-adjusted returns and top-quality service to our clients and to generate superior value for our stakeholders.[1]

Accordingly, our strategy and objectives are designed with a consistent focus on:

- Protecting and evolving the strength of our investment culture, processes, and philosophy with the goal of generating consistently strong investment performance;
- Demonstrating commitment to our clients by being both proactive and highly responsive;
- Building and refining our product mix to meet market needs;
- Refining our global distribution strategy;
- Integrating our business globally;
- Investing in technology and infrastructure to support growth; and
- Focusing on talent and culture.

Our philosophy hinges on investing for the long term with fundamental research-driven security selection at the heart of everything we do. We believe that diversified portfolios, built through the integration of macroeconomic, credit, quantitative, and ESG analysis—coupled with an emphasis on risk management—can achieve consistent excess returns with high information ratios.

We seek to generate alpha from multiple sources through active allocation, primarily in credit. Risk budgeting is central to our approach, with allocations made within portfolio-specific "risk budget" thresholds.

As a global fixed income manager, we have the resources and ability to strategically hire the individuals and develop the infrastructure needed to support our business objectives.

[1] There is no guarantee that this objective can be achieved.

ESG PHILOSOPHY AND APPROACH

As a fundamental research-driven active fixed income manager, we believe that ESG issues can affect the performance of investment portfolios. Therefore, we recognise the importance of integrating environmental, social and governance factors in our global investment research, decision making, and portfolio management processes.[2] We consider relevant ESG factors in our investment process as part of working toward our ultimate fiduciary duty—searching for the highest risk-adjusted returns for our clients based on their return objectives.[3] The core tenets of our ESG philosophy and approach are summarised below.

- We believe that ESG factors impact the performance of investment portfolios, and we have integrated them into our investment analysis and decision-making processes for both traditional and ESG strategies.
- We believe credit risk cannot be disaggregated into individual components and must be assessed holistically. Our credit ratings incorporate analysis of credit-material risks and opportunities arising from ESG factors alongside other risk factors to reflect our overall fundamental credit view of the issuer. This is done for all credit strategies that we manage.
- Separately, we have observed that an issuer's ESG impact on the environment and society do not always create material credit risks for that issuer, even when those ESG impacts are significant. Our proprietary ESG Impact Ratings assess negative and positive impacts of issuers on the environment and society—whether or not they are immediately credit-material—and determine their eligibility for investment by our ESG strategies.
- We believe our 100+ fundamental research analysts, economists and ESG specialists are best placed to analyse an issuer's ESG characteristics, and as such, we conduct our own ESG research and risk assessments as part of our credit analysis. We have developed ESG Impact Ratings as a proprietary tool to help clients invest according to their ESG/sustainability preferences.
- We use issuer engagement to communicate our views on fundamental and ESG issues. We believe in disclosing our ESG Impact Ratings/rankings to issuers, when requested, creating opportunity for dialogue around the potential increase in funding costs for issuers who lag peers on ESG factors and the potential impact on future market demand for their new issue bonds.
- As a signatory to the Principles of Responsible Investment (PRI) since February 2015, we are committed to implementing the PRI.

As one of the world's largest active fixed income managers[4], we cater to a variety of client needs, and a growing number of these clients demand a robust approach to ESG and stewardship to enable them to fulfil their ESG obligations and aspirations. Integrating ESG and stewardship into our investment process and culture is essential to our mission of pursuing consistent superior risk-adjusted returns and providing excellent service to our clients and value for our stakeholders.

We manage assets across a wide range of products and vehicles, and our ESG philosophy remains consistent throughout: we believe in providing clients with an explicit choice of how to express their policies, views, and beliefs through their investments. As such, we believe in providing our clients with a choice of investing in strategies that a) integrate credit-material ESG factors within our credit research and relative value analysis or also b) evaluate the potential impact of their investments on the environment and society and meet their impact objectives.

[2] Where consistent with applicable law and regulation.
[3] There is no guarantee that this objective can be achieved.
[4] Pensions & Investments' annual ranking and issue on the Largest Money Managers, which was published on 6 June 2022 ranks Prudential Financial as #2 for Managers of active U.S. bond assets; #3 for Managers of emerging market debt assets; #4 for Managers of core bond strategies; and #5 for Managers of active global/non-U.S. bond assets.

MAJOR ESG DEVELOPMENTS IN 2021

Governance Structure

Our ESG approach has historically been governed by the PGIM Fixed Income ESG Committee. However, given the scale of ESG initiatives we are undertaking, the increase in client and regulatory requests around ESG, and the growth in our dedicated ESG specialist team, we saw an opportunity to evolve our process by restructuring the PGIM Fixed Income ESG Committee into two separate committees—the ESG Policy Committee and the ESG Ratings Sub-Committee (together the "ESG Committee")—which are supported by three working groups: Client Advisory Group, Portfolio Management, and Technology and Data.

The ESG Policy Committee, as the name suggests, focuses mainly on high-level policy decisions, although it has oversight of the related workstreams and the Ratings Sub-Committee, whereas the ESG Ratings Sub-Committee is primarily responsible for overseeing the methodology and quality of our ESG research. For more information regarding the responsibilities and composition of the committees, see Governance, Resources and Incentives to Support ESG Stewardship Section.

Expansion of ESG Research Team

Over the course of 2021, our ESG Research Team grew from 2 to 5 ESG analysts, emphasising our commitment to ESG. These ESG analysts are split between London and Newark, New Jersey, and average nearly 10 years in the industry. As of 1 February 2022, Eugenia Unanyants-Jackson, formerly head of PGIM Fixed Income ESG Research, assumed the newly-created role of Global Head of ESG for PGIM. Building on the strong ESG foundation Eugenia helped establish, John Ploeg and Armelle de Vienne, previously regional leads on the ESG research team, have assumed the roles of co-heads of ESG Research for PGIM Fixed Income. As co-heads, they are responsible for managing further strategic integration of ESG across PGIM Fixed Income. They are both members of the PGIM Fixed Income ESG Policy Committee and the ESG Ratings Sub-Committee.

Green, Social and Sustainability Bond Framework

We believe that ESG-labelled bonds (e.g., green, social, sustainability, sustainability-linked, SDG bonds), when used to finance projects and measures that positively impact the environment and society, have a growing role in transitioning towards a sustainable economy and a sustainable environmental and social ecosystem. Unfortunately, we remain sceptical of the quality of many such bonds being issued today. As a result, we participate selectively in issuances of ESG-labelled bonds. However, in response to the growth in ESG-labelled bonds, we developed a proprietary framework in 2020 (which is linked to our ESG Impact Ratings) for assessing the impact of individual Green Bonds.

Under our proprietary framework, we assess both the issuer's credibility with respect to the Green Bond, and the potential incremental positive impact the issuance can have for the issuer or its industry by replacing "brown" assets or activities with "green" assets or activities. This assessment results in an uplift (or a lack thereof) of a Green Bond's ESG Impact Rating versus the ESG Impact Rating of its parent issuer. We distinguish between High, Higher, Medium, Low and No Impact Green Bonds. After issuance, Green Bond ratings are reviewed alongside the issuer's other ratings and may be revised in light of actual activity (e.g., if a Green Bond has low credibility at issuance, but the issuer's actual activity post-issuance clearly shows it is acting credibly, or vice versa).

In 2021, we expanded this framework to include social and sustainability bonds.

We believe this approach allows our ESG strategies to invest in more impactful Green, Social and Sustainability bonds of issuers that would otherwise be ineligible for purchase based on the Impact Rating of the parent issuer, thus adding to the positive environmental and social impact of our investments.

When it comes to Sustainability-Linked Instruments, we have a slightly different approach. Given that the uses of proceeds are not specifically geared towards funding environmental or social activities, the utility of the Sustainability-Linked Instrument depends on the degree to which the targets will improve the issuer's ESG profile. Such improvement is a function of the KPIs' materiality to the business, as well as the additionality that would come from achieving the targets set for them. Thus, our framework looks to assess the ambition and materiality of the KPIs, as well as strength of the structural features, in order for the instrument to receive an uplift relative to the parent ESG Issuer Impact Rating. At the same time, targets are typically set at the issuer level for these instruments. As a result, if a Sustainability-Linked Instrument leads to an issuer setting new, high-quality targets, much of the benefit of this would actually be reflected in the issuer-level rating, which limits the amount of uplift that can then be applied to that specific instrument. Again, we remain sceptical of many of the Sustainability-Linked Instruments we see issued today, although we acknowledge that this is a new and evolving market.

From a credit and relative value perspective, we analyse green/social/sustainable bonds as we would analyse any other corporate investment, and if we believe we are being paid for the credit risk we would be happy to invest in both ESG and non-ESG strategies; however, if a company is issuing at a too tight spread level just because the bond is "green-labelled", and we don't believe the issuer is having meaningful impact, we may not see that as an attractive investment opportunity. We generally would not pay a premium (i.e., tighter spread) to purchase a Green Bond versus non-green bonds of the same credit, unless it is more environmentally or socially impactful in some form relative to the existing issuance, or unless this helps meet clients' specific ESG objectives (e.g., a client has specific targets for Green Bonds).

ESG Commitments and Collaborations

Regarding collaborative engagements, we are co-chairs of the Structured Finance Association's (SFA) Structured Finance Disclosure Framework Working Group, and in 2021 we joined the Center for Real Estate Finance Council's (CREFC) Sustainability Steering Committee and the Transparency Subcommittee. We also sit on the European Leveraged Finance Association (ELFA)'s ESG Committee, which seeks to increase and standardise ESG disclosures in leveraged finance.

Enhancing ESG Infrastructure

Engagement Tracking

As data becomes increasingly available and clients want to be kept abreast of our ESG activities, we are taking specific steps to enhance our technology infrastructure to be able to monitor, measure and leverage the engagement-related information we produce. In 2021, one such step included the development of a cloud-based platform that could better record our engagement activities and allow us to store, analyse, report and act on the interactions in a more efficient manner. This system is integral to supporting our engagement efforts, especially as we look to emphasise and increase these efforts in the future.

Net Zero Portfolio Analytics

Clients are increasingly asking us to assess their portfolios' exposure to climate risks and alignment with Net Zero. While we can conduct one-off requests and analyses through our current systems, we recognise the value of having a more efficient system. With that in mind, the ESG research team has been developing a dedicated Net Zero Framework that brings together data from multiple sources—both forward-looking and backwards-looking—to assess issuers' targets and performance on emissions reductions in a consistent way. The data used in the framework will be supplemented with our own fundamental research where that data tells a conflicting story. Alongside the creation of this framework, our Technology Solutions Group has been diligently developing a platform through which we should eventually be able to systematically assess our clients' portfolios' alignment with Net Zero using this proprietary methodology.

Regulatory Reporting

Many of our accounts, including our UCITS funds, are subject to increased disclosure and reporting requirements as outlined by Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector ("SFDR"). As such, we built out our reporting capabilities throughout 2021 and continue to do so in 2022. We have been conducting due diligence on data vendors to assist in reporting disclosures and are thoroughly assessing the data quality at an issuer level and at an aggregated portfolio level. This required close collaboration throughout the year between the ESG research team, Technology Solutions Group, and our Project Management Office.

GOVERNANCE, RESOURCES, AND INCENTIVES TO SUPPORT ESG STEWARDSHIP

In 2021, we saw an opportunity to improve our PGIM Fixed Income ESG governance framework and oversight. The changes were intended to reflect the growing focus on ESG, the need to be nimble and constantly enhance our process and integration of ESG in response to client and regulatory clarity, and the desire to include multiple stakeholders across the firm as ESG increasingly impacts each of their day-to-day responsibilities. As such, PGIM Fixed Income has split responsibilities across two committees – the ESG Policy Committee, which remains the top governance and decision-making body for ESG and climate-related topics, and the ESG Ratings Sub-Committee. The ESG Policy Committee is further supported by three ESG Working Groups, each considering ESG issues from their respective perspectives:

- Client Advisory Group (CAG)
- Portfolio Management
- Technology and Data

ESG POLICY COMMITTEE

ESG RATINGS SUB-COMMITTEE

Approves and decides on:
- ESG Research Frameworks
- ESG Impact Ratings

Considers ESG from the perspective of:
- Credit Research
- Macro Economic Research
- Securitised Products Research
- Municipal Research
- ESG Research

Feedback and recommendations are shared between both groups related to:
- ESG implementation in credit, economic, and securitised products research;
- ESG research/data vendors;
- engagement activities; and
- industry initiatives and collaborations.

ESG CLIENT ADVISORY (CAG)

Considers ESG from the perspective of:
- Client Advisory
- Client Management
- Consultant Relations
- Product Strategy
- Marketing
- Reporting
- Communications

Feedback and recommendations are shared between both groups related to:
- sales and marketing;
- product strategy;
- client management;
- client reporting; and
- industry initiatives.

ESG PORTFOLIO MANAGEMENT

Considers ESG from the perspective of:
- Portfolio Management (investment desks)
- Portfolio Analytics
- Risk Management

Feedback and recommendations are shared between both groups related to:
- ESG implementation in portfolio; and management process
- ESG data and analytics.

ESG TECHNOLOGY AND DATA

Considers ESG from the perspective of:
- Technology and Systems
- Project Management
- Data Governance
- Portfolio Analytics

Feedback and recommendations are shared between both groups related to:
- ESG data
- Technology, analytics and visualisation tools;
- ESG reporting; and
- ESG data vendors

WORKING GROUPS

ESG Policy Committee

Co-Chairs

MIKE LILLARD

Head of PGIM Fixed Income

JOHN VIBERT

President of PGIM Fixed Income

Responsibilities

- Serves as the top governance and decision-making body for ESG and climate related topics
- Steers and guides PGIM Fixed Income's ESG strategy and approach
- Makes decisions on material ESG business matters
- Approves ESG-related policies
- Reviews ESG Ratings Frameworks and ESG Ratings Sub-Committee decisions
- Approves ESG-related external submissions and reports
- Sets direction for internal work on emerging ESG topics
- Approves proposals to join new industry bodies or initiatives
- Approves addition/replacement of ESG data, research, and ratings vendors
- Ensures its decisions are communicated throughout the organisation

Operations and Composition

- Reasonably small in size to enable healthy debate
- Comprised of senior leaders and decision makers who are able to make decisions, communicate these decisions to their teams, and oversee implementation
- Committee members include Head of PGIM Fixed Income, President of PGIM Fixed Income, Co-Chief Investment Officers, Head of Credit, Co-Heads of ESG Research, Head of Global Investment Grade Credit, Head of Emerging Market & FX, Chief Business Officer, Head of Client Advisory Group, Head of Product Management, Head of EMEA
- Average years of experience[5] of committee members: 25 years
- 23% female members

[5] For investment professionals on the ESG Policy Committee it relates to investment experience and for non-investment professionals it relates to the number of years of experience they have had in the industry.

ESG Ratings Sub-Committee

Chair

RICHARD GREENWOOD

Head of Credit

Responsibilities

- Approves ESG Ratings Frameworks
- Makes decisions on matters related to ESG integration in credit analysis and ESG Impact Ratings
- Oversees ESG Impact Ratings assigned by the analysts and reviews any challenges to ratings from Portfolio Managers, CAG, clients or ESG team
- Oversees development of approach to climate risk and stewardship
- Provides feedback and recommendations to ESG Policy Committee on matters related to ESG research, ESG integration into credit and macro-economic analysis, ESG Impact Ratings, and ESG engagements
- Provides guidance and oversight to analysts
- Communicates the Sub-committee's decisions to respective research teams and serves as a liaison between research teams and the ESG Policy Committee

Operations and Composition

- Comprised of senior representatives of research teams across Investment Grade, High Yield, Emerging Market, Municipals, Securitised Products, Macroeconomic, and ESG from our Newark, London and Tokyo offices to ensure diversity of thought
- Average years of investment experience of committee members: 27 years
- 33% female members

While the new Committee structure was instituted in December 2021, the first few months have already proven that the new structure is effective in discussing key items such as:

- Setting agenda and providing guidance to ESG Ratings Sub-Committee and Working Groups
- Approving a framework designed to comply with SFDR's definition of 'Good Governance'
- Providing additional guidance to credit analysts on how to handle issuers with low ESG disclosures

In addition, the boards of both our UK and Dutch entities have each designated a specific member to oversee ESG responsibilities, providing quarterly updates on ESG progress the firm is making.

Resources

Our research teams have ultimate responsibility for assessing ESG Risks and Opportunities, including climate-related issues, and assigning ESG Impact Ratings to each issuer they cover. As the impact ratings framework evolves, the focus on ESG factors by our analysts and portfolio managers increases as they establish and maintain ESG Impact Ratings on over 1,000 issuers, validate these ratings across sectors and fixed income asset classes, and incorporate these ratings in ESG-focused portfolios.

In 2021, we built out the ESG research team to include 5 ESG specialists, with an average of nearly 10 years of experience, and are continuing to grow the team in 2022. In addition to these dedicated ESG specialists, we are able to leverage one of the largest teams of credit analysts and economists in the industry to assess ESG factors across the spectrum of the global fixed income markets.

The ESG research team's primary responsibilities include:

- Maintaining and enhancing the consistent implementation of PGIM Fixed Income's ESG integration approach, including the processes used to analyse ESG risks and opportunities, as well as the framework for applying its ESG Impact Ratings;
- Undertaking sector, thematic, and issuer-level ESG research across all fixed income asset classes and regions;
- Partnering with credit research analysts, economists, and portfolio managers to identify and incorporate material ESG factors into their investment analyses and decision making;
- Engaging with issuers on ESG factors, both individually and in partnership with credit research analysts and economists;
- Tracking ESG-related developments from a market, regulatory, and thematic perspective, and formulating strategies for PGIM Fixed Income to adapt accordingly;
- Analysing third party ESG data and research, working with the firm's technology support group to constantly improve ways of accessing and applying this data, and investigating potential new sources of such information;
- Producing ESG-related thought leadership for use by PGIM Fixed Income and our clients;
- Interfacing with peers, industry groups and other external ESG organisations; and
- Participating in the design and launch of new ESG products and strategies.

At the end of 2021, our credit research team comprised 136 research analysts with an average of 15 years of experience in their respective sectors and industries, making them well-placed to keep abreast of the latest ESG, regulatory, and industry developments for the issuers they cover.

The following chart highlights the levels of collaboration between our fundamental research analysts and ESG specialists.

