



## IRI Working Paper

# A Brief Note on the Global Green Bond Market

February 2011

David Wood and Katie Grace

**Abstract:** The market for green bonds, while relatively small at around \$3.5 billion in 2010, has developed globally in both the institutional and retail sectors over the last few years. Investors in green bonds range from pension funds with environmental, social, and governance (ESG) mandates to socially responsible investment (SRI)-focused retail investors, all looking for ways to expand their investment strategies throughout their portfolios. Debate continues on the range of “green” projects that may be included in green bonds, the extent of the impact that these investments should create, and even what investment areas may count as green. This short overview of the green bond market argues that future growth of the field will depend upon the ability of issuers to source projects, issue at scale, and engage with stakeholder-supported standards for content and impacts, while simultaneously meeting the financial needs and sustainability-related expectations of investors.

*We would like to thank Chris McKnett and Christopher Flensburg for helping us to set up our interviews, and to them and Heike Reichelt for their invaluable comments on a draft of this piece. We'd also like to thank all of our interviewees for their time and expert insights.*

**Contact the authors:** David Wood, [david\\_wood@hks.harvard.edu](mailto:david_wood@hks.harvard.edu); Katie Grace, [katie\\_grace@hks.harvard.edu](mailto:katie_grace@hks.harvard.edu)

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## **Introduction**

In anticipation of the February 17 Summit on Green Bonds at State Street, the Initiative for Responsible Investment conducted a series of interviews with green bond issuers and investors, with the goal of creating a short overview of investor interest in the product. The following note reflects a general sense of how investors and issuers see the market today and highlights a few key topics for discussion at the Summit and after.

We spoke to a dozen investors and issuers around the world who have shown interest in green bonds. The green bond market, while nascent, is driven by demand from a variety of institutional and retail investors globally, most of whom are interested in low-risk (AAA-rated) products from respected issuers. The drivers behind investors' decisions varied, although many felt that the opportunity to expand a green focus into their fixed-income allocations was of particular interest. Across the board, our interviewees felt that prospects for growth in the green bond market were high, but that definitions, standards, issuance scale, and liquidity concerns are barriers to expansion.

The market for green bonds has developed globally in both the institutional and retail sectors. Investors in green bonds range from pension funds with environmental, social, and governance (ESG) mandates to socially responsible investment (SRI)-focused retail investors, all looking for ways to expand their investment strategy throughout their portfolio. Current issuance of green bonds is still relatively small – around \$3.5 billion in 2010 – though both issuers and investors expect this to grow over the next few years. The market largely consists of green bonds issued by international financial institutions (IFIs), the largest issuer being the World Bank.

## **How do investors view the green bond field?**

The market for green bonds remains relatively undefined as participants have yet to reach a clear consensus on core definitional issues. Debates continue on the range of “green” projects that may be included in green bonds, the extent of the green impact that investments should create, and even what issue areas may count as green. Despite these differences in understandings of what “green” means, early adopters – issuers and investors – have converged on a set of products they agree can constitute an emerging space.

Our conversations suggest that investor interest in the green fixed-income space stems from a general desire for investment products that address key environmental challenges and a specific understanding of the fixed-income space as a relatively easy place to integrate environmental investing policies into portfolio strategy. Fixed-income, from the investor's perspective, offers the possibility of investing in green products that are very similar in design, risk and return to existing products in their portfolio. This similarity may allow for clear comparison and the ability to swap green products into a portfolio relatively easily.

Green bonds are attractive to investors for several related reasons. For some investors, for instance from the social investment community, green bonds respond to a desire for products that produce specific environmental benefits. In particular, green fixed-income products were seen as offering the opportunity to directly invest in specific projects with tangible impacts. To date, the fixed-income space has not seen the same amount of attention and product development for environmentally focused products such as public equities, and green bonds can fill some of the latent demand. Institutional investment interest – especially early demand from Swedish investors who helped develop the World Bank green bonds – has sparked the creation

of the market. Retail and SRI interest in the United States and Japan has helped fuel early market development.

Larger investors and issuers have entered the market via institutional commitments to addressing environmental problems, most obviously climate change, though water bonds and others have also received some attention. These institutional investors see in green bonds an opportunity to integrate environmental, social, and governance criteria throughout their portfolios, and to signal commitment to stakeholders ranging from public policy makers to beneficiaries. Political interest in engaging private markets on climate change has been key to developing the institutional market.

Investors and issuers both pointed to the targeted nature of project-specific green bonds as a particular source of their appeal. Investors can get information on the projects they are supporting, and the bonds are seen to offer a tangible sense of environmental impact. The promise of environmental benefits seemed more salient to interviewees, in the current market for IFI-issued products, than arguments for the risk-mitigating benefits of a green tilt to their fixed-income portfolios.

