



# ESG Investment Update

Semi Annual Report  
May 2020

*Signatory of:*



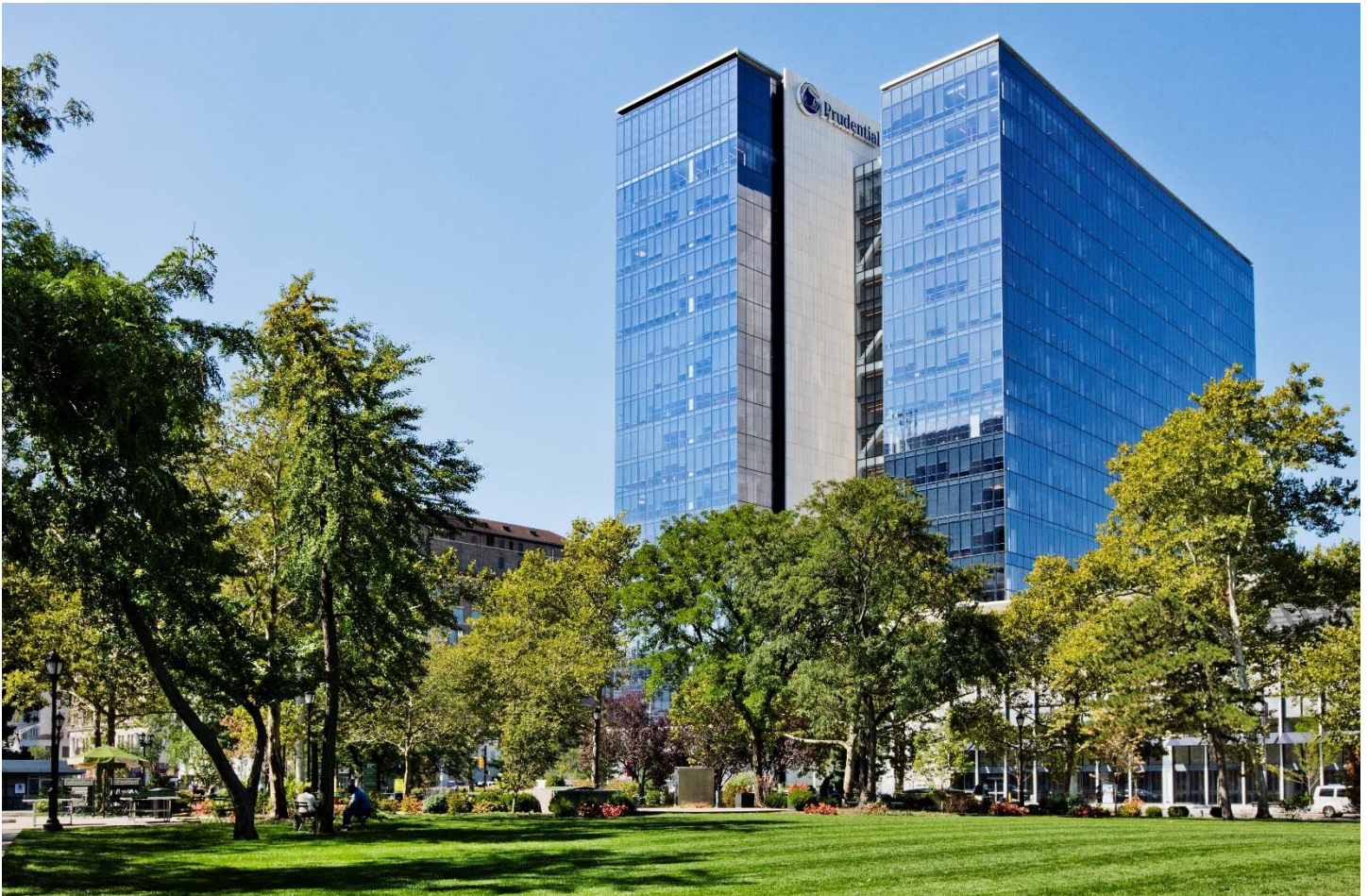
**For Professional Investors only. All investments involve risk, including the loss of capital.**

Confidential – Not for further distribution. Please see Notice Page for important disclosures regarding the information contained herein.



## Contents

Responsible Investing at PGIM Fixed Income .....	3
Principles of Responsible Investing (PRI) .....	4
ESG Engagements.....	5
Relative Value Discussions.....	11
ESG Tracked Issues .....	11
Green Bonds.....	12
PGIM Fixed Income ESG Practices in Investment Portfolios .....	13
Proprietary ESG Ratings.....	14
PFI Initiatives.....	15



## Responsible Investing at PGIM Fixed Income

At PGIM Fixed Income our mission is to provide consistent, superior risk-adjusted returns and excellent service to our clients. We strive to be a leading global fixed income manager with competencies across the entire fixed income spectrum. We are led by our core values—a strong moral compass, a clear vision, an external focus, the ability to take intelligent risks,<sup>1</sup> the ability to seize opportunity, and the ability to transform strategy into action. We are committed to doing business the right way.

This report has been prepared for you, our clients and constituents, with the objective of keeping you informed and updated on our efforts regarding ESG investments, reviews, and reporting. Also included in this report is information on Prudential Financial, Inc. (PFI)<sup>2</sup>, our parent company, and its efforts, as well as important links to our assessment and transparency reports from the PRI, of which we are a signatory.