CREDIT ANALYST/ ECONOMIST ROLES	CREDIT ANALYST/ ECONOMIST + ESG SPECIALIST COLLABORATION	ESG SPECIALIST ROLE
Financial, operational and economic analysis—industry/country overview, financial reports, third-party research	**Fundamental Research** Consideration of how much ESG affects credit quality	Industry/country level ESG research, data, news, regulatory and political developments, academic and third-party research
Communication with individual issuer leadership teams to ask key credit and ESG questions/updates	**Due Diligence** Engagement with issuers on credit fundamental and ESG topics	Review of issuer ESG data and trends; engagement with individual issuer leadership teams on ESG issues
Financial modelling; assessment of industry/country's overall credit profile and individual issuer's credit ranking	**Analytical Framework** Determination of ESG risk materiality for a credit; ESG impact analysis	Framework for ESG credit risk and ESG impact analysis; key ESG metrics for each asset class
PGIM Fixed Income Credit Rating and ESG Impact Rating	**Ratings** Robust ESG integration process and high-quality ESG Impact Ratings	Monitoring ESG integration into credit analysis and application of ESG impact ratings
Economic, operational and financial data, external ratings, news, regulatory and political changes	**Ongoing Monitoring** Evaluation of key ESG trends, news, regulatory and political changes, and other ESG-related developments	Country, industry and issuer level ESG-related developments

Incentive compensation for investment professionals, including the annual cash bonus, the long-term equity grant and grants under our long-term incentive plans, is primarily based on such person's contribution to our goal of providing investment performance to clients consistent with portfolio objectives, guidelines, risk parameters, and our compliance, risk management and other policies, as well as market-based data such as compensation trends and levels of overall compensation for similar positions in the asset management industry. Given our belief that ESG factors can impact financial performance and relative value, investment professionals' compensation inherently includes their ability to appropriately incorporate these views into their credit assessments and portfolio construction. In addition, an investment professional's qualitative contributions to the organization and its commercial success are considered in determining incentive compensation.

Management of Conflicts of Interest in ESG/Stewardship Activities

Like other investment advisers, we are subject to various conflicts of interest in the ordinary course of our business. We strive to identify potential risks, including conflicts of interest, that are inherent in our business, and we conduct annual conflict of interest reviews. However, it is not possible to identify every potential conflict that can arise. When actual or potential conflicts of interest are identified, we seek to address such conflicts through elimination/disclosure of the conflict, or management of the conflict through the adoption of appropriate policies, procedures or other mitigants.

Further detail around our management and handling of conflicts of interest can be found in the [Appendix](#).

ESG in Risk Management

For Our Investments

The line between ESG risks and other forms of risk is often blurred, and we believe effective credit analysis requires analysis of relevant risks in combination, rather than in isolation. PGIM Fixed Income's senior investment team, comprised of the Head of PGIM Fixed Income, President, Co-Chief Investment Officers, Chief Investment Strategist, heads of the sector teams, and heads of macroeconomic, credit, securitised products, quantitative analysis and risk management, meets weekly at a "desk heads" meeting to analyse market-wide and systemic risks, including those related to ESG. This may include analysing economic, interest rate, credit spread, market technical, underlying fundamental themes, pandemic, and macro-climate related impacts in each major fixed income sector. The senior investment team develops a PGIM Fixed Income-wide market outlook consolidating these views, which influences the overall risk profile, sector allocation, and duration/yield curve positioning in our fixed income portfolios, depending on the specific strategy.

Relative value decisions, including sizing and hedging, are made by portfolio management in consultation with credit research analysts. Credit research analysts are responsible for confirming that relevant ESG risks and opportunities are reflected in their credit analysis and ratings. ESG factors, including climate-related risks and opportunities, are incorporated in the identification and monitoring of individual credit risks.

ESG constraints are considered when constructing portfolio risk budgets, which are used in our daily risk surveillance. Guideline constraints for ESG dedicated accounts and accounts with specific ESG-related restrictions are monitored by compliance as part of their daily process.

Additionally, our risk management framework combines monitoring the risk of individual credits and the risk of the overall portfolio. Market Implied Rating curves that drive our risk analytics are recreated each night based on market spread levels. These curves are then used to assign CUSIP-specific ratings based on the spread and tenor of each bond. In this framework, if an individual credit, industry, or country trades with a spread premium due to ESG or other factors, it would be assigned a lower credit rating in our risk system. The lower rating would result in tighter thresholds and/or bigger stress shocks being applied to those credits. While not a specific ESG filter, if market forces cause names with less favourable ESG characteristics to trade with wider spreads, they will be assigned lower ratings and higher risk weights in our system.

Selection and Monitoring of Service Providers

PGIM Fixed Income uses third-party providers for ESG data, research, and screening services. We prefer to do engagement ourselves and do not use third-party providers for stewardship services. While the sourcing of raw data from the ESG third-party providers is highly useful to us, we believe that engagement and stewardship is extremely nuanced, and we seek to ensure that our feedback is appropriately communicated to issuers. We do not engage simply for the sake of engagement. As one of the largest fixed income managers, we believe that our engagement is more meaningful when it is linked to tangible investment decisions, which is why we look to maintain autonomy over our stewardship activities.

PGIM Fixed Income monitors its ESG service providers, which, besides significant initial due-diligence, also includes continued assessment of the quality and appropriateness of their services, their coverage and screening parameters, the quality of data and research received, the robustness of the providers' research, ratings and screening methodologies, technical support, data feed capabilities, and the quality of customer service.

We provide regular feedback to our providers through ongoing communication on specific issues, as well regular service review meetings. We proactively engage with our ESG providers to help improve data coverage and functionality of their platforms, as well as to question and correct, when necessary, any inaccuracies we may find in their research. For instance, on several occasions we noticed that data of a parent was incorrectly being attributed to a subsidiary with an entirely different business model. In these cases, we have spoken directly with the data provider to request review and correction. We believe that this approach also benefits others in the industry that similarly rely on the data.

In addition to monitoring our existing providers, we are actively exploring new sources of ESG data and insights in the market, with a particular focus on climate and carbon-related data and analytics, which supports our assessment of the existing providers and their ability to meet our needs.

In general, we find that our current ESG data and research needs cannot be fully met by any of the third-party providers, with certain fixed income asset classes such as high yield, bank loans, emerging market corporates, and securitised products experiencing particularly insufficient ESG coverage. However, we acknowledge that historically this has been partly due to the lack of respective disclosures on the issuer side, and is not always due to the shortcomings of any particular data provider. PGIM Fixed Income actively engages with issuers, banks, trade bodies, and regulators to encourage relevant and consistent ESG disclosures. At the same time, as we see disclosures improve in many markets, we are also very actively engaging with data vendors – both directly and via industry groups such as the European Leveraged Finance Association – to encourage vendors to capture this new data and expand their coverage beyond the main equity indices.

ESG INTEGRATION

In order to frame our approach to ESG integration, it's important to first characterise our understanding of ESG risks and opportunities. We define "ESG risk" and "ESG opportunity" as an environmental, social or governance event or condition that could directly cause a material negative or positive impact on the financial and/or economic value of a specific investment.

In line with our fundamental, bottom-up approach to credit analysis, analysts seek to form a holistic view of an issuer's risk by considering all factors they believe to be credit-material. This includes ESG factors. Not all ESG factors are deemed credit-material for every issuer, as they can depend on the issuer's industry and activities, as well as its unique circumstances. However, where analysts determine ESG factors are likely to be credit-material, we take these factors into account alongside all other factors we consider credit-material as part of our standard credit assessment process. This is true for all portfolios we manage.

In conducting their research, analysts review information related to ESG factors from a wide range of sources. These sources vary depending on the issuer, but may include the issuer's own materials, third-party ESG research and data providers, and alternative data sources (e.g., NGO analyses, governmental and inter-governmental studies, etc.). Analysts may also supplement this information through engagement with the issuer.

Although analysts' views are often informed by quantitative metrics, ESG evaluations typically involve a significant degree of qualitative judgement, as with many other types of risks and opportunities. Analysts then incorporate any ESG factors—negative or positive—that they feel are likely to be credit-material into their fundamental credit ratings, which are a key factor in the relative value assessments used by portfolio managers to evaluate the overall relative attractiveness of potential investments.

CORPORATE DEBT

EUROPEAN AUTO MANUFACTURER

The firm has a history of control failures and emissions scandals, as well as a complicated shareholder and board structure that regularly puts management in conflict with unions and the founding family. While controls and compliance have been improved significantly in recent years, there has been very limited progress on governance reforms since the appetite for change amongst the shareholders is very limited. Indeed, when an opportunity for reform arose as part of the IPO of a major business unit, the family shareholder chose an approach that largely preserves the existing structure. We believe that the governance failures at the top of the firm are ultimately responsible for past scandals, as well as more recent executive turnover and management disruption. These governance problems constrain our ratings as we believe the risk of unexpected negative events is notably higher than at peer firms.

Despite the governance issues, the firm has an ambitious electric vehicle strategy, pushing pure Battery Electric Vehicles (BEVs) over less environmentally friendly Plug in Hybrid Vehicles (PHEVs), management target 20% global BEV penetration by 2025 and 50% in 2030. The firm will develop no new conventional powertrain cars after 2026. EVs are delivered to customers with net zero lifetime emissions (including carbon offsets) and the wider firm has a 2050 net zero commitment with meaningful 2025 and 2030 interim targets. We think that the strategy is credible and likely to be a credit positive in the long run through better market positioning.

Outcome: Taken together, we think that the long-term credit benefit of the EV strategy is offset by the governance risks leading to a net negative impact of ESG factors on creditworthiness. Nevertheless, the company's bonds trade significantly wider than peers, at a level that we think compensates the near-term governance risk and does not give sufficient credit for the longer-term strategy. We are a regular buyer of the name in new issue markets and maintain significant overweights in a number of portfolios.

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Governance Analysis

The quality of governance is an important investment consideration. It is incumbent on our analysts to assess governance structures and practices at the issuer level. Our governance analysis is asset class and sector specific and may include the following issues: alignment of interests between management, controlling shareholders and other providers of capital; related party transactions; board quality, effectiveness and oversight; management incentives; audit and accounting issues; quality of risk management; business ethics and conduct issues (e.g., bribery and corruption, anti-competitive practices, and advertising/sales practices); and supply chain sustainability practices. However, we do not employ a "checkbox" approach to assessing governance. Ultimately our aim is to assess whether the company is well run and has sufficient checks in place to limit downside governance risks.

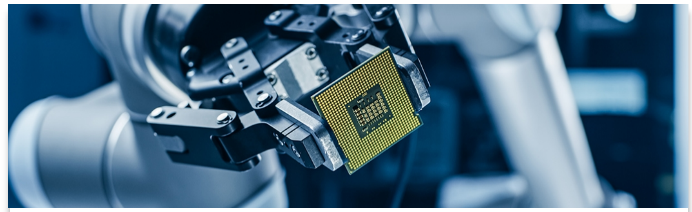
In addition, we have created a dedicated "SFDR good governance" framework. The framework gives analysts guidance on how to evaluate good governance for the purposes of SFDR. It focuses on the four main aspects highlighted in the regulation (sound management structures, employee relations, remuneration of staff, and tax compliance), but also requires analysts to consider any other governance factors they consider material.

Environmental and Social Analysis

The environmental and social factors considered during our research assessment, including ESG risks which may cause a material negative impact on the value of potential investments should those risks occur, will vary depending on the asset class, the industry and/or individual issuer. These include, but are not limited to, the following aspects.

Environmental risks may include climate change (both from a transition and physical risk perspective); pollution of air, water or land; harm to biodiversity through changes in land use, deforestation and ecosystem damage; energy inefficiency; generation and poor management of hazardous and non-hazardous waste; and high water consumption/withdrawal needs, especially in water-stressed areas.

Social risks may include poor occupational health and safety and process safety; poor product safety and quality; privacy and data security weaknesses; poor labour relations and/or



LEVERAGED FINANCE

U.S. TECHNOLOGY COMPANY

The company has a very strong commitment to the environment, demonstrated by the fact that its data centres are 100% powered by renewable energy. The company is outperforming peers such as Apple, Facebook, Google, Microsoft and Salesforce when it comes to operating its data centres efficiently and was recognised across a number of categories in Greenpeace's Clicking Clean Report such as Energy Transparency, Renewable Energy Commitment & Sitting Policy, Energy Efficiency & Mitigation, Renewable Procurement, and Advocacy.

Outcome: The company's focus on data centre energy efficiency was incorporated into the credit assessment and positively supported our decision to participate in a new deal in 2021.

LEVERAGED FINANCE

MINING SERVICES COMPANY

An Australian mining service company was attempting to issue a new 1st lien bond deal. Although leverage was very low, 40% of its revenues came from running coal mines in Australia, which were generally higher cost.

Outcome: Given the uncertainty of where steam coal prices/demand will be in the next 5-10 years, coupled with the negative environmental impact, our rationale for not participating in the deal was well-supported.

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human capital management, including diversity and inclusion; breaches of employee rights/labour rights; human rights violations; child labour/forced labour; and infringements of rights of local communities/indigenous populations.

In addition to considering these potential risks for an issuer's own operations, we also evaluate whether such risks could be material upstream or downstream in an issuer's value chain.

In line with our bottom-up, fundamental credit approach, we view issuers' credit profiles from a holistic perspective, rather than separating them into distinct components that must then be reconciled. Therefore, we do not evaluate issuers' credit-material ESG risks and opportunities in isolation, but, instead, integrate them directly into our fundamental credit ratings and thus into our relative-value assessments. So, our portfolio managers are provided with information on ESG risks and opportunities and take ESG factors into account when making an investment decision. But these are a part of a holistic picture of the risk/opportunity of each issuer's credit, which is considered by PGIM Fixed Income before an investment decision is made. Generally, a higher potential return or credit spread would be required for issuers with credit-material ESG risks and incorporated into the overall risk limits.

Sovereign and Macroeconomic Research

An important focus of our sovereign research is on macroeconomic stability and debt sustainability. ESG issues feature prominently in this analysis and, in particular, the sovereign credit ratings process.

In addition to a fundamental macroeconomic score that captures pertinent macroeconomic strengths and vulnerabilities, our sovereign ratings framework is also based upon a comprehensive assessment of qualitative aspects that guide policy making. These aspects include institutional strengths and weaknesses, potential governance issues, as well as social and environmental issues that could affect relevant macroeconomic variables. Nevertheless, while we carefully consider the relevant ESG issues, we believe these factors should always be considered within a broader macroeconomic context.

EMERGING MARKETS DEBT

ETHIOPIA

Ethiopia suffered from severe ethnic divisions that, in the past, had turned violent. More recently, these tensions escalated into a civil war as PM Abiy Ahmed tried to rein in the activities of the Tigray People's Liberation Front (TPLF). The TPLF had been the dominant force in Ethiopian politics for a long time but was then ousted by Abiy's coalition in the 2018 elections. War started after the TPLF held elections in the Tigray region in September 2020 in defiance of the government's decision to postpone the general elections to 2021 because of Covid. Violence has been rampant, and the population has been suffering to a very large extent. International organisations and other African countries have called for an end of the hostilities but without success.

Outcome: Against this backdrop, we downgraded our internal credit rating in October as fighting continues and the situation remains tense with no lasting peaceful solution in sight.

EMERGING MARKETS DEBT

EL SALVADOR

Material ESG shortcomings can hinder progress towards achieving an IMF program. Governance under President Bukele has undermined institutional credibility, checks and balances, and coherent economic policymaking. The latter has been a focal point with the IMF, following the country's adoption of Bitcoin as legal tender.

Outcome: This prompted us to downgrade our internal credit rating in October and adjust our baseline scenario for the sovereign, which now assumes no IMF-backed adjustment to address macro vulnerabilities.

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Securitised Credit

ESG factors are core to PGIM Fixed Income's evaluation of securitised credit. Given the nature of securitised products, governance is particularly relevant to our credit view, both in terms of the deal's sponsor or originator, as well as the terms of the deal itself. But environmental and social considerations are also important. For instance, environmental hazards and transition risks can have significant impact on the analysis of products backed by real estate. Specific to social considerations, the quality of servicing, as well as the fair treatment of borrowers, are often key components in deals backed by consumer-facing loans.

Transaction Structures and Documentation Packages

Understanding the terms and conditions of indentures, contracts, prospectus supplements and related transaction documents is a central part of our due diligence relating to securitisations.

At the transaction level, our securitisation documentation underwriting begins with the initial offering materials and, depending on the type of transaction, the prospectus/prospectus supplement/private placement memorandum/indenture or equivalent documentation. Amongst other things, we focus on:

- The structural features of the transaction, especially provisions and definitions that may directly or indirectly impact the cashflow waterfall;
- The events of default or any intercreditor rights, as well as any redemption rights provided to the sponsor or equity class;
- Any class of amendments that can occur without noteholder consent;
- Amendments that do require noteholder vote including the quorum requirements, the threshold level for approvals, as well as the mechanical notice process to call a first or second meeting or respond to a written resolution. This is particularly relevant for European securitisations, which tend to have lower quorum requirements than in the U.S.;

SECURITISED CREDIT

UNSECURED SUBPRIME CONSUMER LENDING

From a securitised credit perspective, social and governance factors are core to PGIM Fixed Income's evaluation of all consumer lenders, especially in the unsecured subprime consumer lending subsector. Our issuer engagements focus on whether the loan product design affords good utility for the borrower, the lender, and the securitisation investor. Our assessment of responsible lending includes due diligence on the lender's consideration of a borrower's ability to pay relative to their income, other debts and living expenses, as well as the lender's servicing practices.

In the case of live checks (or loan-by-mail), which is a pre-approved check issued to a person via mail without a full application process, the assessment is more complicated than a regular instalment loan. It is difficult to see the net benefit of a small dollar live check when that person did not apply for one, but easy to see it as a bait for the person to apply for bigger loans down the road. With that as the premise, we generally deduct points for issuers that send live checks unless they can demonstrate that they have instituted processes in place to ensure: 1) the borrower has the ability to pay along with his other outstanding debt, and 2) that the borrower is fully aware of the terms of repayment with proper disclosure.

Outcome: We inquired of an unsecured consumer lender about its loan-by-mail channel because of a recent news report casting its practice as predatory. The company walked us through the underwriting process of identifying the credit-worthy individuals, and current regulatory inquiries on the business resulted in no specific findings. The team also sent us a copy of the loan-by-mail document, which clearly stated the borrower would be entering into a loan agreement once the check is signed, and the attaching required disclosure by law (APR, finance charge, amount financed, total payments, number of payments and amount of each payment). As a result of the engagement, the ESG Impact Rating of the issuer was unchanged.

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- The ability of the sponsor to amend the actual governing documents (e.g., pooling and servicing agreement) to conform to the offering materials, or vice versa;
- Representations and warranties, if any, provided by the seller/sponsor; and
- Rights and responsibilities of key transaction parties including independent third parties such as the servicer, administrative agent, and the trustee.

In the new issue context, depending upon the sector and specific investment opportunity, credit analysts may negotiate transaction terms with issuers and sponsors to improve credit protections and governance on behalf of our clients. We may also request enhanced reporting packages and actively negotiate transparency provisions if we feel the proposed or existing reporting is deficient for our surveillance requirements.

Following the closing of a transaction, we endeavour to receive the transaction documents, including the Trust Deed, from the arranger, the trustee or from public filings. The ability to receive private documents depends on the transaction and local market conventions of the Trustee.