Our interviews concentrated on IFI green bonds, which comprise the majority of green bonds issued globally. Investors pointed to the IFI role as issuer as fundamental to their decision to invest – green bonds were more attractive with solid credit ratings, and more than one investor mentioned that they were not looking to the green bond space to find more risk and yield in their portfolio. However, some investors did indicate that they would be amenable to a higher-risk product.

As with other fixed-income investments, the depth of commitment to purchasing green bonds is a function of liquidity in the green bond market, risk profile, maturity, and so on. On the whole, IFI green bonds are seen as opportunities to substitute greener products into the low risk parts of their fixed-income portfolios. Investors seek market-rate products with environmental benefits, but do not seek outperformance in their fixed-income portfolios as they might in green public or private equity products. One issuer described investor demand as focused on relatively plain vanilla products, without complicated structures or specific eligibility criteria for products.

### **What makes a credible green bond?**

As noted, there are no clear standards for what constitutes a green bond. Issuers may choose projects based on their contribution to emissions mitigation, which might include a variety of investments in, for instance, energy efficiency retrofitting, alternative energy or transit infrastructure, or business development for green technologies, which have the intended impact. But others may define green beyond emissions mitigation, and include issues such as conservation and sustainable agriculture.

The field is facing, and will surely continue to face, questions as to how green a project should be to be included in a green bond issue, and how stakeholders will go about measuring greenness. From the issuer's perspective, the challenge is pipeline development - more stringent standards may create additional costs in sourcing deals and verifying their impact, potentially limiting market liquidity and investor demand. On the other hand, issuers do see the potential peril in greenwashing, especially given perceived environmental impact and reputational benefits for investors in the market today.

To date, investors have not demanded specific standards for green bonds. Instead, they invest based on the credibility of issuers in the space, who have due diligence and monitoring processes built into their products. In many cases, issuers also offer the ability to see beyond the bonds to the actual projects their investments are funding. Thorny questions such as the amount of carbon emissions reductions that make a bond green, or the question of whether to invest in organizations which issue green bonds but may also fund carbon intensive projects, seem not to have had a significant effect on the market to date. Questions of whether or not these projects would have been funded without the development of green bonds are also not central to the discussion as of yet – though advocates point to the rising interest in the field as itself a sign of impact.

The current market – and the community behind it – is perhaps thought to be small enough to mitigate the need for more formal standards. While many investors didn't have the internal capacity to judge the veracity of green bonds, investors seemed to prefer external verification of some sort, such as the credibility of issuer or a third party standard.

Most interviewees anticipated clearer standards and an increased concern over greenwashing to emerge as the market grows. More than one interviewee suggested that green corporate bond products might raise issues that project-specific bonds for energy efficiency or renewable energy don't necessarily surface. Financial structures may become more complex, and asset-backed securities may raise their own specific questions about "greeness" as well as investability.

### **Can the green bond market get to scale?**

Investors and issuers both believe that there will be continued growth in the green bond space, and express some confidence that the market will come to scale. There is a pipeline of projects to invest in, continued interest from the retail market, and developing interest from institutional investors beyond those who have already purchased green bonds.

Barriers to growth have a chicken and egg quality, with a limited number of issuers and liquidity in the market paired with a relatively small scale of demand resulting from smaller retail investors and larger investors slowly entering the market. Some of this difficulty with supply and demand will be addressed by additional publicity of the emerging field and its developing track record.

For the field to grow to scale, key questions remain to be addressed. The costs of identifying green projects, and monitoring their actual impact, have to be integrated into the cost of green bonds – indeed, the IFIs role in the marketplace is in part a function of their preexisting institutional capacity for due diligence and project monitoring. More importantly, there must be a sufficient pipeline of investable projects that can credibly be seen as green but can create a market large and liquid enough to draw in the larger institutional investors with some appetite for green products. It should be noted that there are opportunities for liquidity, but investors are looking for a more robust secondary market.

Substantial market growth will likely involve negotiations around standard setting and transparency, as investors may no longer be able to rely on the credibility of IFI issuers alone as the market develops more products and grows more complex. Our conversations with investors and issuers suggest that this will be an iterative process, as new products and their investors interact with advocates, standard setters, and public policy makers who contribute to process of defining what makes a green bond green.

## **Conclusion**

We spoke with interested parties who believe there is potential to build this field in a way that guides private markets to address core environmental challenges. Their size, diversity of motives, and depth of interest in the field suggest real potential for growth in green fixed-income investing.

The ability of the green bond market to grow and satisfy the needs of institutional and retail investors of all types will depend on the ability of issuers to source projects, issue at scale, and interact with stakeholder-supported standards for content and impacts. Investors will need to specify what they feel comfortable with as “green” and the credit quality and financial characteristics they expect from green products. The general problem of balancing standards across the sub-sectors of green, from infrastructure to real estate to sustainable forestry to corporate bonds, will remain a challenge.