As responsible investors, we encourage you to review this material, and contact us with any questions or concerns. We continue to maintain a steadfast focus on our clients and our business and to build on our vision to be widely regarded as a premier active global fixed income manager.

---

<sup>1</sup> No risk management technique can guarantee the mitigation or elimination of risk in any market environment.

<sup>2</sup> 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.

## The PRI

The United Nations supported Principles for Responsible Investment (PRI) Initiative is an international network of investors working together to put into practice the Principles for Responsible Investment. Its objective is to understand the investment implications of environmental, social and governance (ESG) factors and to support its international network of investor signatories in incorporating these factors into their investment and ownership decisions. The PRI acts in the long-term interests of its signatories, of the financial markets and economies in which they operate and ultimately of the environment and society as a whole.

Signatory of:



## Principles of Responsible Investing (PRI)

PGIM Fixed Income has been a signatory of the Principles for Responsible Investment (PRI) since February 2015. We recognize the importance of integrating Environmental, Social, and Governance (ESG) factors in our global investment research assessment and decision-making process. We consider relevant ESG factors in our investment process to work toward our ultimate fiduciary duty — searching for the highest risk adjusted returns for our clients. PGIM Fixed Income currently has \$851 billion in assets under management as of 31 December 2019. A portion of these assets include client-directed portfolios with ESG guidelines. The firm has been managing assets for ESG-conscious clients for several decades.

In PGIM Fixed Income's 2019 Assessment Report which covered the 2018 calendar year, we were rated as follows:

- Strategy & Governance A
- Fixed Income - SSA A
- Fixed Income - Corporate Financial A
- Fixed Income - Corporate Non-Financial A
- Fixed Income - Securitised A

[Click here to view PGIM Fixed Income's 2019 PRI Assessment Report.](#)

[Click here to view PGIM Fixed Income's 2019 PRI Transparency Report.](#)

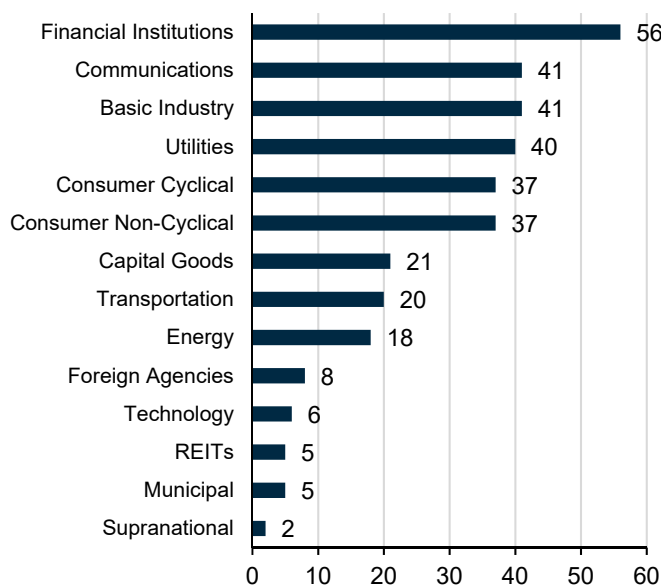


# ESG Engagements

PGIM Fixed Income believes that engagement with the senior management of companies on ESG issues is an important part of effective ESG integration for fixed income investors. Developing open dialogue with management regarding our ESG concerns and how they plan to mitigate risks is an additional research tool for our analysts when developing our internal credit ratings. Engagement helps our analysts to have a forward-looking view of how well the company is positioned to address ESG risk factors. In 2019, we had 566 ESG engagements with sovereign, corporate issuers and structured product issuers.

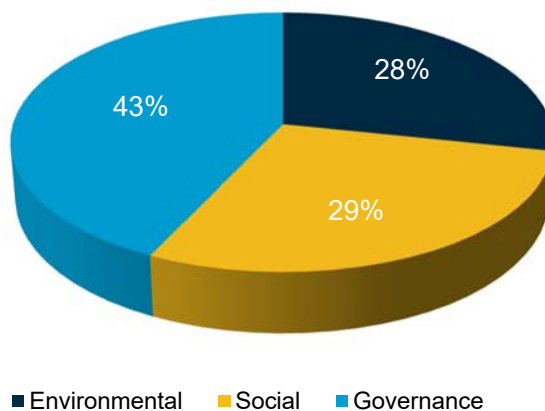
Examples of engagement on relevant ESG issues include, but are not limited to: inadequate succession planning, unsafe labor conditions, future changes to education, healthcare, and environmental policy for sovereigns, regulations on carbon, supply chain risks for retailers, concerns of inadequate risk controls, and concerns regarding the nature of conducting business.

**Corporate Engagements by Industry YTD 31 Dec. 2019**



Source: PGIM Fixed Income.

**ESG Engagements in 2019**



## RECENT ESG ENGAGEMENT EXAMPLES

*The examples shown herein are for informational purposes only. It is not a recommendation to buy or sell any specific security or invest in a particular strategy. Past results are not a guarantee or a reliable indicator of future outcomes.*

### BMW

- During a non-deal roadshow in February 2020, we engaged with BMW regarding their electric vehicle (EV) production as well as their carbon reduction plans. They told us they expect 2019 to have a small reduction in carbon emissions with much greater reductions for 2020 and 2021. They also expect a mid-teens percent electrified mix in 2020 and ~25% in 2021. Unlike some other competitors, BMW is taking a more hybrid approach to the emissions reduction with a mix of alternative fuel types. Specifically, in order to achieve their carbon emission reduction goals, management is looking to use a mix of battery electric (BEV) and plug-in hybrid (PHEV) models and indicated that the mix will be 25:75 respectively.