Impairment Rights

In the consumer ABS and RMBS markets, the credit underwriting of any securitisation begins with analysis of the sponsor. Before investing in a new sponsor, we conduct due diligence, preferably on site, to understand their business thesis and how the sponsor underwrites and services their loans. Special attention is paid to servicing practices, particularly late-stage delinquency management, charge-off policies, modification policies, and collection practices. Our diligence process also focuses on the sponsor's compliance, complaint, audit controls, and ESG philosophy. Once onboarded, credit analysts actively maintain an ongoing dialogue with a sponsor.

In the CLO market, special attention is paid to the rights afforded to the equity tranche holders. In recent years, much has been written about the weak covenants in the loan market and efforts by some investors to exploit these deficiencies at the expense of CLO investors. We try to balance giving equity investors and CLO managers the flexibility to defend the integrity of the CLO collateral investments, with our need to protect senior debt holders from structural features that could allow equity investors to prime other securitisation participants.

In the CMBS market, special attention is paid to the rights afforded to the controlling class holder and the special servicer. Wherever feasible, we attempt to negotiate provisions in the documentation that curtail the ability of controlling class holders to engage in self-dealing (e.g., buying REO from the SPVs) or indulge in extend-and-pretend modifications at the expense of more senior debtholders.

Other Mechanisms for Exercising Rights and Responsibilities

In addition to the due diligence measures outlined above, there are other avenues for exercising rights and responsibilities.

- **Trade Associations:** PGIM Fixed Income is an active participant in trade associations including the Structured Finance Association (Board of Directors until June 2021, now active member), SIFMA, and others. We believe these organisations can serve as an important channel for dialogue between securitisation stakeholders, as well as an effective conduit to policy makers. We will continue to evaluate opportunities to participate in trade associations relevant to our business, our clients, and our ESG initiatives in the future.
- **Legal Remedies:** Litigation is generally a last resort for resolving disputes, but PGIM Fixed Income has experience successfully litigating on behalf of our clients' interests. More information may be furnished upon request.

- **Regulatory Bodies:** PGIM Fixed Income engages with a variety of regulators that can influence investment outcomes and impact our clients' rights and remedies. Examples include the SEC, CFPB, and Federal Reserve Bank amongst others. For example, PGIM Fixed Income is an active member on the Federal Reserve Bank of New York's Alternative Reference Rates Committee, which was created to develop industrywide solutions to LIBOR succession challenges.
- **Legislative Bodies:** Through our external affairs team, PGIM Fixed Income may directly engage with legislators who influence our clients' rights and remedies. For example, PGIM Fixed Income was actively involved in seeking New York State legislation that addressed deficiencies in LIBOR fallback provisions in legacy securitisations governed by New York law.

Climate Risk Analysis

We consider climate change and the associated policy and regulatory response to be an important risk factor that should be incorporated in our credit assessment, especially where the issuer's exposure to climate risk is deemed high. The impact that issuers have on climate change via Greenhouse Gas (GHG) emissions generated by operations, products, or value chain is also a significant consideration under our ESG Impact Rating framework.

In measuring climate risks, we take account of "physical" risks (for example, the impact of severe climate events leading to business disruption or investment losses) as well as "transition" risks, which pertain to the risk to investments as the world's economies decarbonise.

We seek to identify, understand, and manage the impact of climate-related risk on our investments. This is achieved by a combination of approaches applicable to different asset classes, including:

- Incorporating climate risk assessment in fundamental analysis. Our analysts evaluate an issuer's exposure to climate-related risks and impending regulatory changes by considering their GHG footprint and intensity and, where applicable, the physical location of key assets. In doing so, analysts seek to identify the channels through which climate risks are most likely to manifest themselves for a given issuer, and the actual financial impact such risks might have, taking into account each issuer's particular circumstances. They also consider the issuer's targets and plans for reducing their credit-material climate risk exposures, to the extent they are credible. This is consistent with our general focus on fundamental, bottom-up analysis, which we view as core to our ability to add value.
- Focusing on sectors with high direct exposures to the physical and transition risks of climate change, including those particularly exposed to supplying or consuming fossil fuels (e.g., energy, mining, utilities, transportation), carbon-intensive industrials (e.g., producing or using products like steel, cement, and aluminium), as well as the agricultural sector. Our research involves monitoring regulatory developments and analysing potential impact on issuers, incorporating the risk of an increase in carbon prices or lower demand for fossil fuels, identifying sub-industries and issuers with higher mid-term resilience and long-term adaptation capacity, identifying issuers with a credible strategy for transitioning towards lower-carbon business models, and exploring indirect climate risk vulnerabilities (e.g., physical and transition risks in supply chains).
- Requiring more compensation in terms of higher spreads for credits with credit-material climate risks. Credible plans for mitigation of those risks are also considered, as well as the strength of an issuer's balance sheet and its room to manoeuvre;
- For sovereigns, analysing climate risk exposure and mitigation/adaptation capacity of individual countries to consider the potential impact of the future repricing of sovereign debt around climate risk;

- For securitised assets, understanding climate risk associated with underlying assets/asset pools, as well as the extent to which investors are exposed to/shielded from physical and/or transition risks through the deal structure;
- Considering the time frame over which climate risks are likely to materialise, while also recognising that the expectation of future climate risks may also impact asset valuations well before they have fully unfolded; and
- Identifying and monitoring sectors and issuers that we believe are likely to be beneficiaries of and/or contribute to a low-carbon transition.

Furthermore, climate change and GHG emissions are a significant factor in our ESG impact assessment and ESG Impact Ratings. Although these ratings do not focus solely on climate, climate considerations play a large role in analysts' assessments of GHG emissions in intensive sectors where negative climate impacts are material. Where an issuer has significant, negative climate impacts arising from Scope 1, 2, or 3 emissions[6] and is not taking credible measures to materially reduce that impact, this could weigh heavily on its ESG Impact Rating. That in turn may lead to the issuer being excluded from portfolios that include criteria based on our ESG Impact Ratings.

In addition to their ESG Impact Rating criteria, certain portfolios we manage have exclusions on some of the most carbon-intensive activities, such as thermal coal extraction, thermal coal power generation, and oil and gas production in the Arctic and from tar sands, as well as limitations on an issuer's overall carbon intensity.

Where significant, we also endeavour to raise our concerns over an issuer's climate impacts via engagement (please refer to our Asset Class Engagement Case Study- Asian Automobile Manufacturer), noting how those concerns impact our credit assessment and ESG Impact Ratings, as well as how this could limit our demand for its bonds. Our large size and global coverage of fixed income markets allow us to provide issuers with constructive insights into how such concerns could affect demand for their debt more generally, as well as how they compare to their peers with regards to climate performance, strategy, and disclosure.

We strive to ensure that we have adequate access to resources, including staff, data, and analytical tools, to assess, implement and monitor climate-related risks/opportunities and measures. We also dedicate resources to exploring and testing new sources of data, including emerging methodologies to calculate climate value at risk, implied temperature rise, and similar metrics. In addition, we rely on company reported information and strategies, industry reports and external analysis from a variety of sources as relevant (e.g., the International Energy Agency (IEA), Transport & Environment, UN Environmental Program (UNEP), etc.).

PGIM Fixed Income has publicly supported the Task Force on Climate-Related Financial Disclosures ("TCFD") recommendations, which are a set of voluntary climate-related financial risk disclosures. In our engagements with issuers, we strongly encourage climate-related disclosures and reporting aligned with the TCFD principles (please refer to our Asset Class Engagement Case Study – UK Diversified Bank). Please also see page 61 for an index of TCFD reporting items embedded in this report.

We believe that such climate-related risks and opportunities are best assessed at the issuer level rather than at the portfolio level given the weaknesses of climate models. In a thought leadership piece published in December 2021, our Co-Head of ESG, John Ploeg, explains Three Flawed Assumptions about Climate Risk Models which assume that: 1) the energy transition will be smooth; 2) climate risks can be isolated; and 3) climate risk models are precise.

That being said, we have run some of our strategies through data vendors' Climate Value at Risk (VaR) tools in the past and, upon analysing the results, concluded that the results are oversimplified and unhelpful in decision making

[6] Scope 1 covers direct emissions from owned or controlled sources; Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting company; Scope 3 includes all other indirect emissions that occur in a company's value chain. Source: https://www.carbontrust.com/.

for bottom-up, active investors like ourselves. Besides confirming some of the weaknesses laid out in our blog post on climate risk models, it is also evident that these models are backwards looking in the sense that they do not adequately capture an issuer's capacity and willingness to adapt. Additionally, the results inevitably bias certain industries based on whether the concentration of their emissions are in Scope 1, 2 or 3 and don't take a holistic view of the company's situation, targets, and market share into consideration.

For example, according to one of the data vendors, one of the world's largest producers of fertiliser would see the company essentially wiped out in an orderly 1.5C scenario, and in a disorderly 2C scenario. The firm produces ammonia and ammonia-based shipping fuels and is working to develop ammonia made with green Hydrogen. Net leverage is only 1.2x, and the company has historically had good cash flow. It is true they operate in a carbon intensive industry and have emissions on the high end in that industry as well. However, this firm is committed to setting an SBTi target covering all 3 scopes (due this year) and has already set a net zero 2050 target (plus a 2030 target to reduce absolute scope 1 and 2 emissions by 30% vs 2019). They also have a score 3 on TPI's management quality indicator, and we believe will get to 4 (the highest score available) in the next refresh based on some of the steps laid out in their latest sustainability report. In short, they have some climate risks, but they also have some plans to mitigate them. They also produce a very in-demand product that cannot presently be produced en masse in a low carbon way. Finally, the government of the country in which they are domiciled owns over 35% share of the company, and given its specific circumstances, we believe that a full wipe out of the company's value seems an unlikely scenario.

Another example is a European utility which is 84% state-owned, and projected to lose 66% of its value at the company level (though nothing on its debt) in a "hot house" climate scenario. It is also projected to lose 24% at the company level (though none on its debt) in a 1.5C case, even though its fleet is mainly nuclear. The company has already set a "well-below 2C" target with SBTi and committed to SBTi's new net zero standard, which will require short-, medium- and long-term targets aligned with 1.5C. Further, TPI gives it a 4 rating (the highest) on management quality, assesses its near- and medium-term targets to be 1.5C aligned, and assesses its long-term target to be 2C aligned. More importantly, without this company, which supplies ~80% of its country's electricity, much of the country would be without power. Additionally, we are seeing how this country's neighbours rely on the company – with the combination of the Ukraine war and the company taking a large share of its reactors offline for maintenance creating ripple effects in other EU countries. The company is also one of the highest rated firms according to InfluenceMap's climate lobbying report, and one of only a handful of utilities to receive at least a B rating on InfluenceMap's scale (no companies have received an A). For many issuers, success at decarbonisation will depend heavily on government policy, so lobbying activity is another important consideration.

On the other end of the spectrum, most large banks are projected to see minimal losses in all of the climate scenario models we reviewed. In a 1.5C scenario, for instance, one of the world's largest financiers of fossil fuels– is projected to lose only 0.7% of its valuation at the company level, and 0.02% on its debt. Even in a hot house scenario, the company-level loss for banks is usually only 1-3%. Thus, the top-down model in this case seems misaligned with the amount of discussion and concern shown by investors, policymakers and others around the physical and transition risks that climate change poses for financial stability.

In light of these nuances, we think it is more useful for decision making to assess certain issuers on a case-by-case basis and identify the climate risks to which they are exposed through fundamental research.

Thus, instead of relying on top-down models, we generally assess the various climate-related risks and opportunities at a portfolio level using a bottom-up approach. One example of this was a client request to estimate the level of exposure (i.e., low, medium, high) to the key types of climate risk defined by TCFD (i.e., transition risks including policy and legal, technology, market, reputation; physical risks including acute and chronic) across three time horizons (1-3 years, 4-10 years, 11+ years) at a portfolio level. Rather than turn to third party vendors or simplified modelling, we felt the most appropriate method was to assess the individual holdings' risks and opportunities and aggregate those to the portfolio level. We started by identifying the most likely risk channels through which each of these climate risks might manifest for different industries. These were not always obvious. For instance, in certain industries, a material transition risk was a supply shortage of key metals and minerals needed for clean technologies. From there, our analysts considered the actual holdings in the portfolio, again identifying unique risks for individual companies. Only after doing this bottom-up analysis did we aggregate our findings at a portfolio level.

Engagement as Critical Component of ESG Integration

We believe engagement is a key tool in our investment process. By discussing our ESG concerns with an issuer, we make them aware of how those concerns factor into our investment decision, while at the same time gaining a better understanding of what the issuer is doing to address them. This can increase focus on ESG at the issuer, while at the same time enriching our investment analysis.

During these discussions, our analysts probe management on the ESG issues we see as material and assess the issuer's plans to address them. This is all then factored into both our fundamental credit ratings (which drive our relative value assessments) and our ESG Impact Ratings. At the same time, analysts aim to be constructive when raising ESG concerns with issuers by offering context around why they feel ESG issues are important and how they factor into our investment analysis. Further, given our scale and global coverage, such discussions often provide useful insights to issuers into how they compare to industry peers and how markets perceive their ESG initiatives. As a result, engagement provides benefits to both investors and the issuer.

EUROPEAN INVESTMENT GRADE

EUROPEAN AUTO MAKER

As an illustrative example, we met with the CEO, CFO, Product Managers, Design experts and Factory Management teams of a European automotive company to discuss their EV strategy. While the company has been less vocal than its peers about ending the production of combustion engine vehicles, management was keen to highlight that this does not mean it does not have the capacity to meet EV demand if it develops as expected. Despite a seemingly less ambitious approach to EVs versus its peers, we think that their EV penetration will rise significantly in 2022. The firm sets the industry standard in a number of areas that often receive less press than headline grabbing EV targets. For instance, they were the first OEM to have a net zero target for their production network, they generate significantly lower non-CO_2 emissions (VOCs, NO2, etc) than peers per unit produced, and their 100% renewables target expands to Chinese operations, whereas many of their competitors exclude China from such objectives. The engagement gave us confidence in the consistent attention to detail and careful management, which has helped the firm avoid scandals and lends credibility to its emissions targets. As such, we upgraded our ESG Impact Ratings for this issuer to reflect the clear differentiation versus its less reliable peers. As BEV penetration increases, we expect to make further upgrades.

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Our engagements with issuers are focused mainly on areas of concern identified when integrating ESG into our fundamental credit analysis and/or our ESG Impact Ratings. They may also cover recent controversies surrounding the issuer and/or key ESG themes for the issuer's industry. Finally, at times, issuers take the initiative to approach us to request feedback on their ESG efforts. We aim for these discussions to be constructive for both sides, which helps maintain an ongoing dialogue between our analysts and the issuers they cover. In this regard, our ESG Impact Ratings offer additional tangibility and context to the conversations, as they allow our analysts to show issuers how we rank them on ESG impacts, while also providing the rationale and factors behind the ratings.

Feedback from these meetings is used to inform our fundamental credit ratings and ESG Impact Ratings. The ESG issues raised, as well as the issuers' response to our comments (where applicable), are then noted in our internal credit reports and engagement notes, which are available to portfolio managers.

Impact of ESG Integration on Investment Portfolios

At PGIM Fixed Income, relative-value assessments are at the core of our investment process. Corporate industry analysts/sovereign regional economists determine their fundamental credit and ESG assessments for their issuers, ordinally rank their credits by fundamental value and, together with the sector portfolio manager, decide on a relative value ranking. Credit-material ESG risks and opportunities are factored into an analyst's fundamental credit assessment. An outcome of the discussion between portfolio managers and analysts may be an identification of topics for further engagement with issuers on ESG risk factors. Investments with higher ESG risk may be owned within our broader portfolios if the portfolio manager/analyst together believe that other fundamental strengths of the issuer and/or wider spreads compensate for the higher ESG risk; however, investments with a low ESG Impact Rating may be screened out of our ESG-based investment portfolios regardless of their relative value rankings.

ESG IMPACT ASSESSMENT

ESG Impact Ratings Concept and Methodology

We strive to help our clients understand the impacts that their investments have on the environment and society by assessing investments against negative and positive ESG impacts relevant to the industry, issuer and/or issue. This ESG impact assessment is distinct from our assessment of the risk that ESG factors could have directly on the financial/economic value of individual investments; however, it should be noted that impacts can create systemic risks that affect many investments indirectly as well.

Our ESG Ratings Sub-Committee provides detailed guidance to the analysts on the environmental and social impacts of issuers and/or issues for 150+ GICS[7] sub-industries. The PGIM Fixed Income ESG Ratings Sub-Committee also provides detailed governance guidance covering major governance factors and relevance for credit risk analysis and ESG Impact Ratings. Analysts rate issuers and/or issues based on the severity of the negative sustainability impacts and the issuers' efforts to reduce and minimise negative, as well as enhance positive, impacts. Although often informed by quantitative metrics, these ratings ultimately reflect the qualitative judgement of our credit analysts regarding sustainability impacts.

After assessing an issuer's ESG performance based on the guidance provided by the ESG Ratings Sub-Committee, our investment analysts assign an ESG rating on a 100-point scale in 5-point increments, with 0 as the lowest and 100 as the highest ESG rating ("ESG Impact Rating"), to an issuer or issue.

An ESG Impact Rating between 40-100 requires that the economic activities, products/services, and practices of an issuer (or financed by an issue):

i. are inherently positive for either environment or society; and

ii. associated key negative impacts are being reduced and/or minimised.

An ESG Impact Rating below 40 generally means that the economic activities, products/services, and practices of an issuer (or financed by an issue):

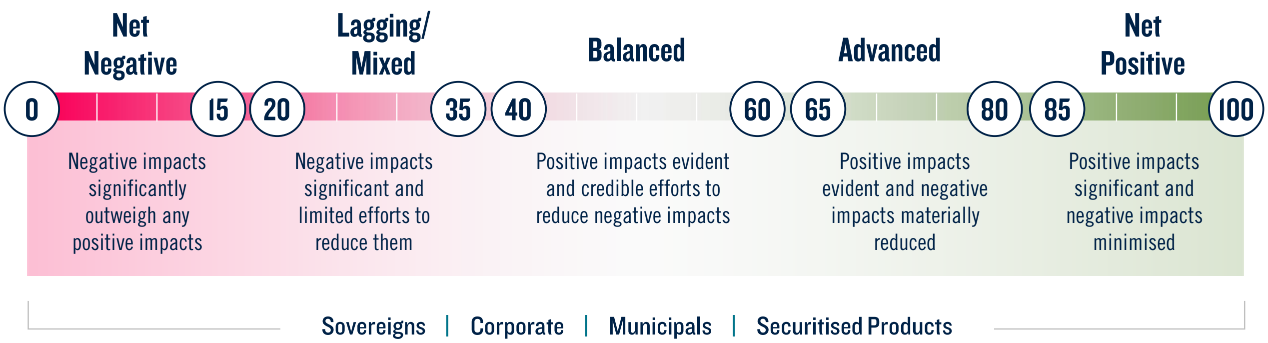
i. are inherently positive for either environment or society, but there are only limited efforts to reduce associated key negative impacts; or

ii. come with significant environmental or social costs, and there are no credible efforts to minimise these negative impacts; or

iii. have such significant negative impacts to environment or society that they cannot be outweighed by any other potential positive contributions.

