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FIXED INCOME
GREEN BONDS: FORGING A DIRECT LINK BETWEEN PROJECTS AND FINANCING

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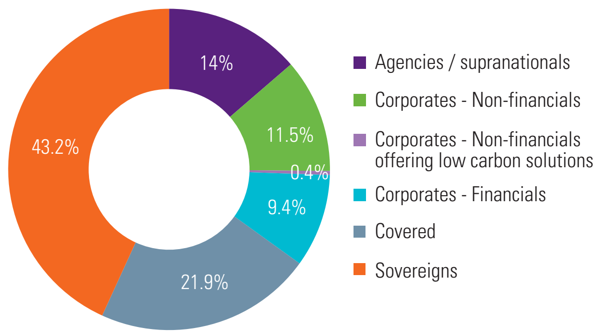
When it comes to investing in companies that contribute significantly to addressing the issues of climate change, can we apply the same logic to the bond markets as that employed for equities? In theory, the answer to this question is yes: when an issuer uses the market to raise debt capital for 'general corporate purposes' its creditors are in the same position as shareholders. This said, when one examines a breakdown of the bond market in practice, the investment universe reveals a very meagre showing of companies.

If we take the IBoxx Europe index as an example, corporate issuers represent barely 20% of the market, almost half of which are financial industry players.

Figure 1. Distribution of the IBoxx EUR index according to issuer type (by weight)



Source: Mirova based on (Natixis Global Market Research, 2015).

The stark truth is that regardless of whether one considers sovereigns, supranationals, financial companies or securitized debt, the pool of issuers strongly committed to the transition toward a low carbon economy is almost negligible. Turning to non-financial companies, firms offering meaningful low carbon solutions constitute less than 10%, which is to say that they represent an investment universe covering 0.4% of the index as a whole. Under these conditions, it is difficult to imagine a bond strategy that would be convincing both in terms of financial criteria and carbon impact.

Green bonds offer an ideal solution to this investment conundrum. These securities serve to finance projects whose aim is to have a positive impact on the environment and/or society. So far, they have mainly involved renewables or energy efficiency projects. By ensuring a traceable relationship between financing and the projects they fund, these securities offer all bond issuers—non-financial and financial companies, supranational organisations, agencies, securitization vehicles, even someday sovereign issuers—a mechanism for meeting their funding needs by drawing bond investors' attention to their low carbon activities.

This compelling logic, combined with the efforts of pioneering entities, has allowed the green bond market to achieve spectacular growth in the last few years. Like any nascent market, however, this market needs to be structured around shared principles if it is to consolidate its credibility, an indispensable quality for this growth to be sustainable.

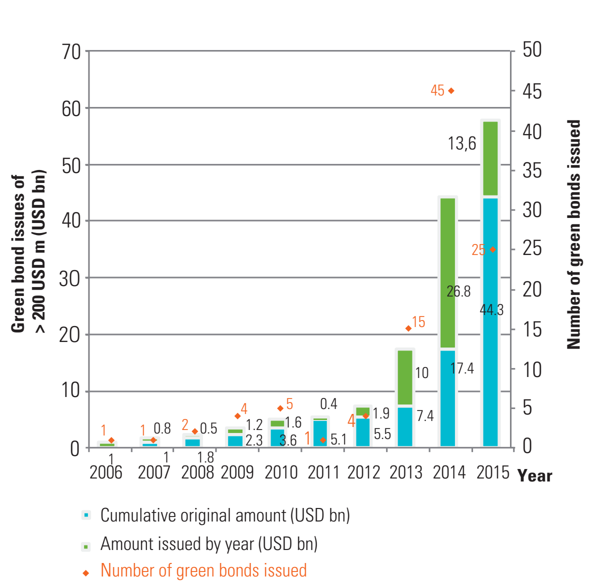
1 | Green Bonds: a market experiencing vigorous growth in many directions

Although green bonds still represent only a minute part of all bonds issued at the moment (less than 1% of the bond market), we have witnessed an exponential rise of this market since 2013.