- With regard to comparing costs of electronic vehicles to internal combustion engine vehicles they said the cost of production is cheaper without the battery however more expensive including the battery. They said they believe globally in 2025 they will be at ~25% EV sales.
- We like BMW's CO2 compliance strategy as we believe it is more flexible than peers like VW which have a more pure play battery electric approach. By using hybrids BMW is able to sell cars which are electrified but still recognizable to the public. For example, the X3 is now available in petrol, diesel and plug in hybrid variants; in the future many of the firm's most recognizable models will also have battery electric variants. This should give BMW the flexibility to adapt to consumer preferences and still reduce its fleet emissions – the average plug in hybrid has CO2 emissions of less than 45g/km vs the firm's current fleet average of 127g/km. We see BMW as one of the safest OEMs from a CO2 compliance perspective.

### FMC Corp (FMC)

- FMC came to our market September 2019 with a \$1.5 billion, 3-tranche deal. We spoke with CFO Andrew Sandifer about their financial policy, which targets leverage of 2.2-2.5x and mid-BBB ratings for tier-2 access to the CP market.
- Regarding ESG, we asked about FMC's exposure to the ongoing glyphosate (Roundup) litigation against Bayer and potential for that to spread to other chemicals. FMC told us that their sales of glyphosate are only ~\$20m, < 1% of total sales, and that they do not produce any of the chemical, instead they are more of a passthrough. They also pointed out that non-crop use of their pesticides is only ~3% and, to date, nearly all of the glyphosate lawsuits are from non-farm users and retail customers. FMC management said their two bestselling products, Rynaxypyr and Cyazypyr, were developed more recently than glyphosate, which has been around for decades. As such, these products were subject to much higher approval standards, which results in a better safety profile for end users. As a result, we do not feel the impact is material to the credit profile.
- FMC treats sustainability as a core value and they publish annual reports with medium term and longer term goals. By 2025 FMC is targeting 100% R&D spend on developing sustainable products, <0.1 total recordable incident rate, and a score of 100 on the Community Engagement Index. By 2030, compared to 2018 FMC is targeting 25% less energy intensity, 25% less GHG emissions intensity, 20% less water use intensity, and sustain 2018 waste disposed intensity.

### Government Sponsored Entities (GSEs) on Affordable Multifamily Housing

- We recently engaged with GSEs under the following investment scenario: Securitisation of a U.S. multi-family apartment complex which the local authority was taking public (via eminent domain) to guard against the property being sold for conversion to luxury properties and thereby preserving access to affordable housing.
- We were concerned that the failure by the lending agency (Fannie Mae) in this example to collect an associated prepayment penalty on the underlying loan could result in investors requiring higher compensation (higher coupons) on new loans given the resulting negative convexity. Higher coupons on agency multifamily loans, that are primarily made available to owners of affordable housing, would increase the cost of ownership and could lead to lower property values. Property owners would likely respond by raising rents to offset higher costs, thereby threatening the affordability of these multifamily complexes.
- PGIM Fixed Income requested that Fannie Mae require the payment of the prepayment penalty in "public taking" eminent domain situations. The suggested changes to the Agency loan documents could improve the investment profile for our clients and could help to: (a) preserve the high level of investor participation in the agency CMBS market (b) avoid likely rent increases, thus supporting affordable housing which has social merit.
- As a response to our social concerns, the agencies agreed to modify loan documents as we requested to require the payment of a prepayment penalty.

### PPL Corporation (PPL)

- At a recent industry conference we discussed ESG issues with PPL. We focused on the Kentucky subsidiaries which are very carbon-intensive due to heavy usage of coal. The company does not think the cost of

renewables will drop enough to make KY coal uneconomic until late in the 2020's. This makes it hard to justify closing coal generation in a coal mining state.

- State regulators generally must approve any new generation spending - and without a clear economic rationale it is difficult politically. However, PPL did note that they are seeing interest among large corporate customers to purchase renewable power. This might not change their generation mix much but it may help at the margin.
- We do not expect PPL to make rapid progress in reducing coal usage in KY. The small, uneconomic coal generation plants have already been closed. The current plants are about 25 years old and they will not be obsolete for another 10-15 years. So, it will likely be another decade, when the book value on the coal plants will be very low, before wide-scale closures occur.