[7] Global Industry Classification Standard

ESG Impact Categories and Definitions



An issue may have a different ESG Impact Rating from an Issuer in the case of ESG-labelled bond issuance. As of March 2021, for illustrative purposes only. Subject to change. Not indicative of future expectation.

The ESG impact assessment generally applies to all asset classes.

An assignment of a high ESG Impact Rating is generally based on the credibility and ambition of an issuer's strategy to reduce negative environmental and social impacts, as well as their actual achievements at the time of our analysis.

In assigning an ESG Impact Rating, investment analysts review information provided by the issuer, third-party ESG research providers, and/or alternative data sources (e.g., NGO analyses, governmental and inter-governmental studies, etc.). This third-party research may, among other things, be used to screen our investable universe for specified economic activities and controversies (including violations of the United Nations Global Compact (UNGC) principles); provide information regarding ongoing litigation; review performance data for a large number of environmental, social and governance key performance indicators; or otherwise analyse various ESG themes. In certain instances, it may not be possible or practical to obtain all of the information needed to assess each investment. Where this is the case, our analysts will evaluate the factors they can assess based on the information they do have (including from external and alternative data sources), and make reasonable assumptions about other factors based on, for example, information relating to the industry of an issuer. To the extent certain factors cannot be evaluated that are likely to be material for an issuer, our ESG Impact Rating frameworks guides analysts to take a conservative view, resulting in lower ratings.

In assigning an ESG Impact Rating, the environmental and social issues and the negative and positive impacts considered by our investment analysts vary depending on the asset class, industry, individual issuer and/or issue, but generally may include, but are not limited to:

Climate and Environmental Sustainability Indicators	Negative/Adverse Impacts	Positive Impacts
Energy use/performance; greenhouse gas (GHG) emissions	High greenhouse gas emissions; high carbon footprint or carbon intensity; consumption of energy from non-renewable sources	Sustainable sourcing of energy; use of or revenues from renewable energy; practices that improve energy efficiency; R&D in energy efficient products
Waste management/hazardous materials; pollution	Generation of and poor management of hazardous and non-hazardous waste; plastic pollution; packaging waste; use of hazardous materials in products	Reducing use of non-recyclable packaging and plastics; remediation of existing contaminants; lifecycle management of products; new technologies reducing environmental impact
Water consumption and pollution; air pollution; ecosystems	Destruction of natural habitats and biodiversity loss; ecosystem damage; high water consumption; water pollution; dust and other particle emissions; noise pollution	Water efficiency solutions; strong chain of custody in supply chains; environmental rehabilitation strategies; land conservation areas and protected endangered species habitat; carbon sequestration

Social Sustainability Indicators	Negative/Adverse Impacts	Positive Impacts
Human rights; employee rights/labour rights; health and safety; community relations	Modern slavery or forced labour; child labour; irresponsible labour practices; discriminatory exclusion (e.g., against low-income communities or underprivileged segments of society); infringement of rights of local/indigenous communities; poor occupational health and safety	Robust worker training programs; robust worker health and safety policies and controls; local and indigenous community relations; product safety measures; provision of affordable services to underprivileged/underserved segments of society
Business conduct	Bribery and corruption; anti-competitive practices; financing of crime, terrorism, and other illegal activities; fraud, insider trading and profiteering from access to trade secrets; tax avoidance or abetting tax avoidance	Robust audit and transparency practices; training and human capital development practices; encouraging workforce diversity; protection of privacy and security of customer and personal data

While certain corporate governance considerations (e.g., ownership structures or board effectiveness) are not considered to directly affect an issuer's and/or issue's impacts on the environment and society, they are an important part of the overall evaluation of an investment opportunity and are considered by the investment analysts as part of the credit research and the initial evaluation of an investment. They also can play an important role in assessing the credibility of an issuer's efforts to reduce its negative impacts and/or enhance its positive impacts. These potential indirect effects on environmental and social impacts are also evaluated under our ESG Impact Ratings framework. As noted above, we have also developed a dedicated SFDR good governance framework (as described under the section ESG Integration – Governance Analysis), which can help inform our ESG Impact Rating governance evaluations.

Sovereign ESG Impact Ratings have been developed by our global economics team, using a quantitative approach with a qualitative overlay to determine a final ESG Impact Rating. Issuers are first assigned a raw score based on a number of pre-selected indicators relevant to sovereigns. These come from sources such as the Yale Environmental Performance Index, the Harvard Social Progress Index, and the World Bank. This raw score does not translate directly to an ESG Impact Rating. Economists must then map the score to an ESG Impact Rating based on their expert knowledge of the countries they cover, which may lead to a different ordering than is implied by the raw score in cases where economists feel the data does not sufficiently capture a country's performance on certain themes.

ESG Impact Ratings for securitised products are generally based on those of the associated issuer/sponsor and/or the industry guidance most relevant to the underlying collateral. This may be further adjusted for certain factors specific to the transaction. For more information on our approach to ESG in securitised products, please see our white paper on Applications of ESG to Securitised Assets.

The ESG Impact Rating for currency and derivative contracts referencing a single investment will reflect the ESG Impact Rating of that investment (e.g., a U.S. Treasury future or U.S. interest rate swap would get the same ESG Impact Rating as the corresponding U.S. Treasury). Similarly, a single name sovereign or corporate credit default swap would get the same ESG Impact Rating as the corresponding sovereign or corporate issuer that it references.

For currency and derivative contracts (e.g., a Euro or High Yield CDX contract) that reference multiple underlying investments, the analysts will assign an ESG Impact Rating to the contract that is based on the average ESG Impact Rating for the underlying constituents within that contract for which we have assigned an ESG Impact Rating.

Asset Class Examples: Corporates

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and are not intended to represent a specific portfolio's performance or characteristics. PGIM Fixed Income's ESG processes may yield different results than other investment managers', including its affiliates. ESG factors and rankings may change over time. The information should not be construed as investment advice.

MAJOR AUTO COMPANY

ESG Impact Rating: 50

The company is favourably positioned on environmental aspects versus other OEMs given a high share of mild hybrid vehicles on the road (c.25% of unit sales in FY2021) and a proven track record of success in the transition away from more traditional, pure diesel and petrol vehicles. The company has focused its environmental strategy on hybrid technology, and as such, we think it will be able to adapt to various local CO_2 regulations without facing penalties and with more ease than some larger OEMs. However, its hybrids dependent on 48V technology, not high-voltage battery packs, hence the "hybrid" vehicles continue to be substantially more polluting than battery electric vehicles. In May 2021, the company updated its strategy, now aiming to reach carbon neutrality by 2039. Management now targets 5.5mn electrified units (HEV[8], PHEV[9], BEV[10], and FCEV[11]) by 2025, which accounts for c.55% of the company's unit sales in comparison to 1.92mn or c.20% currently. Of the projected 5.5mn, 500k units will be BEV and FCEV, continuing to show the firm's reliance on less "green" mild hybrid models. We note that while this is an improvement, targets remain well behind European peers that look to have > 50% BEV penetration by 2030. Our ESG impact score would improve if the company brought the target dates closer or if it increased its commitment to BEV and FCEV vehicles by reducing its reliance on mild hybrid vehicles.

Another key consideration for the company includes corporate governance, where it is an underperformer amid product-quality issues (which are not uncommon for the industry), few independent board members, relatively opaque ESG disclosures, and c.20% of its voting rights held by inside entities.

GERMAN REAL ESTATE COMPANY

ESG Impact Rating: 55

Our assessment views the company as advanced in environmental factors given its commitment to CO_2 neutrality by 2050. In order to achieve this target, the company has committed to a 60% reduction in CO_2 intensity by 2030 (base year 2019), a 3% energy efficient modernisation rate, and proprietary district heating, as well as sector coupling, heat pumps and/or solar. In order to reduce the CO_2 intensity of standing assets, the company is committing to capex-heavy modernisation by converting heating systems and replacing windows, switching fuel sources to gas systems, targeting EPC A or better energy ratings in new developments, and engaging in modular construction and wood construction schemes to help manage energy intensity and waste during development. Additionally, as of 2020, the German government taxes CO_2 emissions from fossil heating and fuel in Germany at €25 per ton, although this will increase to €55 by 2025. The firm's portfolio generates c.1m tonnes of CO_2 p.a., taking the total liability to €25mn. Current legislation means that the tax is borne by the tenants, although a discussion is under way about sharing the burden.

[8] Hybrid Electric Vehicles
[9] Plug-in-Hybrid Vehicles
[10] Battery Electric Vehicles
[11] Fuel Cell Electric Vehicles

We see the company's focus on modernisation as a positive in its ability to perform better than peers over time and as a result, the carbon tax liability for a tenant is likely to be lower, positively affecting the total cost of accommodation.

A key consideration is the social assessment, which we view as negative due to well-publicised concerns around rent affordability and landlords applying pressure to relatively poor tenants to move out in order to enable owners to modernise the apartment and hike rents (known as "rent-eviction"). The company is trying to offset this by self-imposing a modernization rental cap of €2 per sqm and has made a guarantee to tenants over 70 years old that their rents will remain affordable (i.e., they will not have to leave apartments if income is not developing in line with rent). Additionally in order to combat the trend of elderly people leaving apartments earlier than expected, given different living requirements, i.e., showers, lifts, widened doors, etc, the company has committed to modernize 30% of apartments the group gets back for elderly use.

Lastly, the company's governance picture is strong. It has a large and independent board of directors and reports a high level of attendance at meetings. It has also established its own Sustainability Performance Index (SPI), which incorporates progress on CO_2 intensity targets, customer satisfaction and workforce gender diversity, and its reporting is audited by the group's statutory auditor. This has carried over into management compensation, which has long term incentives split equally between: (i) relative total shareholder return; (ii) development in adj. NAV per share; (iii) development of Group FFO per share; and (iv) customer satisfaction index (CSI), which forms part of the SPI. As such, we see sustainability as well-integrated into management's core values.

CHINESE ALUMINIUM PROVIDER

ESG Impact Rating: 30

The Chinese company is one of the largest aluminium manufacturers globally. Despite being vertically integrated in commodity extraction, the company has not had meaningful environmental and safety risks in the past. That said, they are currently highly reliant on energy from coal, which leads to them being lower rated. However, they are currently transitioning a large part of their energy sourcing from coal to renewables, and they have made a large investment to move over 1/3 of their production facilities from Shandong to Yunnan, where hydro energy is located. In 5-10 years, they want to end with 2/3 of capacity in Yunnan. They currently do not have specific greenhouse gas emissions targets, but they claim to be working on an emissions report to establish these. The company also has a JV with another company that does R&D regarding recycling aluminium from scrapped vehicles, white goods, batteries, etc.

Asset Class Example: Sovereigns

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CHINA

ESG Impact Rating: 25

Our assessment of China's ESG Impact Rating involves multiple steps. First, we collect ESG data compiled by third-party providers, including Yale University, the Social Progress Imperative, the World Bank, and the United Nations. We refer to these as components, of which there are Environmental (including Climate & Energy and Ecosystem Services), Social (including Personal Safety and Income Equality), and Governance (including Control of Corruption and Rule of Law). The performance across these components is weighted and aggregated to each E/S/G pillar and then aggregated into a single ESG score.

Finally, we map China's final ESG score into an ESG Impact Rating. All countries in PGIM Fixed Income's universe are sorted by ESG score and mapped into rating buckets, which fall in increments of five and can range from 0 to 100. We see where China lands in this ranking and assign it a rating based on its relative placement. Gaps in adjacent scores and intuitiveness of country groupings help inform breakpoints around buckets. Importantly, however, analysts can override the data-implied rating to incorporate real-time views that better reflect a country's ESG performance. For China, our analyst believed that the governance and social concerns arising from the passage of the National Security Law in Hong Kong were not sufficiently captured in the quantitative data and thus implemented a 5-notch downgrade relative to what its score would imply.

Asset Class Example: Securitised Products

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AUTO SECURITISATION

ESG Impact Rating: 40

The technology-enabled company finances auto loans for a full credit spectrum of borrowers. Its ESG Impact Rating of 40 is generally based on the environmental impact of the underlying vehicles and their manufacturer's ESG Impact Rating. In terms of environmental impact, the business is dependent on the pipeline of used vehicles, and many of those vehicles are diesel. While older diesel vehicles can be a concern in dense urban areas due to toxicity of some emissions, their overall environmental impact is not as significant as other factors facing automobiles such as fuel efficiency, manufacturing waste, damage from sourcing materials, etc. The company keeps track of all diesel regulations and considers potential impairments to future recoveries. For now, diesel sales are holding strong in rural areas. The company is working on incentive programs for buyers purchasing electric vehicles. We recognise the level of attention that the team gives to environmental issues and would like to highlight that it is one of the few issuers that disclose greenhouse gas emissions data in its loan tape. From a social perspective, the company continues to invest in loan management, employing different servicing strategies through COVID. For example, they have allowed borrowers to take longer forbearance periods to get back on track. Based on these considerations, the issuer is rated as

40 without any negative overlay due to diesel vehicles exposure, which is in the mid-range for the auto lending sub-category.

ESG Impact Ratings in Portfolio Construction

Our portfolio construction for all our portfolios, whether ESG or not, emphasises bottom-up credit selection within a risk budgeting construct that emphasizes diversification across countries, industries, and individual issuers. As a signatory to the UNPRI since 2015, we have committed to integrating ESG risk factors in our credit analysis for over seven years.

For our portfolios that are explicitly ESG managed, issuers with significant negative impacts on the environment/society and exhibiting limited efforts to reduce those impacts (i.e., low ESG Impact Rated issuers/issues) are not considered for selection. In addition, our ESG portfolios generally target a higher average ESG Impact Rating than their benchmarks. While adhering to these ESG constraints, our strategy for these portfolios is to seek to achieve their alpha targets while operating within their risk budgets using the same fundamental and relative value assessments that we use across all portfolios.

Given the incremental restrictions on ESG portfolios, alpha targets for ESG portfolios are typically set below those of traditional portfolios as implied by classical portfolio theory, however there are market environments where we believe ESG portfolios will outperform.

ESG LABELLED BONDS

Our Approach

At PGIM Fixed Income, we take a case-by-case approach for every ESG-labelled bond that we consider for our portfolios. For individual Green, Social and Sustainability (GSS) Bonds, we assess credibility at the security and issuer level, and additionality in terms of the potential incremental positive impact that the bond can have on the environment and society. For Sustainability-Linked Bonds and Loans (SLB/SLL), we look to assess the ambition and materiality of the KPI targets, as well as the strength of the structural features of the instrument.

Green, Social and Sustainability Bonds Framework

We believe that financing projects and measures via ESG-labelled bonds (e.g., GSS Bonds, as well as sustainability-linked bonds and other, similar instruments) have a growing role in transitioning towards a sustainable economy and sustainable environmental and social ecosystem provided such projects have legitimate positive impacts on the environment and society. We are sceptical of many of the ESG-labelled bonds currently being issued, and do not believe they are all of similar quality. As a result, we participate selectively in ESG-labelled bonds.

Additionally, we have recently developed proprietary frameworks for assessing how impactful individual issuances of these bonds are, which is linked to our ESG Impact Ratings. Under our proprietary framework, we assess both the issuer's credibility with respect to the Green Bond, and the potential incremental positive impact the issuance can have for the issuer or its industry by replacing "brown" assets or activities with "green" assets or activities. This assessment results in an uplift (or a lack thereof) of a Green Bond's ESG Impact Rating versus the ESG Impact Rating of its issuer. We distinguish between High, Higher, Medium, Low and No Impact Green Bonds. After issuance, Green Bond ratings are reviewed alongside the issuer's other ratings and may be revised in light of actual activity (e.g., if a Green Bond has low credibility at issuance, but the issuer's actual activity post-issuance clearly shows it is acting credibly, or vice versa).

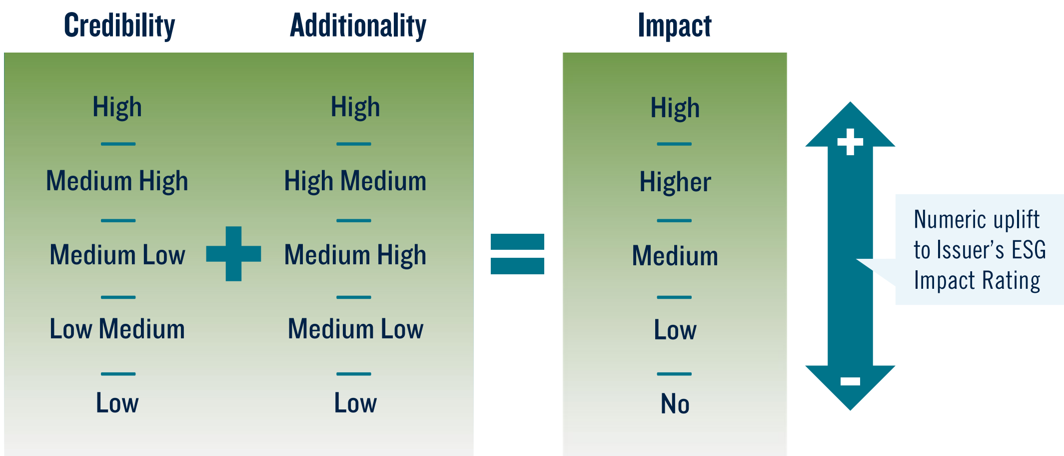
In order to assess the impact of GSS Bonds, we need to understand an issuer's overall ESG strategy and how the GSS Bond fits into that strategy. A GSS Bond is more credible the more that it is consistent with, or supportive of, an issuer's ESG strategy. This means that before evaluating the bond, we must first assess whether the issuer has established overarching ESG policies and objectives, created an implementation strategy, and, where appropriate, implemented specific targets that the proceeds from the issuance will directly support.

This approach allows our ESG strategies to invest in more impactful GSS Bonds of issuers that would otherwise be ineligible for inclusion, thus adding to the positive impact of our investments.

From a credit and relative value perspective, we analyse Green/Social/Sustainable Bonds as we would analyse any other corporate investment, and if we believe we are being paid for the credit risk, we would be happy to invest. However, if a company is issuing at too tight of a spread level just because the bond is "ESG-labelled", and we believe the issuer is greenwashing, we do not see that as an attractive opportunity to invest. We generally would not pay a premium (i.e., tighter spread) to purchase a GSS Bond versus non-GSS Bonds of the same credit, unless superior in some form to the existing issuance, or unless this helps meet clients' specific ESG objectives.

The overall impact assessment allows us to decide whether a given bond's ESG Impact Rating deserves a numeric uplift compared to the issuer's ESG Impact Rating and, if so, to what extent.

