PGIM FIXED INCOME

Filtering Shades of Green Through Our Green Bond Framework

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- Green Bond issuance is surging, but not all Green Bonds are equal. Some carry a much greater ESG impact than others.
- Issuers place the “green” label on their bonds—there is no standardised metric for green compliance, nor any penalties imposed for weak or non-compliance.
- Without clear, comparable metrics, investors must rely on their own research.
- This paper provides an overview of our proprietary Green Bond framework, which assesses the impact of a Green Bond based on credibility at the security and issuer level as well as the additionality of the bond in terms of its incremental positive impact on the environment.

This year will likely see a bumper growth in Green Bonds. Governments and companies are expected to issue the equivalent of $500 billion in green debt in 2021, which would be nearly half of the amount that the asset class has raised in total since its creation.[1] The European Union is set to issue €225 billion of Green Bonds as part of its COVID-19 recovery plan,[2] while a raft of environmental legislation—complemented by growing awareness and pressure from investors—is forcing companies to take sustainability seriously and to consider their own business models in a decarbonising world.

Against this landscape of accelerating growth and rising demand, investors must recognise that the impact of Green Bonds can vary significantly.

[1] Financial Times “Analysts Expect As Much As $500 Billion in Green Bonds in Bumper 2021” Last Updated: 4 January 2021 https://www.ft.com/content/021329aa-b0bd-4183-8559-0f3260b73d62
[2] Op. cit.

There have been high-profile instances when Green Bond issuers have not fulfilled their stated use of proceeds, their projects have not moved forward, or their projects have been decidedly less green once implemented. [3]

There have also been cases, particularly with Government Sponsored Enterprises, where Green Bonds initially appeared impactful, but, under closer scrutiny, the promised environmental benefits were modest compared to similar projects by other issuers. Furthermore, some projects funded by Green Bonds have produced short-term environmental gains at the expense of locking in "browner" infrastructure over the long term.

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Issuers have incentives to label a debt offering as a Green Bond—on average, the transactions' order books result in larger coverage ratios, narrower spread concessions, and better performance upon reaching the secondary market.[4] Although issuers agree to adhere to the Green Bond Principles, which are voluntary guidelines that aim to promote market transparency and integrity, there is no standardised metric that determines compliance, nor are there any guidelines that establish penalties for weak or non-compliance.[5] Therefore, the lack of clear, comparable metrics raises the difficulty of establishing an appropriate "greenium" on a specific Green Bond and underscores the importance of a proprietary assessment framework.

Our Approach

A case-by-case analysis of the credibility and additionality of individual Green Bonds is part of our security selection process. Credibility is assessed at the security and issuer level, while additionality measures the potential incremental positive impact that the bond could have on the environment.

Credibility

In order to assess impact, we need to understand an issuer's overall ESG strategy and how the Green Bond fits into that strategy. A Green Bond is more credible the more that it is consistent with, or supportive of, an issuer's ESG strategy.

As part of our assessment, we consider whether an issuer is following the Green Bond Principles. These assess whether the issuer 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.

Furthermore, it is critical that the bond's proceeds only finance eligible projects and that issuers provide complete transparency regarding the specific use of proceeds. Timing also plays a role in establishing the credibility of a Green Bond—the faster the proceeds are distributed to a green project, the better.

Second party opinions on an issuer's green bond philosophy or on specific issues support our pre-investment analysis. In this context, we consider a Climate Bonds Standard Certification as a good indication of credibility.[6] The EU Green Bond Standard will provide a similar

[3] International Financing Review "Green Bond Black Hole Leaves Investors Exposed" Last Updated: 24 May 2019 https://www.ifre.com/story/1588361/green-bond-black-hole-leaves-investors-exposed-f0mfpbrnvc

[4] Climate Bonds Initiative https://www.climatebonds.net/2020/03/green-bond-pricing-report-q3-q4-2019-spotlight-green-sovereigns-emerging-greenium-all-latest

[5] International Capital Markets Association https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/green-bond-principles-gbp/

[6] Climate Bonds Initiative https://www.climatebonds.net/standard

indication when it is introduced.[7] As we monitor the allocation of proceeds and implementation of projects over time, we expect an annual report from the issuer and third-party verification.

Additionality

Our framework assigns a higher ESG Impact Rating to Green Bonds with a greater environmental impact. The more the Green Bond enables a transformation from brown activities to green ones—either in terms of the issuer or the industry—the greater its incremental impact. For example, if the proceeds have been slated for an existing project or would have happened regardless of the bond, then the issue has less of an impact. We assign higher additionality to bonds where proceeds are being used to finance new projects versus refinancing existing ones. When part of the proceeds are used for refinancing, the longer the lookback period, the lower the additionality.[8]

If the proceeds have been slated for an existing project that already exists or would have been constructed regardless of the bond, then the issue has less of an impact.