Indeed, by the end of June 2015, the total issuance for the year was already close to US$ 60 billion, 3 times that of 2013, which was itself more or less a threefold increase compared to the 'birth' of this market in 2006.

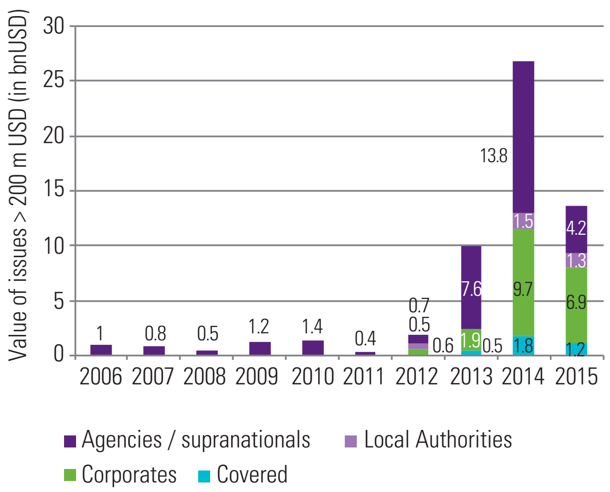
The market has been further reinforced over the past few years through an increasing diversification of issuers. Specifically, 2014 was the year that corporate issuers arrived in full force. Whereas the market had previously been dominated by supranational organizations, development banks and international agencies, corporate issuances, which first appeared in 2013, reached nearly 50% of the global volume of bonds issued in 2014, and over 50% by the end of June 2015.

Figure 2. Total number and value of sustainability bond issues greater than US$ 200 million, as at 30 June 2015



Source: Mirova based on (Natixis Global Market Research, 2015).

Figure 3. Distribution of sustainability bonds greater than US$ 200 M by issuer type – as at 30 June 2015



Source: Mirova based on (Natixis Global Market Research, 2015).

Continued diversification can further strengthen the sustainability of the market by i) ensuring more corporate bonds with a broader variety of ratings (BBB and HY issuers); ii) attracting more North-American and Asian issuers; iii) fostering activity by sovereign issuers, and iv) growing the number of issues by current issuers in order to produce meaningful issuer yield curves.

In addition to increasing volume and diversity, the market is also gradually gaining in structure: creation of 100% green bond funds, as well as dedicated originators, indices, and external insurance products for projects etc.

Despite its size, which continues to be modest relative to the bond market as a whole, these developments confirm that green bonds are here to stay, creating a new sub class within fixed income.

2 | Issues of (self ?) regulation

Nonetheless, while green bonds do appear to offer an effective means of addressing climate concerns, a solid framework needs to be established to guarantee their credibility.

This structuring process was launched in 2014, with the announcement of the Green Bond Principles (GBP). A multi-stakeholder initiative, the GBP aim to provide guidelines for what constitute the elements required for a bond issuance to be considered Green, with the dual goal of helping issuers design their green bonds, and assisting investors in evaluating the environmental impact achieved by such bonds.

Rather than precisely defining the environmental impact sought, the GBP focus on the governance criteria a bond needs to use in order meet the definition of a green bond. As we see it, there are two critically important issues for ensuring the credibility of these instruments here: the qualitative and quantitative evaluation of projects' environmental contributions, and the allocation of funds.

2|1 Measuring impact

Analysing how well projects meet the goals of sustainable development

To ensure the ESG (environmental, social and governance) quality of green bonds, Mirova has developed a dedicated evaluation grid for this type of issue. One of its key aims is to determine whether a bond's underlying projects meet the following criteria:

- Offers demonstrably improved practices that exceed business as usual, as well as a positive impact on an environmental concern, particularly climate issues;
- Does no exhibit negative exposure to any other sustainability issue (health, development, biodiversity, pollution, etc.).

We hope to enrich this basic framework for analysis as our knowledge and expertise of the standards and best practices prevailing in each sector progresses. A continuous learning and adjustment process is crucial if this new financial vehicle is to establish credibility as having genuine environmental and social value.