The Combinations of Determining a Green Bond Impact Rating



Source: PGIM Fixed Income. Provided for illustrative purposes.

Sustainability-Linked Instruments Framework

Similar to assessing GSS bonds, the objective for assessing an SLB/SLL is to assign an uplift to the instrument versus our PGIM Fixed Income ESG Impact Rating of the issuer. Uplifts are assigned to high-quality SLBs/SLLs in recognition of the financial incentives they provide, the increase in credibility it provides, and the additional reporting/verification requirements it imposes. However, we assign SLB/SLL uplifts only if we believe that the Key Performance Indicators (KPIs) and Sustainability Performance Targets (SPTs) are material and ambitious. Unlike for GSS bonds, there are no restrictions on how the proceeds can be used, and they are typically issued as general obligation bonds; thus, there is rarely any additionality stemming from the use of proceeds. Additionally, SPTs are generally set at the issuer-level, not for any specific projects. Therefore, the assessment is done on both the issuer and the KPIs/SPTs that are put forth. With respect to assessing the KPIs/SPTs, we assess the materiality and ambition of the KPI(s) to the issuer, as well as their measurability and transparency. Additionally, we assess the structural features of the instrument and whether the target dates are appropriate given the term lengths, as well as whether the step-up structure provides sufficient financial incentive. High-quality SLBs/SLLs will receive an additional numeric uplift to the ESG Impact Rating of the issuer, whereas low-quality instruments will simply default to the issuer rating given that we determine no added positive impact of the instrument. But, since SPTs are set at the firm level, we will consider them like any other target, which could result in an upgrade to the issuer level ESG Impact Rating if they are credible and ambitious. As a result, the potential uplift for an SLB/SLL itself is more limited.

Impact Examples

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HIGH IMPACT GREEN BONDS

Proceeds are used to finance a project that is core to transforming an issuer's business model and operations from brown to green, with green economic activities expected to replace brown activities.

Many of the High Impact bonds will likely be issued by relatively "brown" issuers considering that they have the most room to transform themselves via credible, ambitious plans and need a way to finance the transition. Furthermore, a substantial uplift to an issuer's ESG Impact Rating may allow us to buy their Green Bonds in ESG-oriented portfolios, even if we can't buy their traditional bonds in those portfolios.

Example: We recently reviewed a Green Bond from a U.S. utility following the release of its new green capital markets framework. Besides the fact that the bond's proceeds are directly contributing to the company's goal of reducing emissions by 67% by 2025 vs 2005 (while still managing to double electricity generation over the same period), we also assessed the issue as having a high impact with an above average uplift relative to typical utility green financings. The issuer's framework incorporates numerous features which we view as superior to a typical green issuance. These include a coupon step if the proceeds are not allocated as required, proceeds targeted towards specific renewables projects, a requirement that projects be operational within 12 months, and finally, a public certification from the CFO which verifies the framework has been followed. We feel these features address several shortcomings inherent in typical utility company Green Bond financings.

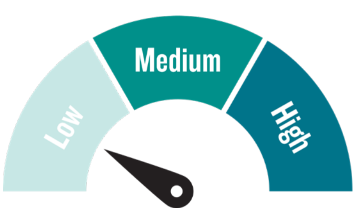
MEDIUM IMPACT GREEN BONDS

Proceeds are used to finance projects that are either non-core to the issuer's business or are in addition to core brown activities.

Even though the share of green activities in an issuer's mix is growing, they are not always replacing "brown" activities. For example, when Green Bond proceeds finance new, renewable energy projects that expand a utility's capacity, but do not meaningfully speed up the retirement of its coal power plants, the issue may fall into these categories.

Example: We viewed a Green Bond from a European semiconductor design and manufacturer having medium credibility and medium additionality. From a credibility perspective, the company's Green Bond Framework is well aligned with its overall sustainability strategy; however, the timeline for allocating the proceeds is longer than we would typically hope to see and funds may temporarily be used for other purposes, including debt pay down, before they have been allocated to green projects. From an additionality perspective, while we do see value and positive impacts stemming from the use of proceeds, some of the R&D projects that the proceeds would be allocated to were already underway, meaning we cannot grant full 'additionality' to this instrument.

LOW IMPACT GREEN BONDS



Proceeds are used to finance projects that are unambitious, have low credibility, or a combination of both characteristics.

Low additionality often occurs when an issuer has a large proportion of green economic activities in their overall mix already, and are using Green Bonds mainly to finance these existing activities. In this case, there is no meaningful increase in the overall share of green activities or active replacement of brown activities with green ones. It is worth noting that in this scenario, even though the Green Bond impact is assessed as low with a smaller ESG Impact Ratings uplift, the issuer is likely to have a higher ESG Impact Rating to begin with because it is already involved in a large number of green activities.

Example: We recently assessed a Green Bond from a European bank as having a low impact with a minimal uplift to the issuer's ESG Impact Rating which is in the middle of the sector range. An important credibility weakness was the place of the bond in the capital structure. As a Senior Non-Preferred instrument, the bond is used to meet regulatory 'bail in' requirements, as well as funding purposes. This means that there is a wider benefit to the bank beyond simply raising money for green investments. We do not believe that the bank would have issued a bond in this form if it did not also need to meet its regulatory obligations since the spread is significantly higher than for pure funding instruments such as Senior Preferred or Covered Bonds. As such, we see the green aspect of the bond as largely opportunistic.

We also consider this bond to have weak additionality since it is 85% allocated to 'green mortgages' on energy efficient houses and commercial property. We do not consider writing mortgages on existing properties to be hugely additional since it does not incentivise or facilitate further emissions reductions.

ESG INVESTMENT GUIDELINES AND PRODUCTS

At PGIM Fixed Income, we strive to provide our clients with the best products and solutions. Throughout 2021, our Client Advisory Group worked with clients to align guidelines, risk budgets, and portfolio construction approaches to their investment beliefs. As the ESG industry continues to evolve, we actively seek input from our clients, which helps guide enhancements to our internal frameworks and tools, while also ensuring that we continue to offer the most relevant ESG products. ESG sensitivities can be highly nuanced, which is why we believe that one-on-one dialogue with our clients is critical to meeting our clients' objectives while also complying with applicable regulatory guidance.

Such conversations with clients have directly led to enhancements in our ESG research and processes on several occasions. For example, one of our clients stressed the importance of an intellectually honest approach to assess their portfolio's alignment with Net Zero. This prompted us to start developing a proprietary tool that would help clients better understand the extent to which their portfolios may be contributing to a 1.5 degree future and also identify those issuers that are struggling on that path.

We held a series of meetings with another client that led us to perform targeted research on the climate risks faced by some of the largest, long-tenured emerging market sovereign and corporate bond holdings in their portfolio. In response, we assessed the issuers' transition and physical risk exposures, as well as their mitigation/adaptation strategies. We believe this deep, bottom-up analysis enhanced our credit assessments and gave us significantly better insight into these markets' exposure to climate-related risks.

We continue to engage in one-on-one dialogue with clients to explain our rationales for holding specific credits. At a firm level, there are certainly credits that we own that have observed ESG challenges. Our rationale for owning credits where we observe credit-material ESG challenges is two-fold. We either see the company or country moving in the right direction to reduce these risks and/or we feel that we are sufficiently compensated for the ESG risk through spread. We believe timely discussions with our clients on the rationale for our views on the current status and trajectory of individual credits are a valuable contribution to their stewardship efforts.

As it relates to PGIM Fixed Income portfolio emissions data, weighted-average carbon intensity (WACI) metrics are included below. For the full list of TCFD metrics across sample portfolios, please see Appendix III.

	Corporates Emissions Intensity (Sales)[2]	Corporates as a % of Total Portfolio	% of Corporate Subset Missing Data
All Portfolios[1]	525	53.42%	15.8%
Sample Global Corporate Bond Portfolio	293	97.53%	6.0%
Sample ESG Global Corporate Bond Portfolio	121	95.57%	4.9%
Sample Global High Yield Bond Portfolio	425	97.97%	30.4%
Sample ESG Global High Yield Bond Portfolio	108	98.46%	31.9%
Sample ESG Emerging Markets Corporate Bond Portfolio	233	93.48%	30.6%

[1] Note: All portfolios refers to all AUM of PGIM Fixed Income. The sample portfolios listed are only a subset of this AUM.
[2] Only includes Scope 1 and 2 emissions.
Source: MSCI. As of 31 December 2021.

Approach to Exclusions and Restricted Lists

In an effort to give clients options in their approach to ESG investing, one of the tools we offer and implement across a range of portfolios involves negative screens and exclusions which are built according to specific, client-determined criteria. For certain clients, we use specialist third-party screening providers to implement such exclusionary screens. For other clients, we exclude investments contained in detailed "restricted lists" provided by the client. In addition to exclusions and constraints in our separate account mandates, we employ similar constraints across certain comingled products that we manage. In most cases, this includes limits on UNGC violators, tobacco production, manufacturing of controversial weapons, and thermal coal extraction and generation, among other limitations. Our ESG-labelled products also include limits on Arctic oil and gas, oil sands, and overall carbon intensity. As the ESG industry evolves, we seek to stay at the forefront of developments. This includes having annual conversations with clients and consultants to ensure that the exclusions and thresholds that we have set for our comingled strategies are still appropriate. We finalize any amendments to the exclusions on at the ESG Policy Committee.

Examples of Exclusion Guidelines for ESG Strategies[12]

Ineligible ESG Investments

- Issuers that violate UN Global Compact ("UNGC") Principles;
- Issuers that are involved in the production of nuclear or other controversial weapons (including landmines, cluster weapons and biological/chemical weapons);
- Issuers that are conventional weapon manufacturers deriving at least 10% of revenues from such activities;
- Issuers that are tobacco manufacturers deriving at least 5% of revenues from such activities;
- Issuers deriving at least 25% of revenues from thermal coal generation;
- Issuers deriving at least 10% of revenues from thermal coal extraction;
- Issuers deriving at least 10% of revenues from arctic oil and gas exploration;
- Issuers deriving at least 10% of revenues from oil sands extraction;
- Issuers deriving at least 50% of revenues from gambling activities;
- Issuers having an emission intensity of above 3,000 tonnes CO_2e per million USD sales.

Proprietary ESG Impact Score Criteria

- No investments in issuers that have an ESG Impact Rating below 40;
- The relevant portfolio must have an average ESG Impact Score that is higher than the average score of the applicable benchmark

A third-party screening agent is used to screen for the ineligible ESG investments in our ESG-focused portfolios. The list of ineligible ESG investments is provided to PGIM Fixed Income by the screening agent, and information with respect to such list is updated and provided to PGIM Fixed Income monthly.

[12] ESG exclusions vary by product. This list is non exhaustive and does not pertain to all ESG strategies.

Please find below a comparison between a sample global corporate investment strategy portfolio and its ESG-focused equivalent.

ESG Characteristics Comparison

Sample Global Corporate Portfolio, Sample Global Corporate ESG Portfolio, and Bloomberg Barclays Global Corporate Index

	Global Corporate ESG Sample Portfolio	Global Corporate Sample Portfolio	Bloomberg Barclays Global Corporate (USD Hedged) Index
Average Internal ESG Impact Rating	61	54	54
Internal ESG Impact Rating Score Breakdown* (% MV)			
80-100	9	4	4
60-79	52	42	40
40-59	37	41	40
20-39	0	11	10
0-19	0	0	2
Not Rated[13]	1	2	5
Scope 1 and 2 Emission Intensity (Sales)[14]	122	293	253

As of 31 December 2021, unless otherwise noted. Provided for illustrative purposes only. Source: PGIM Fixed Income. Source of benchmark: Bloomberg Barclays Indices. An investment cannot be made directly in an index. The above table and graph compare characteristics of a sample portfolio within the Global Corporate (USD Hedged) Composite. The data shown is subject to change and may not be indicative of future portfolio characteristics. Actual results may vary for each client due to specific client guidelines and other factors and should not be construed as investment advice. *ESG Rating Score Breakdown excludes Not Rated (NR)

[13] In certain instances, it may not be possible or practical to obtain and/or analyse the information needed to assess and rate each investment, in which case the issuer may not receive an ESG Impact Rating.
[14] Tonnes CO_2e per million USD sales. Source: MSCI.

ENGAGEMENT ACTIVITIES

Approach to Issuer Engagement

Debt investors are a critical stakeholder for corporate and sovereign issuers reliant on debt financing markets. We see issuer engagement as an important tool in our investment process insofar as it helps us gain a more holistic understanding of the issuers, from both the fundamental and ESG impact perspectives. We believe that this, in turn, helps us in our efforts to achieve better investment and, where applicable, ESG outcomes for our investors. We therefore encourage our analysts to initiate discussions with issuers whenever an ESG issue surfaces during the research process.

During these discussions, our analysts probe management on any material ESG issues and assess the issuer's plans to address them. At times, we have pointed out to issuers our assessment of credit-material ESG risks and our assessment of how their policies, practices or products impact the environment and society. Where applicable, we discuss the implications of these impact assessments on our future demand for their bonds in ESG portfolios and their future funding costs.

Raising our ESG concerns with issuers makes them aware of how those concerns factor into our investment decisions, while also providing our analysts a better understanding of what, if anything, the issuers are doing to address our concerns. This can increase focus on ESG at the issuer level, while enriching our investment analysis at the same time.

Further, given our scale and global coverage, such discussions often provide useful insights for issuers on how they compare to industry peers and how markets perceive their ESG initiatives. Our ESG Impact Ratings offer additional tangibility and context to the conversations, as they allow our analysts to show issuers interested in our process how we rank them on ESG impacts, while also providing the rationale and factors behind the ratings. As a result, engagement can also positively influence issuer behaviour.

Being one of the largest active fixed income managers in the world, we feel that issuers take our views and concerns seriously and value the insights they gain through dialogue with our analysts and economists. This allows us to engage constructively with management and elevate ESG issues to their attention.

Given our team of over 100 fundamental research analysts, economists and ESG specialists, we are able to engage frequently with issuers in our universe, including not just corporate issuers, but also sovereigns, municipalities, and sponsors of securitised products.

Our ESG engagement activities are focused on issuers that have credit-material ESG risks, generate significant adverse impacts on the environment or society, or lag their peers in ESG practices. Engagements are influenced by the materiality of ESG factors on financial and/or operational performance, our proprietary ESG Impact Rating of the issuer, the quality of an issuer's ESG disclosures, the exposure to specific ESG factors and events that, in our view, require special attention, as well as the size of our overall exposure to the issuer.

Feedback from these meetings is used to inform our fundamental credit ratings and ESG Impact Ratings. The ESG issues raised, as well as the issuers' response to our comments (where applicable), are then noted in our engagement notes, which are available to portfolio managers.

Given our engagement activities with issuers are directly linked to our investment research and investment decisions, our strong preference is for direct engagements with issuers to enable us to speak openly and frankly when highlighting our ESG concerns to company management, government officials, arranging banks, etc. We are open to collaboration with other investors in instances where our individual engagement efforts are deemed to have low chances of success in isolation. Our preference is to collaborate via trade associations and other industry initiatives of which PGIM Fixed Income is a member.

As a manager of primarily fixed income investments, we generally do not have ownership rights and, therefore, are not actively engaged in proxy voting. In the rare instance where we are able to vote by proxy at an Annual General Meeting, PGIM Fixed Income abides by its proxy voting policy, which includes guidance on environmental and social shareholder resolutions, seeking to balance the interests of all our clients. As a bondholder, the engagement escalation mechanisms available to us include:

1) Seeking engagement at a more senior level within the issuer;

2) Collaborating with industry groups and other institutional investors; and

3) Reducing or exiting our investment position or foregoing an opportunity to participate in a new issue. Any decision with respect to investment positions will be taken at a portfolio level and reflect the clients' investment guidelines.

Engagement Activities in 2021

288

total ESG engagements

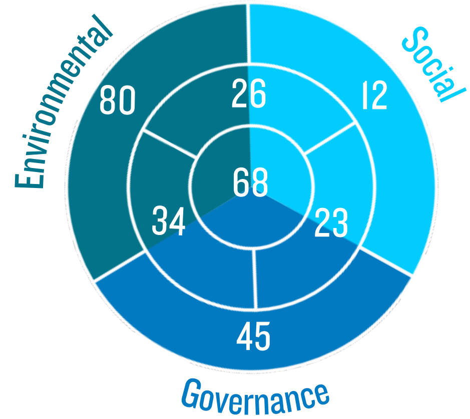
224 Corporates
64 Securitised Products

265

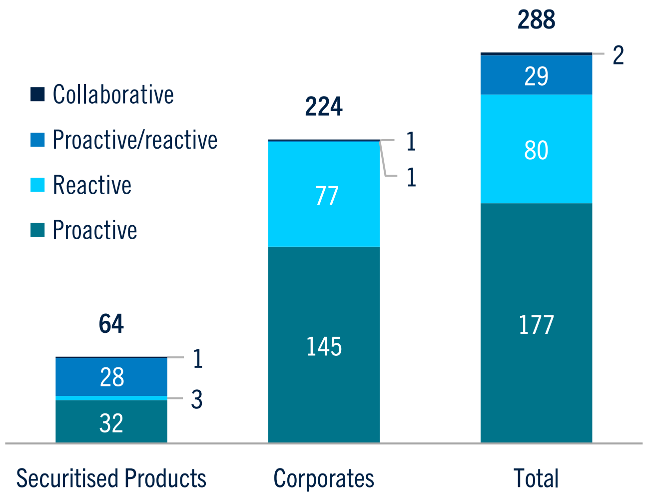
total issuers engaged

207 Corporates
58 Securitised Products

Total ESG Engagements by Category



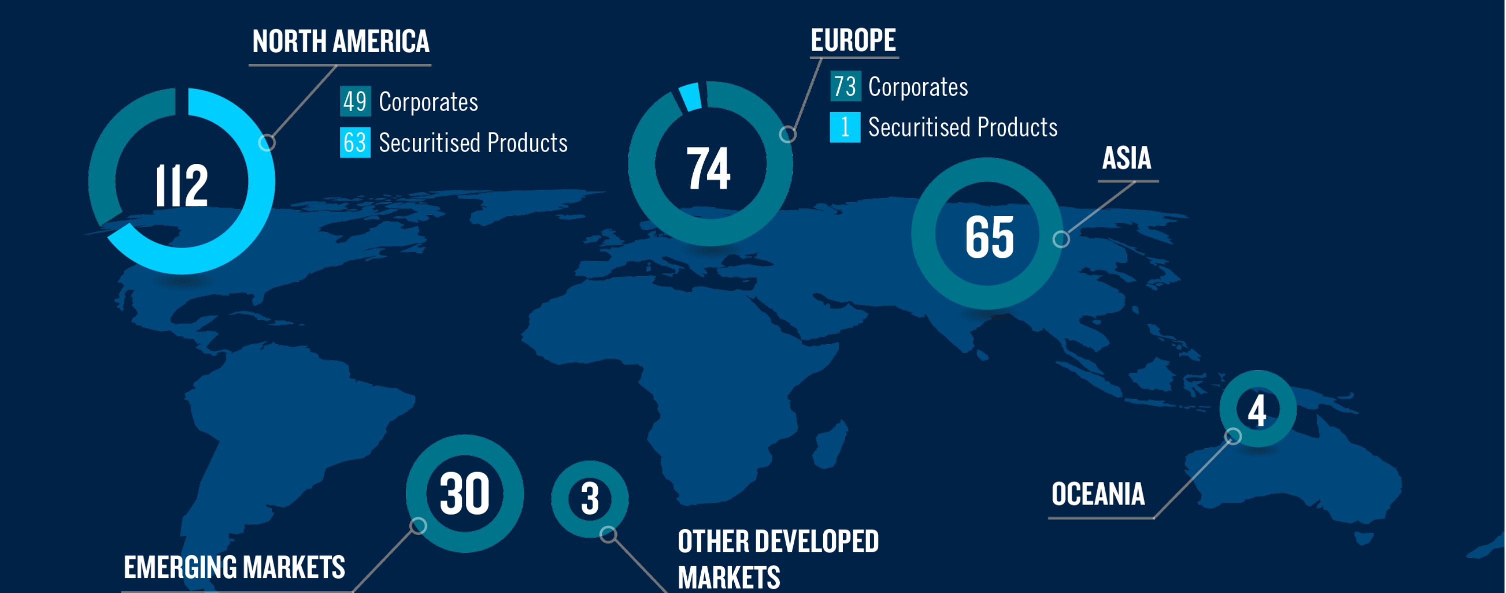
ESG Engagements by Type (Issuers Only)



ESG Engagements by Category and Asset Class

	Corporates	Securitised Products
Environmental	79	1
Social	9	3
Governance	13	32
Environmental and Social	26	0
Environmental and Governance	31	3
Social and Governance	8	15
Environmental, Social and Governance	58	10

ESG Engagements by Region



Source: PGIM Fixed Income as of 31 December 2021. Provided for illustrative purposes only.