### T-Mobile USA, Inc. (T-Mobile)

- In September 2019 we met with management of T-Mobile at the Deutsche Bank conference in Scottsdale, AZ, and asked them about a perceived antitrust issue with the Sprint merger. T-Mobile received federal approval for the merger from both the Federal Communications Commission (FCC) and the DoJ, however the transaction could not close until litigation from the state's Attorney Generals representing ~19 states that were suing to block the deal was resolved. During the meeting, we asked T-Mobile why they thought the judge would side with them and they provided the following reasons:
  1. The merger was not likely to lessen competition/is not anticompetitive as the states alleged. Pricing is a function of network costs, and because this merger would have an 8x multiplicative capacity effect on T-Mobile's network, they would need to actually offer lower pricing to consumers in order to fill such capacity.
  2. Contrary to what the states alleged, absent a merger Sprint would not remain competitive as a fourth national carrier given its poor financial performance, negative free cash flow and declining subscriber counts. Sprint management essentially laid out a "failing business" argument to the judge.
  3. The deal brokered by the DoJ to enable Dish to compete has a 4th national carrier would benefit consumers. Dish would be given the tools to compete immediately and over time would have the financing to build out their own 5G network that would surpass what Sprint would be able to accomplish given the latter's balance sheet constraints.
  4. The merger would not disadvantage rural customers, as the states said it would. T-Mobile made commitments to cover 90+% of the rural population with 5G service within 6 years of closing the merger, as well as offer an alternative to these consumers for fixed broadband (many rural consumers lack more than one option for broadband today).
  5. A ruling in favor of the states would be unprecedented, in that no merger that has received approval from both the FCC and DoJ has ever been blocked as a result of an objection at the state level.
- Following this engagement with management, we felt more confident that T-Mobile would eventually prevail with respect to the suit brought by the states against the merger.

### Gabon

- In December 2019, we met with representatives of the Ministry of Finance of Gabon for a non-deal roadshow. We asked them about their oil industry and environment. They said that they try to do their best and that Gabon takes environmental protection very seriously. 10% of the land is national parks and that is not going to change. They have also strengthened their efforts to prevent elephant poaching.
- When we talked about economic diversification, they had mentioned the export of processed wood. We asked about the pulp and paper processing as it could be very polluting and they mentioned that all the production is

ISO certificated and that it has been illegal to export trees for a while. We believe the ISO certification is a positive. Exports of wood and articles of wood account for \$600 million, or 9.5% of total exports.

- Finally, we asked them about the recently (6 months ago) approved law punishing with jail same gender intimate relationships and they had nothing to say about it. We mentioned to them that clearly a sovereign country has all the rights to pass the laws its parliament deems as appropriate but, at the same time, that there are investors that are looking at these things when allocating their funds.
- In January 2020, we met with representatives of the Gabon government as part of their roadshow. They reaffirmed that Gabon is a country that is trying hard to protect its biodiversity. They have large hydroelectric projects (Public Private Partnerships funded) to increase the supply of energy. Gabon has made progress on their fiscal consolidation as part of their IMF program and is proceeding in efforts to diversify their economy. We viewed these changes as positive.

### **JBS S.A. (JBS)**

- In September, we initiated a conference call with JBS' Director of Sustainability. We addressed issues reported in the media about the company's track record of purchasing cattle supplies from embargoed land which includes deforested areas, land declared to be reserved for indigenous people and environmental conservation areas. It has been reported that the Brazilian Environmental Institute (IBAMA) has fined JBS R\$24 million in 2017 and has suspended two meat packing plants in connection with violations involving sourcing cattle from "blacklisted pastures" between 2013-2016 and from farmers that have concealed their illegal cattle sources. Further, in a July 2019 article, the Guardian newspaper accused the company of continuing to source beef throughout 2018 from deforested areas prohibited by IBAMA.
- The company told us they have established internal policies for sustainable cattle sourcing in 2009 and hired a team to monitor these policies. It uses satellite imagery, geo-referenced farm data and information from government agencies to analyze on a daily basis over 50,000 cattle suppliers in Brazil. Only members of the company's sustainability team have access. As a result of enforcement, JBS has excluded 7,000 cattle suppliers since 2009. Almost 90% of these were the result of JBS's internal policy enforcement action and 10% based on outside sources like the government "blacklisted" farms.
- The incidents mentioned in the media were a result of farmers from embargoed lands moving cattle to adjacent, not blacklisted, areas to conceal the sourcing of their cattle. Actions like those are difficult to spot. IBAMA has been using a non-public governmental database from the Agricultural Ministry that tracks cattle sourcing for health reasons to ascertain the provenance of cattle and investigate the company. JBS does not have access to this database.
- After JBS discovered how the farmers were cheating, they took three measures to counter it – 1) they decided to exclude from its allowable cattle sources all areas adjacent to embargoed land; 2) JBS conservatively excluded farms with only a portion of their land designated as a conservative area by the government but the rest was free to be used as pasture; 3) excluded public land used by farmers to raise cattle. The company also has a cattle agreement with DNV GL to audit the compliance with their sustainable cattle supply policies annually and JBS reached 100% compliance in 2018.
- As to the current rain forest fires, the company is waiting for the governmental agencies to investigate the natural versus criminal causes for these fires which will take time. If, as a result, land areas are put on the government blacklist, the company will adjust its supply sources accordingly.
- We believe JBS management is taking supply chain sustainability and cattle sourcing issues seriously and following the existing environmental regulations strictly.