Measuring the amounts of CO_2 avoided

Qualitative analyses of the environmental and social benefits offered by the projects a green bond finances must be combined with quantitative assessment of their contributions to a low carbon economy. This must necessarily include a mesure of their carbon footprint, but also of any 'carbon benefits' they produce.

Given the importance and magnitude of the climate issue, it appears to us paramount that the methodology employed be widely shared, and entrusted to an external entity (certifying authority) whose job it is to ensure the carbon measurement of projects. A stringent and ambitious programme offering maximum disclosure provides a strong basis for credibility. Such a system would also make it easier for companies lacking the means to implement reliable methodologies internally to access the green bond market.

2|2 The link between projects and their funding

Clarifying the 'use of proceeds'

From investor's point of view, the function of this market is to provide an opportunity to contribute to the ecological transition by providing the capital necessary to the development of low carbon business models. From this perspective, there is, beyond the 'green' quality of the underlying project, an additional question, which is the nature of the project.

The great strength of the green bond concept is to tie investment to specific underlying projects. Thus any company is entitled to participate on this market, as long as they have a viable project for transformation to offer. The counterpart to this inclusiveness is a need for stringent clarity standards as to the use of proceeds to finance investments that induce the promised transformation. And, as we know, capital markets are organized to ensure that debt instruments are as fungible as possible. Green and social bonds are at odds with this attitude, since their function is to bind together financing and investment. One might summarize the rationale of this market as follows: using green debt to finance green or social assets.

The corollary of this principle is that there cannot be more green or social bonds than there are green or social assets on the issuer's balance sheet, meaning that such bonds may not be used to cover operational losses, share buybacks, or to refinance existing debt, even if such losses, shares or debt were to belong to green or social companies.

Quality of dedicated reporting

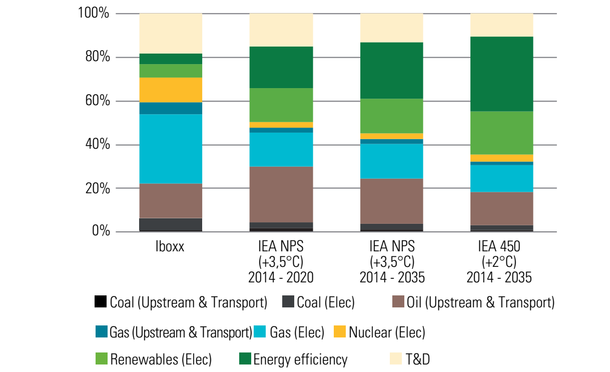
Even the greatest mastery of these elements, from the quality of environmental or social components, to the traceability of projects' funding, is to no avail if lacking a high degree of transparency and gestures of commitment on the part of issuers on the following aspects: i) clear and verifiable criteria for determining projects' eligibility to receive financing, ii) strong traceability as to use of proceeds, and iii) the existence of a reporting system for tracking the projects actually financed, and the impacts they achieve in practice.

3 | Shifting to low carbon bond portfolios

Green bonds are an eminently suitable approach for investors seeking to allocate their capital in ways that reflect climate issues. To illustrate this, we have attempted to quantify the capital requirements for green bonds across the overall IBoxx index.

For 'non-financial corporate issuers' exposed to an energy sustainable development theme, we analysed companies' investments in energy and compared them with the projected investment needs for achieving climate change objectives. This exercise allowed us to get a general sense of how investments in this part of the index stack up against the funding needed to implement the energy transition for the +3.5°C and +2°C scenarios across several time horizons.