Collaboration and External Initiatives

Memberships

We believe in constructive engagement with policymakers and regulators. We are a member of several trade associations and industry initiatives and are committed to providing feedback to policy consultations or technical input into regulatory processes that materially impact PGIM Fixed Income, our clients, or our investments. We also engage financial regulators on ESG-related topics. The selected list of our current memberships and collaborative initiatives related to ESG topics is below:

- Principles for Responsible Investment (PRI)
- PRI Securitised Products Advisory Committee
- PRI Structured Products Workstream
- Task Force on Climate-Related Financial Disclosures (Formal Supporter)
- European Leveraged Finance Association – ESG Committee
- UK Investment Association (Stewardship in Fixed Income Working Group)
- Structured Finance Association ESG Steering Committee
- Center for Real Estate Finance Council's (CREFC) Sustainability Steering Committee and the Transparency Subcommittee
- Association for Financial Markets in Europe
- Loan Market Association
- Loan Syndications and Trading Association
- Climate Bond Initiative

EXAMPLES OF COLLABORATION TO PROMOTE BEST PRACTICES

PGIM Fixed Income is a member of several industry associations undertaking ESG initiatives, such as the PRI and the LSTA. Over 2021, PGIM Fixed Income became increasingly involved with the **European Leveraged Finance Association, or ELFA**. The association brings together investors in European high yield bonds and leveraged loans, and ESG is one of its top areas of focus.

A representative from PGIM Fixed Income's ESG research team sits on ELFA's ESG Committee, and PGIM Fixed Income analysts take part in a number of related ESG initiatives. For instance, ELFA continues to lead a series of roundtables bringing together issuers, investors, and rating agencies to discuss improvements to issuers' ESG disclosures. Analysts from PGIM Fixed Income frequently participate in these roundtables as both participants and moderators. Since these events include issuers as well as investors, they have been highly collaborative and productive. Our analysts have also contributed comments to the "ESG factsheets" produced on the back of these roundtables, including significant input on how to enhance them to better capture data needed for the EU's Sustainable Finance Disclosure Regulation. In addition, our analysts have been very active in the ESG work of ELFA's CLO Committee—particularly the development of ESG questionnaires for CLO managers—and they were key participants in a subgroup tasked with drafting recommended supplemental guidance for sustainability-linked bonds issued in the high yield market. Finally, PGIM Fixed Income volunteered to lead an ELFA workstream to improve ESG data vendor coverage of the leveraged finance space.

ESG disclosure and data availability is noticeably lower for high yield issuers relative to the investment grade universe, and still nearly non-existent in the leveraged loan space. As a result, we feel that ELFA's initiatives on ESG disclosure, and our active participation in them, are valuable.

Engagement Examples

The case studies are provided for illustrative purposes only solely as an illustration of our ESG evaluation process. The case studies are not inclusive of all potential ESG issues and engagements, are subject to change, and are not intended to represent a specific portfolio's performance or characteristics. PGIM Fixed Income's ESG processes may yield different results than other investment managers, including its affiliates. ESG factors and rankings may change over time. The information should not be construed as investment advice.

Corporate Fixed Income

ISSUER: **GOLD AND SILVER MINING COMPANY**

Topics	Greenhouse Gas (GHG) emissions and climate change
Objective	Assess the robustness of their sustainability strategy and discuss issues regarding GHG emissions
Summary	The company believes they are in the top 30% relative to their peers in terms of ESG. In managing their environmental footprint, they have one of the lower GHG emissions intensities per ton compared to their peers. However, they do not have an overall target for GHG reduction, instead using internal site-specific targets because their mines are in different regions with different operating environments.
Assessment	We believe that the company is not a big GHG contributor, has a good water management strategy, and they are looking to incorporate greener energy where possible. However, we think they can do a better job setting specific public company targets.
Rating Impact	Confirmed ESG Impact Rating given progress was insufficient to upgrade/downgrade the impact rating at this stage. No new credit concerns.
Next Steps	Continue to monitor progress to see if they set specific targets in the future. We will continue to engage with the company and their peers.

Source: PGIM Fixed Income as of February 2021

ISSUER: **MULTINATIONAL AUTOMOTIVE MANUFACTURER**

Topics	Waste, other environmental pollution, green securities, sustainability-linked securities (E focus), labour management
Objective	Understand the management of labour relations throughout the electric vehicle transition
Summary	The company expects that the transition to electric vehicles will reduce the required workforce by around 12%. It has been agreed with the unions that this will be managed through greater vertical integration, retraining, and natural attrition. The company expects to issue further green securities this year.
Assessment	The company has clearly cut a deal with the unions to manage the transition to EVs as responsibly as possible. However, it is likely that while their workforce will not shrink that much, the overall impact of EVs on overall industry employment will be much greater because part of the strategy to maintain the company-level workforce effectively involves integrating business that is currently outsourced to suppliers.
Rating Impact	None
Next Steps	Follow up meeting to be held with PGIM Fixed Income's ESG research team

Source: PGIM Fixed Income as of June 2021.

ISSUER: **UK DIVERSIFIED BANK**

Topics	GHG emissions and climate change
Objective	Better understand the steps that the UK Bank is taking with respect to its Net Zero and climate change commitments.
Summary	The bank is investing heavily in the expansion of its internal methodologies to better assess climate risks and achieve its stated climate commitments. In practice, it seems they have been integrating certain considerations for quite some time; thus, the now stated commitments to phase out new financing of coal and other restrictions they have set are not financially material to them. They did stress the significant opportunities they are seeing in renewable energy and clean tech and strongly believe that this will outweigh any small impacts that they could see in no longer financing other high carbon sectors.
Assessment	The bank is clearly well-versed in ESG and is truly considering how to best incorporate ESG throughout its product lines. It has a commitment to become net zero by 2030 in its own operations and net zero through its financing by 2050. It has published a TCFD report and has been modelling its climate risks for several years, although methodologies for alignment and physical risk exposure have been improved over the years. Certain disclosures could be improved, as could the transparency and granularity of its disclosures. That being said, our discussions were productive, and the issuer seems committed.
Rating Impact	No impact – reinforced our views of the bank's commitment to climate and disclosures.
Next Steps	Future engagement should monitor for additional transparency in climate reporting. Additionally, engagements should focus on the microfinance elements to get better clarity on the scope and impact.

Source: PGIM Fixed Income as of October 2021

ISSUER: **ASIAN AUTOMOBILE MANUFACTURER**

Topics	GHG emissions and climate change, supply chain, sustainability-linked securities (E focus)
Objective	Discuss the company's electrification strategy and investments into autonomous driving systems on the heels of its recently issued Sustainability Bond.
Summary	In the meeting, we discussed the company's electrification offensive. China remains the focus of battery electric vehicles given the size of the market, although the recent pickup in demand in Europe is leading to the company stepping up its offering. In Europe, the regulations require OEMs to have an average CO_2 emissions level of 95 g/km or below across the fleet, and the company was comfortably below that level given the high (20%) proportion of hybrid vehicles in its fleet. Management guided that in order to achieve the 80g/km target in 2025, they need a 10% BEV penetration rate and are expecting that to increase to 30% to meet the more stringent 2030 targets. In addressing the risk of the EU Commission tightening the 2030 targets further, the company needs to raise the BEV penetration accordingly, and the key is to secure enough battery cell supply. Currently, the company has a supplier contract relationship for battery cells, but also produces cells in-house via its JV. They therefore have some flexibility to increase battery cell supply via direct investment into the JV, but are partially dependent on two primary suppliers where the typical lead time from order to delivery is 2 years. We also discussed the split of investment between the company and partners on electrification and ADAS technology. The company says investment depends on whether the end-product IP will be awarded to the company or the partner. Given that it wants the EV and ADAS technology to be proprietary, it covers the costs itself, while investments for parts and components are funded by suppliers. Lastly, the company mentioned that while it has a lot of cash available on the balance sheet, it wants to diversify funding given the rapid transformation going

	on in the industry and the need to invest in future technologies. The company intends to issue debt at least every year/2 years going forward.
Assessment	During the engagement, management was very transparent on the strategy laid out and its concerns. The key takeaways are that the company continues to pursue a hybrid model, not betting solely on battery electric vehicles as it sees emissions reduction possible through hybrid vehicles and is still uncertain about the type of batteries that will be adopted in the long term. We see the company as a leader versus other European OEMs on current emissions level and their EV penetration rates, although we think their strategy is less ambitious than some of the more aggressive German automobile manufacturers.
Rating Impact	The meeting had no immediate impact on our credit ratings or ESG Impact Rating for the company. The meeting was useful as it provided a deeper look at the company's electrification strategy and how their emissions reduction ambitions are progressing. The company also spoke around the split of financial investments on new developments with JV partners and what level of flexibility the company has around increasing or decreasing the production capacity of battery-electric vehicles in the context of battery cell supply constraints. The company recognises that hybrid vehicles are a transitory technology towards battery electric and fuel cell vehicles. As a result, it expects these vehicles to eventually fade out in the medium term (after 2025 at the earliest) but it sees the technology is applicable to PHEVs and BEVs as energy efficiency efforts are similar. Nonetheless, there is little direct overlap between BEVs and hybrids as BEVs do not have transmission parts, etc.
Next Steps	We will continue to monitor the company's progress on emissions reduction. In order to upgrade our internal ESG Impact Rating on the company, we would be looking for a greater commitment to BEVs and FCEVs, and an ambition to be less reliant on mild hybrid vehicles.

Source: PGIM Fixed Income as of March 2021

Emerging Markets Debt

ISSUER: **ASIAN DAIRY COMPANY**

Topics	GHG emissions and climate change, supply chain, human rights
Objective	Discuss ESG topics including operating model, treatment of third-party contractors if any, methane gas emissions and waste recycling efforts.
Summary	We queried the company on their provisions for methane gas emissions and efforts undertaken to reduce gas emissions within their farms. The company responded by saying that they have equipped each farm with large scale biogas power generation facilities. They also utilised purified manure to generate electricity which in turn supports the farm's grid. It is quite typical of dairy and poultry/livestock producers to adopt a co-op operating model where livestock are owned by independent contractors rather than the company. This may result in exploitative structures where independent contractors are laden with debt from these companies and are left to flounder in the event of a sudden outbreak of disease, etc.
Assessment	The company appears responsive and committed to bettering its ESG efforts, although the milk industry in that region is still tainted with the overhang from the 2008 scandal. We think it will take more time before processes can be brought up to external scrutiny within the industry.
Rating Impact	No change warranted in the context of this meeting.
Next Steps	We will continue to monitor the company's progress towards its emissions goals, as well as the structures in place for engaging independent contractors.

Source: PGIM Fixed Income as of June 2021

ISSUER: **SOUTH AMERICAN BANK**

Topics	Disclosure and reporting, green securities, social inclusion, social securities
Objective	Provide feedback on KPIs and areas of improved disclosure.
Summary	We discussed the company's ESG efforts at length, as well as its newly introduced sustainability bond framework. The bank's strategy on ESG is based on 10 commitments to provide positive impact on society. This includes goals regarding education, health, and employment diversity amongst others. The bank has a target to grant BRL 100 billion to certain industries and plans to increase loans to small businesses and women-owned businesses. The bank is also striving to improve transparency and make more ESG KPI's available to investors. The bank asked investors what KPI's are of interest and sought guidance from us with respect to our own reporting needs.
Assessment	The company's annual ESG report and KPI data disclosure is better and more in depth than other EM banks and demonstrates that the bank is taking investor concerns seriously. It also sought our input which will lead to future dialogue as PGIM Fixed Income's ESG evaluations evolve.
Rating Impact	No rating impact at this time, but we were pleased to see the progress that the bank has been making.
Next Steps	Continue to monitor the company's sustainability progress and continue to engage regarding the types of disclosures that are most helpful for investors.

Source: PGIM Fixed Income as of May 2021

Leveraged Finance

ISSUER: **TELECOMMUNICATIONS COMPANY**

Topics	GHG emissions and climate change, disclosure and reporting, health and safety
Objective	Develop a more nuanced understanding of the company's environmental and social impacts and on-going efforts to reduce its negative impacts to inform our ESG Impact Rating.
Summary	Management recognised the need to introduce additional climate targets and indicated that the company is in the process of addressing this weakness. Regarding health and safety, management stated the topic was a priority and targets are factored into compensation. Unfortunately, the company's operational partner in Egypt was the primary source for previous fatalities, and the firm recognises the need to address this in the relationship.
Assessment	The company is committed to improving its disclosures and indicated that progress on many of the areas we specified as important would be forthcoming.
Rating Impact	Given the company's performance in mitigating its negative impacts and an indication that it will begin disclosing more information on the material topics, an uplift is under consideration, pending the next ESG report.
Next Steps	Monitor the company for improved H&S performance and the release of new GHG emissions targets.

Source: PGIM Fixed Income as of December 2021

ISSUER: **METAL PRODUCTS AND GLASS PRODUCERS**

Topics	GHG emissions and climate change; circular economy; supply chain
Objective	Discuss current ESG framework. Refresh on current/updated targets around aluminium and glass recycled content, in addition to aluminium and GHG emissions in terms of Scopes 1, 2, and 3.
Summary	Spoke with head of investor relations following 2020 fourth quarter earnings on fundamental results, 2021/2022 outlook, and the key ESG frameworks that management is using to track performance relative to their goals, notably a 27% reduction in Scopes 1, 2, and 3 GHG emissions by 2030.
Assessment	The company is very focused on its sustainability goals, and it is clear that the management team focuses on this as a core element of their business as a way to drive improved fundamentals given customers have increased the demand for recyclable packaging substrates, and to be better environmental participants within the packaging/materials industry.
Rating Impact	No direct impact, as we already viewed the company as one of the highest-quality ESG credits in the packaging industry. This engagement was in line with our current views.
Next Steps	Plan to have a future discussion with their lead sustainability officer as the next step for our engagement on ESG topics with the company.

Source: PGIM Fixed Income as of February 2021.

Securitised Credit

ISSUER: **U.S. CONSUMER LOAN ABS**

Topics	The issuer's ESG framework, PGIM Fixed Income's ESG framework
Objective	To discuss PGIM Fixed Income's ESG methodology for consumer ABS and to understand the firm's progress on ESG topics, with a focus on the development of its social bond issuance program.
Summary	The ABS team discussed PGIM Fixed Income's consumer ABS ESG methodology for unsecured consumer ABS and auto ABS. More specifically, we discussed key considerations on how the ESG Impact Ratings are determined for the firm's issuance conduits. The company has highlighted its comprehensive ESG Report during a previous conversation. We provided detailed feedback and welcomed its transparency on ESG topics as an industry leader. Given the company's interest in developing a social bond issuance program, we discussed how PGIM Fixed Income evaluates labelled bonds for credibility and additionality.
Assessment	Engagement was very constructive with both sides exchanging ideas on ESG topics.
Rating Impact	No immediate impact on ratings. We will continue the conversation as the company continues to develop its ESG framework.
Next Steps	The firm is going to reflect on the discussion and will follow up when they have progressed in their social bond framework.

Source: PGIM Fixed Income as of March 2021.

ISSUER: **EUROPEAN CONSUMER LOAN ABS**

Topic	COVID-19 support for customers
Objective	To ascertain COVID-19 support for credit card customers.
Summary	The issuer's originated receivables are originated under its own brand or via a partnership trust. The former focuses on more near prime customers with the latter focusing on prime customers. Broadly the firm provides critical unsecured financing to customers who are typically not able to access credit cards. The need for credit cards was evident during the pandemic where most retail was limited to some form of online channel; therefore, we feel the company provides a critical service to underserved customer segments in the UK. As part of COVID-19 support measures, the FCA guided regulated firms to provide payment holidays to lenders across mortgages, credit cards, and auto sectors. The company responded in variety of ways, including payment holidays and freezes, depending on the delinquent status of the borrower.
Assessment	We believe this was a good balance of providing support to borrowers, whilst not recklessly lending to customers who were already in arrears.
Rating Impact	No impact on the rating of the company. We rate the firm in line with our balanced unsecured consumer lenders and credit card lenders.
Next Steps	Continue dialogue with the company to understand servicing practice as FCA guidelines expire.

Source: PGIM Fixed Income as of March 2021.

OUR PEOPLE AND COMMUNITY

COVID-19: The Emergence of a New 'Normal'

Without a doubt, after spending the better part of two years navigating a global pandemic, we've permanently changed the way we live and work. PGIM Fixed Income's success in shifting the majority of our workforce to remote work settings, while maintaining appropriate levels of operational control and a consistent level of service to our clients, is a testament to how well our business and employees navigated through these unprecedented times. Our robust business continuity plans allowed us to maintain our control environment, provide the same level of service to our clients, while maintaining the health and safety of our employees.

At both PGIM Fixed Income and PFI, we view our employees as our greatest asset. As such, the health and safety of our employees has been our top priority. Over the course of the pandemic, we have provided the following to our employees:

- The ability to work fully remote during elevated health threat levels;
- Appropriate safety measures in times of elevated health threat levels such as distancing, capacity limits, mask usage, and health screening;
- COVID-19 test kits available through our health network providers;
- Mental health resources available to employees, while building an inclusive culture where all employees feel understood and supported when they need help caring for their own, or a family member's mental and/or physical health.