## **Frontera Energy Corp (Frontera Energy)**

- In September 2019, we contacted the management of Frontera Energy to discuss the social unrest at their Peruvian asset and its implication for production. It has been reported that facilities at Frontera Energy's main Peruvian asset, Block 192, have been taken over by protesters from nearby indigenous communities. As a result, oil output at the field has fallen to less than 2,000 barrels a day, from a recent norm of more than 6,000 barrels a day. Other recent takeovers have led the company to declare force majeure.
- This was the fourth disruption in 2019 at this Block in Peru. Community members from two of the three watersheds affected by the field — the Pastaza and Corrientes rivers — took over an airstrip, electricity system, and a PetroPeru pump station, according to Aurelio Chino, president of the federation of indigenous communities in the Pastaza River watershed. The indigenous communities are demanding a date when environmental remediation of the long-polluted area will begin, and the speedy construction of a hospital that can treat illnesses they blame on the oil industry. Other demands include an "abandonment plan" that oil companies are normally required to have before operating, environmental cleanup, indemnification payments for past pollution, specialized health facilities, and schools. The block, previously known as Lot 1 A/B, had 1,200 contaminated sites according to a government survey more than 10 years ago. Additional spills have occurred since then. Frontera Energy however has only been operating at Lot 192 since 2015, illustrating the area had a history of issues before Frontera took over.
- In September 2019, the CFO of Frontera Energy, Mr. Grayson Andersen, stated that there has yet to be a disruption of production and the impact has been limited to non-operational areas so far. He also stated that the company will provide a market update should a material event occur.
- Later that month Frontera Energy participated in BTG Pactual's LatAm CEO Conference in New York where we had a 2x1 meeting with Richard Herbert, CEO. We followed up on media reports regarding indigenous group protests on Block 192 in Peru, where rumors suggested that production had slowed. Frontera Energy's management was able to confirm that these reports were false. Frontera Energy's CEO noted that production had not been slowed and cited production on 17 September 2019 was 9,260 bbl. He did mention that shipments were lower because of the protests but did not know the exact number.
- Frontera Energy claims to have a good relationship with the indigenous groups as the company provides jobs, funds a healthcare facility, and provides energy. Mr. Herbert stated that he will be visiting Block 192 in late September 2019. Due to older infrastructure, oil spills in the region occur from time to time, but the company continues to work with community with clean-up and healthcare costs. Indigenous protests are not uncommon in this area of Peru as oil spills of varying severity and land development harm the surrounding environment. Historically, these protests are triggered by a lack of response in the form of slow cleanup and limited healthcare support. As per the company's financials, the protest did not appear to directly impact production. While we understand the company's challenges, given these ESG concerns we maintain the issuer's ESG rating at the low end of its peers' range.

## **Charter NEX US Holdings Inc (Charter NEX)**

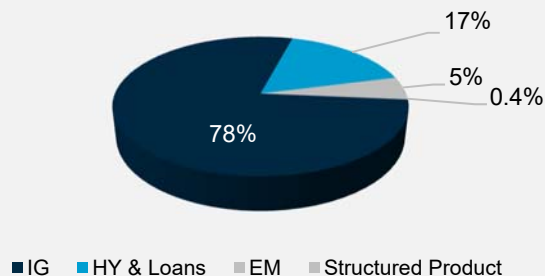
- Charter NEX focuses on specialty film (custom design solutions) versus commodity film (basic formulations with a focus on volumes) and its films are primarily used in food and consumer end markets. Within our packaging coverage, we are impressed with Charter NEX's emphasis on sustainability from its resources to innovation in designing recyclable products that meet its customers' needs.
- During our due diligence process, we discovered their emphasis on Sustainability. In November 2019 we spoke with Charter NEX's Corporate Sustainability Leader, Scott Hammer, who has been focusing solely on sustainability for the past 3 to 4 years.

- Charter NEX is an engaged member of the Sustainable Packaging Coalition and has gained business based on a product line called GreenArrow helping its customers to convert from non-recyclable packages into a 100% recyclable film for lamination and stand-up pouches. The conversion is a process not only for Charter NEX, but their clients who need new machines that can handle the recycled products which are processed differently than traditional blown film. Charter NEX is not concerned that their products are in danger of obsolescence as they are offering sustainable products and listening to customers when developing new offerings.

# Relative Value Discussions

In addition to tracking ESG engagement examples, PGIM Fixed Income also monitors and actively documents relative value discussions where ESG issues are material. In 2019, the investment grade, high yield and bank loans, emerging market debt, and structured products portfolio management teams had 261 examples where ESG was considered material in relative value discussions.

**261 Relative Value Discussions Including ESG**  
YTD 31 December 2019

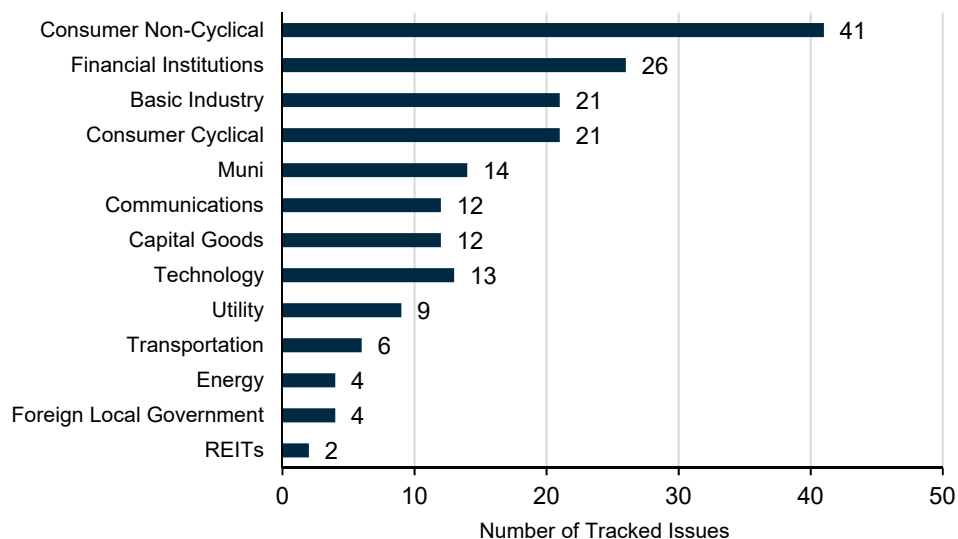


Source: PGIM Fixed Income.

