

GSS Bond Framework 2.0

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- We launched our dedicated green bond framework in 2020, a year where green, social and sustainability (GSS) bond issuance jumped markedly to over \$600 billion. But that turned out to be just the start. 2021 nearly doubled the prior year's record with more than \$1.1 trillion of GSS bond issuance, and this has remained above \$800 billion every year since, including over \$940 billion in 2024.¹
- The framework we developed in 2020 leveraged our proprietary ESG Impact Ratings. It focused on credibility and additionality, the combined quality of which led us to assign an ESG Impact Rating uplift to individual bonds relative to their issuer. This still forms the basis of our approach today. However, we've recently enhanced our methodology to consider learnings and insights from the explosion of issuance since our framework launched.

In particular, we've come to see that, despite early expectations that GSS bonds would be essential to accelerating issuers' transitions, they typically do not allow issuers to raise materially more capital than they otherwise would have for green projects, nor achieve meaningfully lower funding costs.² The vast majority of GSS bonds are also attributed to activities issuers were already doing using other funding sources. In short, we have come to the conclusion that companies would typically be able to raise sufficient transition capital without GSS bonds.

In addition, GSS bonds cannot be assigned all the credit for their associated projects. They do not usually fund the ongoing costs of the projects or the general overhead necessary for the projects' success. Given GSS bonds have the same seniority on the issuer's collateral and cash flows as other debt, they also benefit from a very significant, implied guarantee from the rest of the business, which is effectively backed by non-green activities.³ The credit risk for GSS bonds is essentially the same as for vanilla bonds. This is why there is rarely a material greenium.

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All Investments involve risk, including the possible loss of capital.

¹ Source: Bloomberg. Includes corporates, SSAs, and local government issuers across all regions. Note that classification approaches and currency conversions can cause slight differences across sources.

² We use "green" throughout for convenience, but in the context of social or sustainable bonds, this could also mean "social."

³ Debt service on GSS bonds also often comes from sources other than the green projects.

So, the financial impact of GSS bonds on issuers' transitions is limited.

But that doesn't mean GSS bonds do nothing. Their value is instead their signalling effect. When done well, GSS bonds increase issuers' commitments to their transition plans, and can lead to greater specificity in those plans for both investors and management. These are still significant benefits.

Of course, these are only benefits if the issuer is credibly transitioning and the projects are defensibly green—and we have seen cases where GSS bond issuers do not meet these conditions. Beyond that, the more material the projects are to the issuer's transition plans, the greater the benefit, especially if the projects represent new and novel activities for the issuer. So, not all GSS bonds are created equal.

In recognition of this, our framework now splits our view of GSS bonds into two main groups: credible and not credible. A bond may be deemed not credible either because we believe the issuer is not seriously attempting to transition, or because the projects are not defensibly green (in the latter case, this is not necessarily an indictment of the issuer, just a specific GSS issuance).⁴ Within the credible category, we have three sub-tiers that take into account the bond's structural strength, and the materiality and additionality of its projects. This is shown in more detail in the figure below.

<p>NOT CREDIBLE</p> <ul style="list-style-type: none"> • Issuer not credibly transitioning; or • Projects not defensibly green 	<ul style="list-style-type: none"> • Petrostate lacks targets for key sectors such as transport, and is far behind on some of the key targets it does have • Fertilizer company featuring green ammonia in transition plans instead allocates most proceeds to "premium fertilizer" • Environmental services company includes essentially all its business activities as eligible projects. Effectively, bond can be used to fund the entire business
<p>TIER 1</p> <ul style="list-style-type: none"> • Credible transition plan and green projects, but: • Weaker bond structure; or • Projects less material 	<ul style="list-style-type: none"> • Bank uses proceeds for green lending, but green bond is part of regulatory bail in capital, unlocking additional lending that may not be as green • Telecom buys power under renewable PPAs for its operational emissions (scope 2), but value chain emissions (scope 3) are far more significant and not addressed • Sovereign issuer uses proceeds to maintain and upgrade mostly existing rail. While this is relatively green, the country is lagging much more on its fossil fuel heavy power sector
<p>TIER 2</p> <ul style="list-style-type: none"> • Projects strongly linked to a credible transition plan, but are not new or novel 	<ul style="list-style-type: none"> • Utility uses proceeds for renewables, but mainly to refinance existing projects. It also already had a significant renewables portfolio built using other funding instruments • Materials company uses proceeds to source cleaner inputs, but this is opex, not a long-term investment, and it had already been sourcing these materials before the bond • Auto parts company uses proceeds to acquire business selling EV components. Only transfers ownership of assets; does not create new clean investments
<p>TIER 3</p> <ul style="list-style-type: none"> • Projects strongly linked to credible transition plan, and are new and novel 	<ul style="list-style-type: none"> • Sovereign issuer invests bulk of proceeds in R&D for key transition technologies, dramatically increasing R&D budget for such activities • Utility with only 25% renewable capacity from aged wind farms earmarks proceeds for its first solar projects, which will double renewables share within 4 years and be built post-issuance

⁴ This includes cases where the bond's definition of eligible projects is especially vague, such that we cannot reasonably determine what the proceeds will be used for.

As the ESG industry continues to develop and innovate, so do we. This enhancement to our framework aligns better with our view—based on several years of high issuance—of GSS bonds’ main benefits, and so will improve our ability to gauge their quality.

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Source(s) of data (unless otherwise noted): PGIM Fixed Income, as of May 2025.

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