As we emerge from the pandemic and begin to establish a new way of working, PGIM Fixed Income will be adopting a hybrid model consisting of both in-office and remote working for all of our office locations. This model will allow all PGIM Fixed Income employees a higher degree of flexibility in their work arrangements than prior to the pandemic.

In developing this long-term plan, we considered a number of factors including the need to retain and attract talent, the training requirements of new associates, industry trends and client feedback. The objective of our approach is to balance the desire to give employees additional flexibility with our need to maintain our collaborative, team-based culture.

We will continue to monitor the needs of our employees, alongside those of our clients, to ensure that we're operating as efficiently and effectively in a hybrid environment, adjusting our approach as needed.

PGIM Fixed Income's Workforce

PGIM Fixed Income is committed to attracting, developing, retaining, and promoting diverse talent. We believe that diversity in our workforce is the foundation of the continued success for our business, leads to more impactful and innovative solutions, and best positions us to deliver outperformance to our clients.

As part of the larger PGIM and PFI organization, we share a number of resources across our Human Capital and Diversity, Equity and Inclusion initiatives; however, PGIM Fixed Income still retains significant autonomy to launch our own initiatives and add resources in the areas we believe benefit from greater emphasis. This is why we have split out the programs and initiatives below into those which PGIM Fixed Income leads on its own and those which are led by PGIM and PFI but which PGIM Fixed Income actively participates.

Diversity, Equity and Inclusion—PGIM Fixed Income led Initiatives: We engage in a broad range of programs to support our diversity, equity and inclusion efforts across PGIM Fixed Income with a representative sample of activities detailed below.

Racial Equity and Cultural Change Workstreams: We established four workstreams focused on racial equity and cultural change led the senior leadership team (directly reporting to the Head of PGIM Fixed Income). To maintain accountability and transparency, we communicate the workstreams' progress at our quarterly townhalls and in our monthly PGIM Fixed Income employee communications.

1) **Education, Awareness and Training**—raising awareness within PGIM Fixed Income of racial and social inequities in our society through education and training.

   Contributions include the establishment of an ongoing speaker series, bringing outside perspective to help shine a light on additional aspects of diversity, equity and inclusion for employees to consider. Featured speakers include Dr. Raj Chetty, Dr. Ashleigh Shelby Rosette, Richard Lui, Charles Yu and Sia Sanneh.

2) **Recruitment**—hiring diverse talent at various levels by developing recruiting strategies and processes that showcase PGIM Fixed Income as a destination for top talent.

   Contributions include the creation of a dedicated role, Early Talent Program Manager, with an individual fully dedicated to the hiring, development, and retention of diverse early talent.

3) **Talent Retention**—developing and retaining diverse employees through programs that support growth and development.

   Contributions include the launch of a series of career panels with colleagues across the organization sharing their experience, lessons learned, and advice for other employees.

4) **Social and Community Impact**—partnering with community organizations which have a focus on employment, training, and mentoring opportunities for youth.

   Contributions include…

   - In the United States, we partnered with Braven, which helps first generation minority and disadvantaged college students graduate with the necessary skills and networks to obtain strong employment opportunities after college. The Social and Community Impact Workstream, together with Braven and the Office of Diversity, Equity, and Inclusion planned a series of events in the past year, including 1) Mock Interviews and Resume Workshops (40 conducted in 2021); 2) Leadership Coaches and Professional 1:1 Mentors; and 3) Career Panels and Networking with Braven students.
   - Additionally, In Europe, the London office collaborated with #10000 Black Interns to hire a summer intern and donated computer hardware to Preston Manor to assist remote learning for disadvantaged children during COVID.
   - In Japan, the Workstream partnered with "Lights on Children" to donate PCs to disadvantaged children and Kidsdoor to provide online English tutoring to children living below the poverty line.

Affinity Groups: We created employee-led groups to provide a forum for colleagues of different backgrounds to give consistent, honest, and unfiltered feedback to senior leaders. In 2021, the PGIM Fixed Income affinity groups include:

- Black Professional Alliances at Fixed Income "BPA@FI"
- PGIM Fixed Income Women Initiatives Network
- PGIM Fixed Income Latinx Community
- PGIM Fixed Income Asian Pacific Islander Community

Head of Diversity, Equity & Inclusion: Given the importance of DEI across our organization, and the growing scale of work underway to support our efforts, we made the decision to hire a Head of Diversity, Equity & Inclusion for PGIM Fixed Income, reporting to President John Vibert, underscoring the importance of this role and our commitment to engagement at the most senior levels.

Diversity, Equity & Inclusion—PGIM and PFI led Initiatives: In addition to specific efforts across PGIM Fixed Income, we also contribute to enterprise-wide efforts at the PGIM and PFI levels. Enterprise initiatives with significant impact on PGIM Fixed Income are detailed below.

Kathryn Sayko is PGIM's Chief Diversity, Equity & Inclusion Officer and leads PGIM's inclusion and diversity efforts. She and her team develop strategic inclusion initiatives, collaborate with PGIM's CEOs and Human Resource leads on recruiting and retention efforts, work with internal and external advocacy and affinity organisations, and partner with leaders in the investment industry to accelerate an inclusive culture and diverse talent pool in the industry.

In addition, PFI has established several programs to support increased diversity across all aspects of the company.

- Inclusion Council chaired by our CEO Charles Lowrey and comprised of executive and senior leaders.
- Enterprise diverse talent goal tied to the long-term compensation of senior leaders.
- Employee-led Business Resource Groups which inform the company's diversity and inclusion strategy and drive business execution to help make sure business solutions reflect the diversity of our customers.
- Supplier diversity program seeks to leverage the talent of suppliers in every colour, gender, origin, religion, sexual orientation, and physical capability—using diverse firms as fully as possible and ensuring that long-term agreements with non-diverse vendor partners share our vision for and dedication to supplier diversity.
- Business Diversity Outreach, a branch of the firm's Community Resources Department, connects the company to diverse markets by bringing business and sales professionals into direct contact with marginalised communities—including African-Americans, Latinos, Asian-Americans, the LGBT+ community and women—to form new and mutually beneficial relationships.

We place tremendous value on transparency; thus, we have shared important data points below related to diversity in our workforce at the PGIM Fixed Income level, in accordance with local privacy laws and regulation.

PGIM Fixed Income Workforce Statistics

of our U.S. workforce is made up of women and people of colour[1]

of our U.S. workforce is made up of women[1]

21% in investment roles
43% in non-investment roles

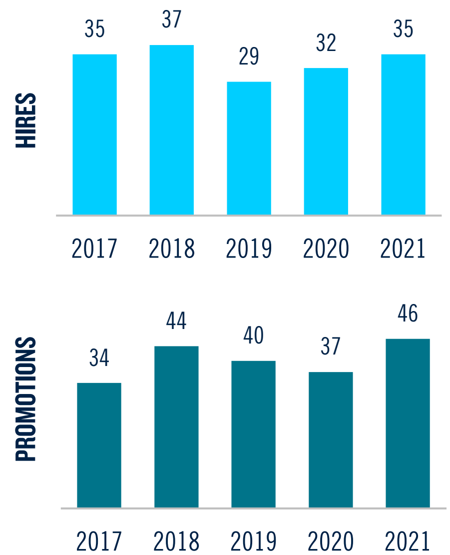
of our U.S. workforce is made up of people of colour[1]

Women Representation Globally[2]

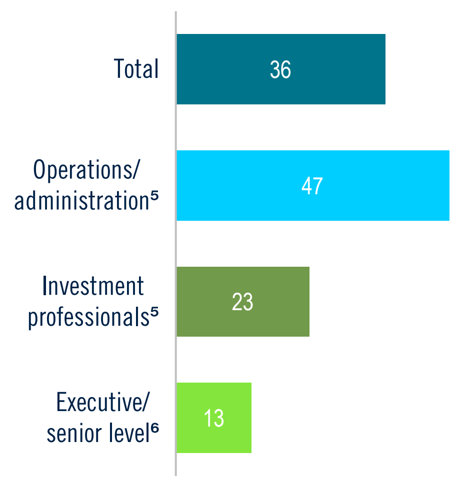
KEY: % women; % in investment roles | % at senior levels[3]

	UNITED STATES	EUROPE	ASIA	GLOBAL
% women	35%	36%	44%	36%
% in investment roles	21%	25%	25%	22%
% at senior levels[3]	21%	23%	21%	21%

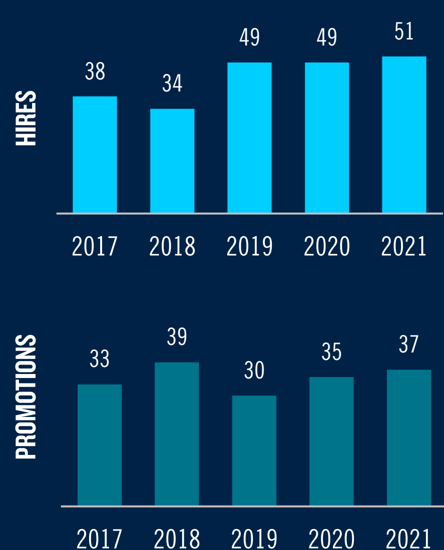
Female Representation Across Hires and Promotions Globally
(2017-2021; % of total)[4]



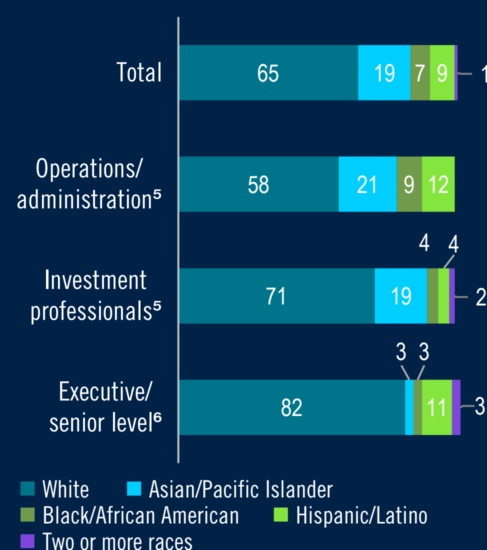
Women Representation Across Global Workforce by Job Category
(% of total)



Ethnically Diverse Representation in the U.S. Across Hires and Promotions
(2017 – 2021; % of total)[7]



Ethnically Diverse Representation in the U.S. by Race and Job Category
(% of total)[7]



Note: As of 31 December 2021.
[1] Data is representative of U.S. workforce only and excludes administrative professionals. [2] Data is representative of global workforce and includes administrative assistants.
[3] Senior implies VP level and above.
[4] Gender data is representative of the global employee population. [5] Data excludes executive/senior level employees. [6] Executive/senior level implies managing directors and above.
[7] Ethnicity data is representative of the U.S. employee population only.

Talent Attraction and Retention

Talent Attraction—PGIM Fixed Income Led Initiatives

PGIM Fixed Income thrives on diversity of thought and active debate, and we recognize the need to attract top talent who can bring new perspectives to our teams globally. Below are a few examples of hiring initiatives within PGIM Fixed Income designed to address this need.

- **PGIM Fixed Income Returners programme (London):** In the summer of 2022, PGIM Fixed Income is partnering with the Diversity Project for the first time to provide six, 6-month paid returnship opportunities with a view to offer permanent placements subject to successful completion of the programme. Aimed at experienced professionals returning from an extended career break, this programme provides a fully-supported route back to employment within the investment industry.
- **Sponsors for Educational Opportunity (SEO) London Internship programme:** SEO focuses on preparing talented students from underserved and underrepresented backgrounds for career success by providing opportunities to gain insight into different industries and sectors through 12-week internships. PGIM Fixed Income in partnership with SEO has created opportunities for students to gain insight into the investment industry with a view for permanent placements following the successful completion of the programme.
- **10,000 Black Interns:** offering an 8-week summer internship to black interns in the financial sector with an effort to increase minority representation and a view to extend permanent placement subject to degree completion. PGIM Fixed Income extended offers for two placements in London in 2022.
- **Investment 20/20:** Investment 20/20 employers commit to the organization's ethos of recruiting for potential. Investment 20/20 Programme positions do not require previous experience and instead focus on candidates' strengths, skills, and qualities. In 2021, PGIM Fixed Income offered two, 12-month placements, again with a view to offer permanent placement following successful completion of the programme.

Talent Attraction—PGIM and PFI Led Initiatives

As part of the larger PGIM and PFI community, we regularly engage with our affiliates in support of programs and initiatives that help attract diverse talent across the enterprise. Those programs are detailed below.

- **Historically Black Colleges and Universities ("HBCUs"):** PFI has engaged with a number of HBCUs. In addition to the enterprise level support underway, PGIM Fixed Income's parent organization, PGIM, has supported additional initiatives to improve students' educational experience specific to investing and asset management. One such example includes fully funding the technology (i.e., Bloomberg terminals) to support a student-run investment fund. This type of support aims to improve students' job prospects and ultimately their financial futures. Going forward, PGIM plans to help create several student-run investment funds across our HBCU partners.
- **PGIM Diversity, Equity & Inclusion (DE&I) team:** led by PGIM Chief Diversity, Equity & Inclusion Officer Kathryn Sayko, provides a global strategy and direction on our DE&I initiatives which are tied to recruitment and retention, brand and influence, and culture. We maintain and support partnerships with several external organisations to enhance our diversity recruiting efforts and talent identification. These organisations include:
  - Robert Toigo Foundation (2012)
  - Posse Veterans (2019)

- Management Leadership for Tomorrow (2020)
- Point Foundation (2021)

Additional programs providing networking and mentorship opportunities include:

- Diversity Recruiting Program at Entry Levels
- Ron Andrews Diversity Scholarship Program
- Mental Health Champions
- Intern Cohorts for Black, Latinx, Veterans, and Female talent
- Women Unlimited
- 30% club
- We Are All Human Hispanic Promise
- Diversity Organisation
- Diversity Project UK

Talent Retention—PGIM Fixed Income Led Initiatives

Attracting top talent is critical, but it's also incumbent upon us to retain the best and brightest by providing a productive, inclusive, and meritocratic culture where our employees feel valued. To that end, in addition to working to diversify our talent pipeline, we've also made concerted efforts to increase the resources devoted to developing and retaining existing talent. Those efforts include:

- **Talent retention workstream:** a dedicated group sponsored by senior executives with participation and support from colleagues with varying levels of seniority. Their work has resulted in tangible results including the previously mentioned hiring of an early talent development manager focused on the hiring, development and retention of early talent.
- **Culture Council:** a dedicated group responsible for promoting and supporting the values of PGIM Fixed Income which aim to create a safe inclusive environment centred around mutual respect, trust in each other, collegiality, teamwork, meritocracy, intellectual honesty, transparency and an unwavering commitment to our clients.
- **Revamping promotion criteria and governance:** the senior Leadership Team continued efforts to ensure fairness and increase transparency in the promotion process. Those efforts involved clearly defining promotion criteria and governance for each PGIM Fixed Income functional area and communicating those criteria and details of the promotion process to all employees.
- **Talent development and succession planning:** we engage in proactive efforts to ensure a diverse pool for development opportunities and promotions with an extensive succession planning program focused on the identification and development of emerging leaders and successors for critical positions across PGIM Fixed Income. Reporting is in place to monitor representation in these talent processes and data is compared to external benchmarks.

Talent Retention—PGIM led initiatives

At the broader PGIM level, PGIM Fixed Income colleagues support a number of key talent retention initiatives. In addition, a dedicated PGIM Diversity, Equity & Inclusion Team was established to provide strategy and direction on targeted initiatives tied to recruitment and retention, brand and influence, and culture. Such PGIM initiatives include:

- **Diversity Recruiting Programs at Entry Levels**
  - Student Veteran Cohort: provide mentorship and support to entry-level military talent
  - Virtual Business Challenge Competition: support the participation of candidates from Historically Black Colleges and Universities, as well as Hispanic Serving Institutions. In this competition, the participants submit responses to a research question and get mentorship and access to senior leaders at the firm.
  - Girls who Invest: sponsor external initiative which targets 30% of global capital managed by women by 2030.
  - Handshake and Posse Veterans: sponsor of external initiatives which focus on military talent transitioning into corporate America.
  - Women Educating on Careers in Asset Management: senior women at the firm focus on providing an overview of careers in asset management to underserved populations, sponsor female talent at the firm, and mentor junior female talent.
- **Women's Advisory Council:** comprised of senior women across the firm who sponsor and develop junior level employees and serve as educators and ambassadors on careers in asset management. In a similar way, the Junior Women's Advisory Council, supports and engages junior level women at PGIM NY and NJ. PGIM Fixed Income has five active members of the Women's Advisory Council and four members of the Junior Women's Advisory Council.
- **Veterans Leadership Circle:** focuses on Veteran's recruitment, retention, and increasing a sense of belonging at the firm.
- **Black Executive Leadership Team:** comprised of VP+ Senior Leaders that focus on recruitment, retention, and increasing representation at the firm. This group also advises senior leadership on creating a sense of belonging for this talent group and provides strategic advice on racial equity plans.
- **Latinx Executive Leadership Team:** comprised of VP+ Senior Leaders that focus on recruitment, retention, and increasing representation at the firm. This group also advises senior leadership on creating a sense of belonging for this talent group and provides strategic advice on racial equity plans.
- **LGBTQ+ Think Tank:** provides strategic direction and counsel to senior leadership, the talent and market opportunity, and how to recruit and retain the top talent from this community.

We are also proud to announce that in December 2021, for the second year in a row, Pensions & Investments has named PGIM a Best Place to Work in Money Management. The list is published by Pensions & Investments, who worked with Best Companies Group, by undertaking a two-step process: firstly, employers complete a questionnaire about the firm's policies, practices, benefits and demographics, which is then confirmed by Best Companies. The second part, which represents 75% of the total score, includes an engagement survey with 78 statements that employees of the company are expected to respond to. The engagement survey revealed that employees feel PGIM is a talent destination for its inclusive and meritocratic culture, where employees feel empowered to make a high impact from day one. The data is then compiled, verified, and finalized by Best Companies and companies are ranked against others of similar size.

APPENDIX

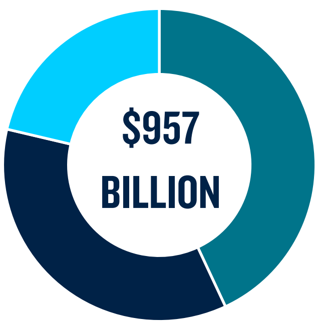
I. PGIM Fixed Income: Facts and Figures

PGIM Fixed Income's business includes a wide breadth of fixed income strategies and products, including traditional multi-sector and single-sector fixed income strategies for institutional clients, insurance companies, and mutual funds, as well as alternative products, including long/short strategies and collateralised loan obligations (CLOs), with an emphasis on credit-related strategies.