# ESG Tracked Issues

The PGIM Fixed Income Credit Research team documents ESG events for the companies they follow that could potentially have an impact on the financial credit. In 2019, PGIM Fixed Income tracked 185 ESG issues within 32 sub-industries for the companies.

**ESG Tracked Issues by Industry**  
31 December 2019



Source: PGIM Fixed Income.

## Green Bonds

Green bonds are debt instruments used to finance environmental initiatives linked to climate change mitigation such as renewable energy efficiency projects. According to the Climate Bonds Initiative (CBI), green bond and green loan issuance reached \$257.7 billion in 2019, up 51% year-on-year. The CBI noted green bond issuance in Europe increased by 74% year on year reaching \$116.7 billion in 2019. According to the CBI, the top three issuers in 2019 were Fannie Mae issuing \$22.9 billion in agency green mortgage backed securities (9% of total green bonds), KfW issuing \$9 billion in green bonds and the Dutch State Treasury Agency (DSTA) issuing \$6.7 billion with its green sovereign bond.

### SECTOR DIVERSIFICATION

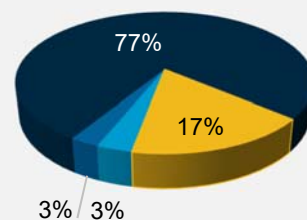
Non-financial corporate issuance of green bonds almost doubled from \$29.5 billion in 2018 to 59.3 billion in 2019 making up 23% of the total volume and financial corporates issuance went from \$49.7 billion in 2018 to \$55 billion in 2019 accounting for 21% of the total. The top three non-financial corporate issuers were all utility companies including Engie, MidAmerican Energy, and Energias de Portugal SA (EDP) which issued combined just under \$9 billion. Industrial and Commercial Bank of China, Industrial Bank, Credit Agricole and BNP Paribas were the top 4 financial corporate issuers. Sovereign green bond issuance continues to grow with the Dutch State Treasury, Hong Kong, Chile, Poland, Indonesia, and Nigeria issuing their first sovereign green bonds in 2019.

### PGIM FIXED INCOME GREEN BOND HOLDINGS

As of 31 December 2019, PGIM Fixed Income managed \$2.72 billion in green bonds from 108 issuers within 24 countries and 5 supranationals. About 58% of the green bonds are from US issuers, 17% Mexican issuers with the remaining 25% issued by European countries such as France and the Netherlands; and Asian issuers among others. PGIM Fixed Income assesses green bonds on investment merit and with the same relative value rigor as we do all securities in our broad discretion portfolios. We continue to closely evaluate the growing market for attractive investment opportunities.

#### PGIM Fixed Income Green Bond Holdings by Region of Issuance

As of 31 December 2019



■ North America ■ Europe ■ Asia/Australia ■ Other

Source: PGIM Fixed Income, Bloomberg. Other includes Africa and Supranationals. Provided for illustrative purposes only.



## PGIM Fixed Income ESG Practices in Investment Portfolios

- PGIM Fixed Income's ESG Committee consists of senior executives and acts as a governing body to oversee PGIM Fixed Income's environmental, social, and governance integration.
- As part of the credit research process, PGIM Fixed Income analysts review publicly-available ESG concerns as well as ESG concerns expressed by a third-party research provider.
- We recognize that applying the Principles of the UN Global Compact and the UN Sustainable Development Goals may better align investors with broader objectives of society.
- Where appropriate, analysts actively engage with senior management of the issuer, requesting that they comment on any potential ESG problems that may exist to enhance our decision making process.
- ESG concerns, as well as management's response to the comments are noted in our internal credit reports, and ESG potential issues and engagements are logged in our proprietary system and provided to the appropriate portfolio managers.
- ESG issues that we consider during our research assessment will vary depending on the industry and/or individual company.

An important focus of PGIM Fixed Income's sovereign research is on macroeconomic stability and debt sustainability. ESG issues feature prominently in this analysis and in the sovereign ratings process. In addition to a fundamental macroeconomic score that captures pertinent macroeconomic strengths and vulnerabilities, PGIM Fixed Income's sovereign ratings framework is also based upon a comprehensive assessment of qualitative aspects that guide policy making.

PGIM Fixed Income also believes the incorporation of ESG principals is fundamental to making sound long-term investments in securitized assets. Our structured products team has created an internal ratings approach across securitized assets.



## Proprietary ESG Ratings

PGIM Fixed Income is rolling out an ESG proprietary ratings framework for all issuers that we cover including corporates, sovereigns, structured products and municipal bonds. Our ESG ratings should assess an issuer's alignment with our view of the broad ESG goals of the UN Principles for Responsible Investing, the UN Global Compact and the UN Sustainable Development Goals. The new framework will rate issuers on a 0 to 100 scale with 0 the worst ESG rating and 100 the best ESG rating.