Figure 4. Energy segment of the IBoxx index compared to scenarios published by the IEA

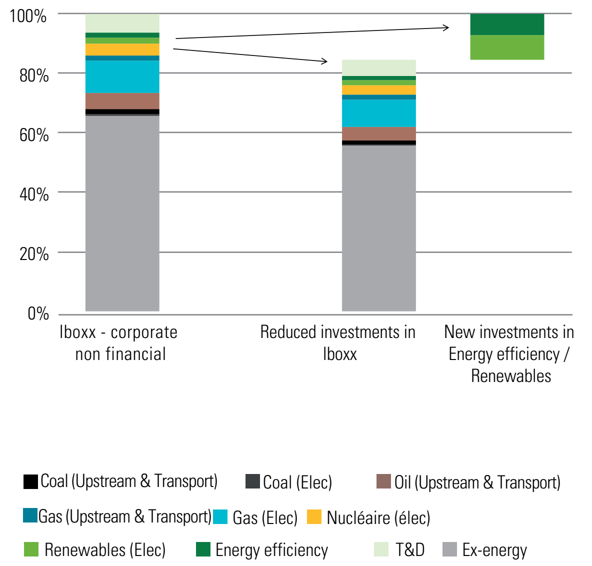


The IBoxx column provides an estimate of the distribution for energy investments within the index. The IEA NPS 2014-2020 and IEA NPS 2014-2035 columns illustrate the investment distributions required to achieve the NPS (+3.5°C) for the period under consideration. The IEA 450 2014-2035 column illustrates the investment distribution necessary to achieve the '450 scenario (+2°C) over the 2014-2035 period.

Source: Mirova based on (IEA, 2014).

The results of this exercise are in line with what has been announced by international organizations. Regardless of the scenario under consideration, it is now urgent that we shift a portion of investments into energy savings solutions and developing renewable energies. In an index such as the IBoxx—Non-Financials, energy represents slightly less than 34% of total investments by weight. Making this component of the index compatible with a 2°C scenario would entail allocating ~16% of capital to green bonds that finance investments dedicated to energy efficiency or renewables.

Figure 5. Redirecting investments (non-financial companies)

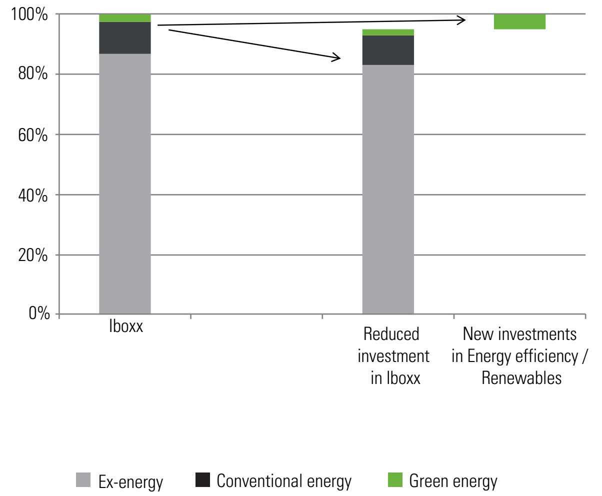


Source: Mirova based on (IEA, 2014).

As regards other types of issuers—sovereigns, agencies and supranationals, but also financials—it is not possible to devise such a clear test. It is hard enough to obtain information regarding the energy investments of corporations, and to date there are no indicators sufficiently reliable to provide guidance on financial issuers.

For lack of such a tool, we have employed macroeconomic data to estimate the energy investments of these players. Using research from international agencies (IEA, 2014; UNCTAD, 2014), according our calculations, investments by the financial industry in energy, broadly speaking, represent approximately 10% of all investments GFCF (Gross Fixed Capital Formation).

Figure 6. Estimated redirection of investments (IBoxx overall)



Source: Mirova based on (IEA, 2014; UNCTAD, 2014).

Leaving aside the possibility of an increased proportion of energy investments between now and 2035, compatibility with a 2°C scenario would entail reorienting ~5% of the entire index toward investments dedicated to energy efficiency or renewables via green bonds.

While the green bond market remains small for the moment, its exponential growth could allow an increasing number of investors to participate in the transition to low carbon. This established, the question for financial companies and regulators is: how to build a market infrastructure that favours the development of this new asset class? This is a high-stakes public issue that Mirova is deeply invested in and will continue to address.

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