With $957 billion in assets managed globally, we serve 955 global clients with 341 investment professionals across the globe. PGIM Fixed Income is routinely recognised as a leader in fixed income, receiving numerous industry awards for the full range of our global, U.S., European, and Asian funds.

PGIM Fixed Income Assets Under Management

($ Billion)



Third Party Institutional	$412
Proprietary	$341
Third Party Retail	$204

Expertise Across a Broad Range of Sectors

(Assets Under Management; $ Billion)

Corporates	$362	Money Markets	$60
Governments	$174	Bank Loans	$38
Securitised Products	$120	Municipals	$32
High Yield	$80	Mortgages	$20
Emerging Markets	$69	Other*	$2

Assets as of 31 December 2021. Please see the Notice section for important disclosures, including risk. Source: PGIM Fixed Income. Assets under management (AUM) are based on company estimates and are subject to change. PGIM Fixed Income's AUM includes the following businesses: (i) the PGIM Fixed income unit within PGIM, Inc, located in the USA; (ii) the public fixed income unit within PGIM Limited, located in London; (iii) PGIM Netherlands B.V. located in Amsterdam; (iv) locally managed assets of PGIM Japan Co., Ltd. ("PGIM Japan"), located in Tokyo; and (v) the public fixed income unit within PGIM (Singapore) Pte. Ltd., located in Singapore. Asset class breakdown based on company estimates and is subject to change. *Other includes Japanese equities and Japanese real estate equities.

PGIM Fixed Income has experienced significant growth in assets under management over the last decade, from ~$400 billion as of 31 December 2011 to $957 billion as of 31 December 2021. Through the same period, we have seen significant growth in the number of institutional clients and employees with 955 institutional clients and 1,043 employees as of 31 December 2021, compared to 270 institutional clients and 467 employees as of 31 December 2011.

During this period, we have increased the number of credit research analysts and portfolio managers employed at our firm. With the addition of high-quality staff and the stability of senior leadership, we believe the growth of our business has had a positive impact on our ability to generate alpha within the fixed income market.

Technology and Infrastructure

We have the resources necessary to maintain a comprehensive, technology-driven infrastructure. We invest significant resources in technology and information systems for research, portfolio construction and management, trading, portfolio administration, and compliance. As of 31 December 2021, 78 professionals in our internal quantitative analysis and risk management, as well as a 92-member applications development team, are focused on developing and maintaining technology-based quantitative research, risk management, and performance analysis analytics.

Ongoing investment in technology to support our global business objectives is a strategic priority for us. In the last 18 months, we have invested considerably through a multi-phased project to update our data architecture and processes across the firm, with the goal of increasing the accuracy and performance of the portal and Business Intelligence platforms. We also commenced a series of data and cloud initiatives aimed at improving the speed to deliver data to our investment desks and distribution businesses. This series of initiatives has increased our capacity to ingest, consume, process, distribute and analyse data in our proprietary quantitative analytics, risk management and research tools with greater speed, accuracy, reliability, and scalability.

Risk management is another area where we invest considerable resources and have developed proprietary systems and methods of analysis that we believe best capture the most relevant risks for our strategies and promote optimal investment practice rather than just instilling binary risk limits. This includes designing a less pro-cyclical system (compared to more typical Value at Risk based approaches) and using proprietary principal component analysis (to focus and drill-down into the most relevant risks).

II. Management of Conflicts of Interest

Like other investment advisers, we are subject to various conflicts of interest in the ordinary course of our business. We strive to identify potential risks, including conflicts of interest, that are inherent in our business, and we conduct annual conflict of interest reviews. However, it is not possible to identify every potential conflict that can arise. When actual or potential conflicts of interest are identified, we seek to address such conflicts through elimination or disclosure of the conflict, or management of the conflict through the adoption of appropriate policies, procedures or other mitigants.

We have adopted various policies and procedures designed to address conflicts of interest. For example, we follow policies on business ethics, personal securities trading, and information barriers. In addition, we have adopted a code of ethics, allocation policies and conflicts of interest policies, among others, and have implemented supervisory procedures to monitor compliance with our policies.

Examples of Conflicts of Interest: Side-by-Side Management

The management of numerous client accounts on a side-by-side basis can create conflicts of interest. Some examples of side-by-side management and the related conflicts of interest are as follows:

- **Performance fees:** We manage accounts with asset-based fees alongside accounts with performance-based fees. This creates an incentive for us to favour accounts for which we receive performance fees, and possibly take greater investment risks in those accounts, in order to bolster performance and increase our fees.
- **Affiliated accounts:** We manage accounts on behalf of our affiliates as well as unaffiliated accounts. We have an incentive to favour accounts of affiliates over others.
- **Larger accounts/higher fee strategies:** Larger accounts and clients typically generate more revenue than do smaller accounts or clients, and certain of our strategies have higher fees than others. As a result, a portfolio manager could have an incentive when allocating scarce investment opportunities to favour accounts that pay a higher fee or generate more income for us (or which we believe would generate more revenue in the future).

We have developed policies and procedures reasonably designed to address the conflicts of interest with respect to our different types of side-by-side management. For example:

- Each quarter, the head of PGIM Fixed Income holds a series of meetings with the senior portfolio manager and team responsible for the management of each of our investment strategies. At each of these quarterly investment strategy review meetings, the head of PGIM Fixed Income and the strategy's portfolio management team review and discuss the investment performance and performance attribution for client accounts managed in the strategy.
- In keeping with our fiduciary obligations, our policy with respect to trade aggregation and allocation is to treat all of our client accounts fairly and equitably over time. Our trade management oversight committee, which generally meets quarterly, is responsible for providing oversight with respect to trade aggregation and allocation.
    - Our compliance group periodically reviews a sampling of new issue allocations and related documentation to confirm compliance with our trade aggregation and allocation policy. In addition, our compliance and investment risk management groups review forensic reports regarding new issue and secondary trade activity on a quarterly basis. This forensic analysis includes such data as the:
        - number of new issues allocated in the strategy;
        - size of new issue allocations to each portfolio in the strategy;
        - profitability of new issue transactions;
        - portfolio turnover; and
        - metrics related to large and block trade activity.
    - The results of these analyses are reviewed and discussed at our trade management oversight committee meetings.

These procedures are designed to detect patterns and anomalies in our side-by-side management and trading so that we may assess and improve our processes.

Examples of Conflicts of Interest: Affiliated Investments

To avoid conflicts of interest related to affiliated investments, we do not purchase securities issued by our parent company or our other affiliates for client accounts.

Examples of Conflicts of Interest: Gifts and Entertainment

Our employees may occasionally give or receive gifts, meals or entertainment of moderate value, subject to compliance with applicable laws and regulations (including the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act 2010) and rules of self-regulatory organizations. We have adopted policies to address the conflicts of interest related to gifts and entertainment, such as the appearance of having given or received something of value that influenced our business decisions or the business decisions of our clients. The policies require the reporting and preclearance of gifts, meals and entertainment given or received which exceed certain thresholds. In addition, our employees are prohibited from soliciting the receipt of gifts, meals or entertainment. Senior management periodically reviews summaries of gifts and entertainment activity to detect trends of abuse, conflicts of interest, or possible violations of the policy.

Examples of Conflicts of Interest: Proxy Voting

We accept the authority to vote securities held in our clients' accounts when our clients wish to provide us with this authority. Our policy is to vote proxies in the best economic interest of our clients. We do not receive a significant number of proxies since we primarily invest client assets in debt instruments. Please see PGIM Fixed Income's Form ADV Part 2A for a more detailed description of our proxy voting policy.

Occasionally, a conflict of interest may arise in connection with proxy voting. For example, the issuer of the securities being voted may also be a client of ours. When we identify an actual or potential material conflict of interest between our firm and our clients with respect to proxy voting, the matter is presented to senior management who will resolve such issue in consultation with the compliance and legal departments.

III. Task Force on Climate-Related Financial Disclosures (TCFD) Metrics

Weighted-Average Carbon Intensity (tCO2e / $M sales)

	Corporates Emissions Intensity (Sales)[2]	Corporates as a % of Total Portfolio	% of Corporate Subset Missing Data
All Portfolios[1]	525	53.42%	15.8%
Sample Global Corporate Bond Portfolio	293	97.53%	6.0%
Sample ESG Global Corporate Bond Portfolio	121	95.57%	4.9%
Sample Global High Yield Bond Portfolio	425	97.97%	30.4%
Sample ESG Global High Yield Bond Portfolio	108	98.46%	31.9%
Sample ESG Emerging Markets Corporate Bond Portfolio	233	93.48%	30.6%

[1] Note: All portfolios refers to all AUM of PGIM Fixed Income. The sample portfolios listed are only a subset of this AUM.
[2] Only includes Scope 1 and 2 emissions.
Source: MSCI. As of 31 December 2021.

GHG Emissions (tCO2e attributed)

	Corporate GHG Emissions (tCO2e attributed)[2]	Corporates as a % of Total Portfolio	% of Corporate Subset Missing Data
All Portfolios[1]	51,982,220	53.42%	27.5%
Sample Global Corporate Bond Portfolio	67,114	97.53%	13.2%
Sample ESG Global Corporate Bond Portfolio	527	95.57%	13.7%
Sample Global High Yield Bond Portfolio	12,041	97.97%	39.4%
Sample ESG Global High Yield Bond Portfolio	3,388	98.46%	40.4%
Sample ESG Emerging Markets Corporate Bond Portfolio	1,549	93.48%	39.4%

[1] Note: All portfolios refers to all AUM of PGIM Fixed Income. The sample portfolios listed are only a subset of this AUM.
[2] Only includes Scope 1 and 2 emissions.
Source: MSCI. As of 31 December 2021.

Carbon Footprint (tCO2e attributed/$M invested)

	Corporate Carbon Footprint (tC02e attributed/$M invested)[2]	Corporates as a % of Total Portfolio	% of Corporate Subset Missing Data
All Portfolios[1]	141	53.42%	27.5%
Sample Global Corporate Bond Portfolio	101	97.53%	13.2%
Sample ESG Global Corporate Bond Portfolio	25	95.57%	13.7%
Sample Global High Yield Bond Portfolio	258	97.97%	39.4%
Sample ESG Global High Yield Bond Portfolio	57	98.46%	40.4%
Sample ESG Emerging Markets Corporate Bond Portfolio	107	93.48%	39.4%

[1] Note: All portfolios refers to all AUM of PGIM Fixed Income. The sample portfolios listed are only a subset of this AUM.
[2] Only includes Scope 1 and 2 emissions.
Source: MSCI. As of 31 December 2021.

Carbon Intensity (tCO2e attributed/$M sales attributed)

	Corporate Carbon Intensity (tC02e attributed/$M sales attributed)[2]	Corporates as a % of Total Portfolio	% of Corporate Subset Missing Data
All Portfolios[1]	346	53.42%	27.5%
Sample Global Corporate Bond Portfolio	284	97.53%	13.2%
Sample ESG Global Corporate Bond Portfolio	86	95.57%	13.7%
Sample Global High Yield Bond Portfolio	530	97.97%	39.4%
Sample ESG Global High Yield Bond Portfolio	116	98.46%	40.4%
Sample ESG Emerging Markets Corporate Bond Portfolio	298	93.48%	39.4%

[1] Note: All portfolios refers to all AUM of PGIM Fixed Income. The sample portfolios listed are only a subset of this AUM.
[2] Only includes Scope 1 and 2 emissions.
Source: MSCI. As of 31 December 2021.

Exposure to Fossil Fuels (% of MV)

	Corporate Exposure to Fossil Fuels (% of MV) *Revenue Based*	Corporates as a % of Total Portfolio	% of Corporate Subset Missing Data
All Portfolios[1]	19.7%	53.42%	15.5%
Sample Global Corporate Bond Portfolio	16.7%	97.53%	6.0%
Sample ESG Global Corporate Bond Portfolio	10.9%	95.57%	4.9%
Sample Global High Yield Bond Portfolio	11.0%	97.97%	30.8%
Sample ESG Global High Yield Bond Portfolio	7.8%	98.46%	31.9%
Sample ESG Emerging Markets Corporate Bond Portfolio	10.2%	93.48%	31.6%

[1] Note: All portfolios refers to all AUM of PGIM Fixed Income. The sample portfolios listed are only a subset of this AUM.
Source: MSCI. As of 31 December 2021.

IV. Prudential Financial, Inc. ("PFI")[15]

At the enterprise level, PFI, of which PGIM Fixed Income is a part, published its 2021 ESG Report, replacing the company's annual Sustainability Report and underscoring PFI's continued efforts to meet the evolving needs of its customers, employees, shareholders, and communities and to fulfil the company's purpose of solving the financial challenges of our changing world.

The full report can be found here: 2021 ESG Report

V. The UK Stewardship Code Related Disclosures

PGIM Fixed Income became a signatory to the UK Stewardship Code in 2021. In support of our application and constant desire to improve our disclosures, we have included stewardship related disclosures in our annual ESG report. Please see below for where you can find relevant information throughout the report.

Stewardship Code Principles	Relevant Disclosures in the Report	Page
Principle 1: Signatories' purpose, investment beliefs, strategy, and culture enable stewardship that creates long-term value for clients and beneficiaries leading to sustainable benefits for the economy, the environment and society.	• About PGIM Fixed Income	5
	• Appendix I. PGIM Fixed Income Facts and Figures	58
	• ESG Philosophy and Approach	6
	• Major ESG Developments in 2021	7
Principle 2: Signatories' governance, resources and incentives support stewardship.	• Governance, Resources, and Incentives to Support ESG Stewardship	10
	• Selection and Monitoring of Service Providers	15
Principle 3: Signatories manage conflicts of interest to put the best interests of clients and beneficiaries first.	• Management of Conflicts of Interest in ESG/Stewardship Activities	14
	• Appendix II. Management of Conflicts of Interest	59
	• ESG in Risk Management	15

[15] Prudential Financial, Inc. of the United States is not affiliated in any manner with Prudential plc, incorporated in the United Kingdom, or with Prudential Assurance Company, a subsidiary of M&G plc, incorporated in the United Kingdom

VI. Task Force on Climate-Related Financial Disclosures (TCFD) Related Disclosures

TCFD Recommendations	Relevant Disclosures in the Report	Page
Governance	• Governance, Resources, and Incentives to Support ESG Stewardship	10
Strategy	• Climate Risk Analysis	22
Risk Management	• Governance, Resources, and Incentives to Support ESG Stewardship	10
	• ESG in Risk Management	15
	• Climate Risk Analysis	22
Metrics and Targets	• Climate Risk Analysis	22
	• ESG Investment Guidelines and Products	38
	• Appendix III: Task Force on Climate-Related Financial Disclosures (TCFD) Metrics	61

NOTICE: IMPORTANT INFORMATION

notice. PGIM Fixed Income has no obligation to update any or all such information; nor do we make any express or implied warranties or representations as to its completeness or accuracy. Any information presented regarding the affiliates of PGIM Fixed Income is presented purely to facilitate an organisational overview and is not a solicitation on behalf of any affiliate. **These materials are not intended as an offer or solicitation with respect to the purchase or sale of any security or other financial instrument or any investment management services. These materials do not constitute investment advice and should not be used as the basis for any investment decision.**

This material may contain examples of the firm's internal ESG research program and is not intended to represent any particular product's or strategy's performance or how any particular product or strategy will be invested or allocated at any particular time. PGIM's ESG processes, rankings and factors may change over time. ESG investing is qualitative and subjective by nature; there is no guarantee that the criteria used or judgment exercised by PGIM Fixed Income will reflect the beliefs or values of any investor. Certain information regarding ESG practices is obtained through third-party reporting, which may not be accurate or complete, and PGIM Fixed Income may depend on this information to evaluate a company's commitment to, or implementation of, ESG practices. ESG norms differ by region. There is no assurance that PGIM Fixed Income's ESG investing techniques will be successful.

These materials do not take into account individual client circumstances, objectives or needs. No determination has been made regarding the suitability of any securities, financial instruments or strategies for particular clients or prospects. The information contained herein is provided on the basis and subject to the explanations, caveats and warnings set out in this notice and elsewhere herein. Any discussion of risk management is intended to describe PGIM Fixed Income's efforts to monitor and manage risk but does not imply low risk. No risk management technique can guarantee the mitigation or elimination of risk in any market environment. These materials do not purport to provide any legal, tax or accounting advice. These materials are not intended for distribution to or use by any person in any jurisdiction where such distribution would be contrary to local law or regulation.

Any references to specific securities and their issuers are for illustrative purposes only and are not intended and should not be interpreted as recommendations to purchase or sell such securities. Any securities referenced may or may not be held in portfolios managed by PGIM Fixed Income and, if such securities are held, no representation is being made that such securities will continue to be held.

Any financial indices referenced herein as benchmarks are provided for informational purposes only. The use of benchmarks has limitations because portfolio holdings and characteristics will differ from those of the benchmark(s), and such differences may be material. You cannot make a direct investment in an index. Factors affecting portfolio performance that do not affect benchmark performance may include portfolio rebalancing, the timing of cash flows, credit quality, diversification and differences in volatility. In addition, financial indices do not reflect the impact of fees, applicable taxes or trading costs which reduce returns. Unless otherwise noted, financial indices assume reinvestment of dividends.

Any projections or forecasts presented herein are as of the date of this presentation and are subject to change without notice. Actual data will vary and may not be reflected here. Projections and forecasts are subject to high levels of uncertainty. Accordingly, any projections or forecasts should be viewed as merely representative of a broad range of possible outcomes. Projections or forecasts are estimated, based on assumptions, and are subject to significant revision and may change materially as economic and market conditions change. PGIM Fixed Income has no obligation to provide updates or changes to any projections or forecasts.

Any performance targets contained herein are subject to revision by PGIM Fixed Income and are provided solely as a guide to current expectations. There can be no assurance that any product or strategy described herein will achieve any targets or that there will be any return of capital. Past performance is not a guarantee or a reliable indicator of future results and an investment could lose value.

Benchmark Description for Bloomberg Barclays Global Aggregate Corporate Bond Index (USD Hedged) (Bloomberg Barclays Global Corporate Index (USD Hedged)) (Global Corporate (USD Hedged): The Bloomberg Barclays Global Aggregate Corporate Bond Index (USD Hedged) is a component of the Global Aggregate Index that includes the global investment-grade, fixed-rate or step up, taxable securities sold by industrial, utility and financial issuers. The three major components of this index are the U.S. Aggregate Corporate, the Pan-European Aggregate Corporate, and the Asian-Pacific Aggregate Corporate indices. The index also includes Eurodollar and Euro-Yen corporate bonds, Canadian corporate securities, and USD investment-grade 144A securities. Securities included in the index must have at least 1 year until final maturity and be rated investment-grade (Baa3/BBB-/BBB-) or better using the middle rating of Moody's, S&P, and Fitch. The index is hedged to USD.

PGIM FIXED INCOME