The ESG Committee provides guidance to the analysts on the relative ranges for each industry. The industry ratings give greater weight to environmental factors and therefore carbon intensive industries tend to start at a lower rating. Industries with a social purpose typically start with a higher ESG rating such as municipal enterprises like hospitals and universities.

Sovereign factors are considered in a bottom-up way, factor-by-factor. Analysts consider the impact that the country of risk has on a company's various ESG factors, evaluating factors such as industry regulations.

Analysts rank issuers based on the severity of the Environmental, Social and Governance issues and then assign ratings within the industry rating range. Companies that have significant environmental, social, or governance concerns have lower ESG ratings and could fall well below the intended ranges as outliers.

Sovereign ESG ratings have been developed by our Global Economics team using a quantitative approach with a qualitative overlay to determine a final ESG rating. Emerging Markets are generally lower than Developed Markets due to the Economic team's view that governance and social factors are generally weaker.

Our research analysts are experts in their respective industries and asset classes, and we believe they are best positioned to identify ESG issues and determine their materiality. Similar to our internal fundamental ratings determined by our analysts, the proprietary ESG ratings are subject to the same analytical rigor.

Our analysts on average have ESG ratings on over 98% of the issuers in the Bloomberg Barclays US Corporate Bond Index and JPMorgan EMBI Global Diversified index. Their ESG ratings cover over 95% of the Bloomberg Barclays Global Corporate Bond Index and Bloomberg Barclays Global Aggregate Index and over 85% of the Bloomberg Barclays US High Yield Bond Index. In addition our ESG ratings cover over 55% of the Credit Suisse US Leveraged Loan Index.

For most of our portfolios, weak ESG ratings does not necessarily prohibit an investment if those ESG factors are sufficiently well compensated for. However, we do intend to incorporate ESG ratings-linked exclusions in select funds and client mandates will also have the ability to elect for the same. We believe this will also aid the meaningfulness of our engagement efforts.

## PFI Initiatives

### Impact Investing

PFI has long recognized that investments can—and should—generate a financial return and create positive, measurable social impact. The company has a dedicated Impact Investing team, which manages a stand-alone impact investment portfolio. This team also provides consultative services to the rest of the firm on responsible investments and perspectives on underserved markets including the PGIM Real Estate Impact Venture fund focused on affordable housing and transformative developments. PFI formalized its Impact Investing unit more than 40 years ago and, in that time, the team has made more than \$2.6 billion in investments as of December 31, 2019. The current portfolio has a market value of more than \$860 million as of December 31, 2019. The impact investing team is 58% diverse and 33% female. In 2019, Impact Investments originated an additional \$171 million of investments, including a first of its kind investment to support the implementation of a cutting-edge stormwater retention technology that will reduce the harmful effects stormwater pollution around the Chesapeake Bay in the United States.

[Click here to view the PFI 2018 Sustainability Report](#)

### PFI issued its Inaugural Green Bond

On 5 March 2020 PFI issued its first green bond with a principal amount of \$500 million, representing the first green bond issuance of its kind by a major U.S. life insurer. The green bond was offered alongside an additional \$1 billion of PFI debt.

“As a purpose-driven company, our commitment to generating sustainable value for our stakeholders goes hand in hand with our commitment to protecting the environment,” said Charles Lowrey, Chairman and CEO of PFI. “Our green bond is an important next step in our efforts to ensure that environmental stewardship is reflected across PFI’s business activities and operations.”

The green bond issuance expands our support for sustainable investments aligned with the company’s [Global Environmental Commitment](#), which established a wide range of business, operational, and investment goals to preserve and protect the environment. Other forthcoming efforts aligned with our Global Environmental Commitment include an initiative to offset all carbon emissions for employee travel in the U.S. and a renewable energy mandate to invest in companies that reduce global emissions.

Net proceeds from the green bond will be allocated exclusively to existing or future investments which provide environmental benefits including reduced greenhouse gas emissions and improved resource efficiency, subject to completing the issuance as planned. The eligible categories for the use of the net proceeds—renewable energy, green buildings, environmentally sustainable management of living natural resources and land use, energy efficiency, clean transport, sustainable water and wastewater management, and pollution prevention and control—align and advance the United Nations Sustainable Development Goals (SDGs).

PFI has established a Green Bond Council, comprised of members of its Treasury, Chief Investment Office, and Corporate Governance/Sustainability teams. The Green Bond Council will be responsible for reviewing and validating eligible projects as well as relevant reporting to investors.

Sustainalytics has reviewed and verified that the firm’s Green Bond Framework is consistent with the current Green Bond Principles, as published by the International Capital Market Association.

[Click here to view our Green Bond Framework](#)

## Notice: Important Information

Source of data (unless otherwise noted): PGIM Fixed Income Climate Bonds Initiative, and Bloomberg, as of December 2019.

PGIM Fixed Income operates primarily through PGIM, Inc., a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended, and a Prudential Financial, Inc. (“PFI”) company. PGIM Fixed Income is headquartered in Newark, New Jersey and also includes the following businesses globally: (i) the public fixed income unit within PGIM Limited, located in London; (ii) PGIM Netherlands B.V. located in Amsterdam; (iii) PGIM Japan Co., Ltd. (“PGIM Japan”), located in Tokyo; and (iv) the public fixed income unit within PGIM (Singapore) Pte. Ltd., located in Singapore (“PGIM Singapore”). PFI 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. Prudential, PGIM, their respective logos, and the Rock symbol are service marks of PFI and its related entities, registered in many jurisdictions worldwide.