Our additionality assessment expects disclosure of the anticipated impact of the bond using quantifiable impact metrics that are normalised to the millions of U.S. dollars invested. We also expect regular impact reporting following a Green Bond offering.

The combination of the credibility and additionality assessments determines the assessment of the overall impact of the bond (Figure 1).

Figure 1: The Combinations of Determining a Green Bond Impact Rating

Credibility	Additionality	Impact
High	High	High
Medium	High	Higher
High	Medium	
Medium	Medium	Medium
Low	High	
Low	Medium	Low
Medium	Low	
Low	Low	No

Source: PGIM Fixed Income

[7] European Commission https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-green-bond-standard_en
[8] Lookback refers to the timeframe in which existing projects might be financed with proceeds from a Green Bond.

PGIM Fixed Income's Wider ESG Impact Ratings Framework

Our proprietary ESG Impact Ratings assess the impact that issuers have on the environment and society, regardless of whether we feel that they present material credit risk. Many impacts that directly affect an issuer's credit profile are captured by our ESG Impact Ratings and our Fundamental Credit Ratings. Those impacts that have yet to present material financial implications, but are identified by our ESG Impact Ratings, can indicate emerging risks as well as an issuer's position and direction of travel on ESG.

Our ESG Impact Ratings provide analysts and portfolio managers with a holistic view and forward-looking perspective on the long-term sustainability of an issuer's business. The ESG Impact Ratings are a tool that facilitates engagement with issuers, provides them with tangible feedback, and conveys our views to clients looking to invest based on ESG criteria.

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.

The overall impact assessment allows us to decide whether a given bond's ESG Impact Rating deserves an uplift compared to the issuer's ESG Impact Rating (as described in the preceding box) and, if so, to what extent. For example, the numeric uplift from a Green Bond could be additive to an issuer's numeric ESG Impact Rating. The following details and examples provide additional context to our Green Bond Impact Ratings.

High Impact: *Projects financed by Green Bond proceeds are 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 re-assessed a Green Bond from a U.S. building materials company given its additional reporting. Our second review assessed the issue as having a high impact with the maximum uplift relative to the issuer's balanced ESG Impact Rating. In terms of credibility indicators, the issuer's guiding principle includes quantifiable 2030 sustainability goals, a science-based target for reducing greenhouse gas emissions by 50% within the next decade, and ambitious targets in other environmental areas (e.g. emissions of volatile organic compounds). Furthermore, the Green Bond proceeds are set to only fund green projects, the issuer is committed to an annual report on the use of proceeds, and all of the proceeds were allocated within six months of issuance.

Similarly, many of the bond's additionality indicators are high, including a detailed description of the green projects being financed, quantification of the expected environmental impact in the context of firm-level objectives and achievements, and an ambitious use of proceeds based on the reported plans.

Medium Impact: *Projects financed by Green Bond proceeds are either non-core to the issuer's business or are seen as an addition to core brown activities.*

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.

Even though the share of green activities in an issuer's mix is growing, they are not 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-based building controls firm as having high creditability and medium additionality. From a credibility perspective, the company is focused on improving its own environmental footprint as well as those of its customers based on its product offerings. The company also has a long list of green projects—some of which are based on its products—and plans to use the proceeds from the offering within 24 months.

The issuer's medium additionality is based on its status as a company that is already fairly green and that the proceeds represent an incremental improvement to activities that the issuer is already involved in.

Low Impact: *A Green Bond with low credibility, proceeds slated towards a relatively unambitious project, 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 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 mobile/cable operator as having a low impact with a minimal uplift to the issuer's ESG Impact Rating, which is at the higher end of the universal range and in the middle of those in the cable sector. Some notable credibility indicators on the Green Bond included the structure for the use of proceeds—the amount raised was slated for general corporate purposes with an equivalent amount "earmarked" for green projects—and the lack of a green projects register.

The additionality considerations included the issuer's inability to specify the proportion of the earmarked proceeds dedicated to energy efficiency projects (likely the most impactful among its five potential project categories) and a three-year lookback period to allocate to prior projects. Although a three-year lookback is common, the issuer acknowledged that it had yet to do any work to identify existing, eligible projects. The Green Bond's low credibility and low additionality resulted in a low-impact rating on the issue.

Looking Ahead

The significant growth in the Green Bond market underscores the importance of scrutinising individual issues and credits. The market's expansion features significant issuance of low-additionality Green Bonds as companies capitalise on investor demand and refinance existing green assets. Furthermore, not all Green Bonds achieve their stated objectives, and not all issuers have processes to monitor and disclose their achieved impacts.

As we await improved standards to enhance issuers' accountability on their Green Bond pledges, our Green Bond impact assessment provides a framework for evaluating the credibility and additionality of their securities. It is an important component of our security selection process for clients aiming to make an environmental impact through ESG-oriented investing.

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Source(s) of data (unless otherwise noted): PGIM Fixed Income as of June 2021.

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