**These materials are for informational or educational purposes only. The information is not intended as investment advice and is not a recommendation about managing or investing assets. In providing these materials, PGIM is not acting as your fiduciary.** These materials represent the views, opinions and recommendations of the author(s) regarding the economic conditions, asset classes, securities, issuers or financial instruments referenced herein. Distribution of this information to any person other than the person to whom it was originally delivered and to such person’s advisers is unauthorized, and any reproduction of these materials, in whole or in part, or the divulgence of any of the contents hereof, without prior consent of PGIM Fixed Income is prohibited. Certain information contained herein has been obtained from sources that PGIM Fixed Income believes to be reliable as of the date presented; however, PGIM Fixed Income cannot guarantee the accuracy of such information, assure its completeness, or warrant such information will not be changed. The information contained herein is current as of the date of issuance (or such earlier date as referenced herein) and is subject to change without notice. PGIM Fixed Income has no obligation to update any or all of such information; nor do we make any express or implied warranties or representations as to the completeness or accuracy or accept responsibility for errors. **All investments involve risk, including the possible loss of capital. 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 and should not be used as the basis for any investment decision. No risk management technique can guarantee the mitigation or elimination of risk in any market environment. Past performance is not a guarantee or a reliable indicator of future results and an investment could lose value. No liability whatsoever is accepted for any loss (whether direct, indirect, or consequential) that may arise from any use of the information contained in or derived from this report. PGIM Fixed Income and its affiliates may make investment decisions that are inconsistent with the recommendations or views expressed herein, including for proprietary accounts of PGIM Fixed Income or its affiliates.**

The opinions and recommendations herein do not take into account individual client circumstances, objectives, or needs and are not intended as recommendations of particular securities, financial instruments or strategies to particular clients or prospects. No determination has been made regarding the suitability of any securities, financial instruments or strategies for particular clients or prospects. For any securities or financial instruments mentioned herein, the recipient(s) of this report must make its own independent decisions.

This material contains 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. Information regarding ESG practices is obtained through third-party reporting, which may not be accurate or complete, and PGIM Fixed Income depends 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.

**Conflicts of Interest:** PGIM Fixed Income and its affiliates may have investment advisory or other business relationships with the issuers of securities referenced herein. PGIM Fixed Income and its affiliates, officers, directors and employees may from time to time have long or short positions in and buy or sell securities or financial instruments referenced herein. PGIM Fixed Income and its affiliates may develop and publish research that is independent of, and different than, the recommendations contained herein. PGIM Fixed Income’s personnel other than the author(s), such as sales, marketing and trading personnel, may provide oral or written market commentary or ideas to PGIM Fixed Income’s clients or prospects or proprietary investment ideas that differ from the views expressed herein. Additional information regarding actual and potential conflicts of interest is available in Part 2A of PGIM Fixed Income’s Form ADV.

*In the European Economic Area (“EEA”), information is issued by PGIM Limited or PGIM Netherlands to persons who are professional clients as defined in Directive 2014/65/EU (MiFID II). PGIM Limited’s registered office: Grand Buildings, 1-3 Strand, Trafalgar Square, London, WC2N 5HR. PGIM Limited is authorised and regulated by the Financial Conduct Authority (“FCA”) of the United Kingdom (Firm Reference Number 193418). PGIM Netherlands B.V. is authorised by the Dutch Authority for the Financial Markets (Autoriteit Financiële Markten – AFM) as an alternative investment fund manager with MiFID top up service capabilities under registration number 15003620. PGIM Limited and PGIM Netherlands are authorized to provide services or operate with a passport in various jurisdictions in the EEA. In certain countries in Asia, information is presented by PGIM (Singapore) Pte. Ltd., a Singapore investment manager registered with and licensed by the Monetary Authority of Singapore. In Japan, information is presented by PGIM Japan Co. Ltd., registered investment adviser with the Japanese Financial Services Agency. In South Korea, information is presented by PGIM, Inc., which is licensed to provide discretionary investment management services directly to South Korean investors. In Hong Kong, information is presented by representatives of PGIM (Hong Kong) Limited, a regulated entity with the Securities and Futures Commission in Hong Kong to professional investors as defined in Part 1 of Schedule 1 of the Securities and Futures Ordinance. It is anticipated that certain investment management services would be delegated to PGIM, Inc. the above-listed entities’*

*U.S. registered investment advisory affiliate. In Australia, this information is presented by PGIM (Australia) Pty Ltd (“PGIM Australia”) for the general information of its “wholesale” customers (as defined in the Corporations Act 2001). PGIM Australia is a representative of PGIM Limited, which is exempt from the requirement to hold an Australian Financial Services License under the Australian Corporations Act 2001 in respect of financial services. PGIM Limited is exempt by virtue of its regulation by the FCA (Reg: 193418) under the laws of the United Kingdom and the application of ASIC Class Order 03/1099. The laws of the United Kingdom differ from Australian laws. In South Africa, PGIM, Inc. is an authorised financial services provider – FSP number 49012.*

© 2020 PFI and its related entities.

2020-2635