# GREEN BONDS: SEEKING NEW OPPORTUNITIES TO INVEST FOR GOOD

**Perspective from Franklin Templeton Fixed Income**

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## Introduction

Green bonds are capital market instruments used to fund projects that will have a positive environmental and/or climate benefit. According to the Green Bond Principles (GBPs),[1] the issuer needs to certify where and how the proceeds are spent, the process for project evaluation and selection, and the effectiveness of these investments in meeting their decarbonisation goals. The GBPs do not require cash to be held in segregated bank accounts or that the assets financed be subject to separate security.

Green bonds made their first appearance in 2008 with an issue from the World Bank. Since then, growing concerns about greenhouse gas (GHG) emissions and climate change have prompted both a surge in the popularity of environmental, social and governance (ESG) mandates and green impacted-related issuance to finance climate-related expenditures. Green bonds have quickly become common across jurisdictions, industries and currencies. This piece addresses some of the main aspects of the green bond sector, including:

- Explaining the process of green bond labelling and certification
- Emphasizing the importance of active management in the green bond space
- Recognizing Europe as the leading market for climate-aligned bonds
- Identifying the potential for lower volatility in the asset class

## Green bond framework

Several ancillary initiatives have been launched to assist issuers, investors, banks and regulators in characterising green bonds. The International Capital Market Association (ICMA) has laid out a set of voluntary GBPs. These were designed to improve transparency and set standards for disclosure in the green bond market. The Climate Bond Initiative (CBI) was set up to develop a taxonomy and a standard set of principles, along with a third-party certification scheme. Bond rating agencies have also launched products providing analysis of the green credentials of specific issues. These initiatives are voluntary and not legally binding. However, they do provide a framework for engagement and a baseline for assessing green credentials.

Investors can use green and climate-aligned bonds to marry an investment outcome with sustainability goals. The issuer needs to balance the upfront costs of structuring a bond as green and the ongoing cost of compliance against the benefits of gaining access to investors interested in green bonds.

## Labelled and unlabelled

Issuers seeking the green label for a bond can take the additional step of certification, which is typically done by a third party that verifies compliance with the GBPs. Many issuers whose business model is supportive of a low-carbon future—often referred to as "green pure-plays"—may not necessarily meet the GBPs, nor do they formally label their bonds as green. Examples include companies producing solar panels, wind turbines or electric vehicle charging infrastructure. However, such companies are part of the drive towards a decarbonised future and it is a widely-held view that their debt should be considered as being aligned with environmentally sustainable investment goals. These pure-plays can often be referred to as being climate-aligned—not to be confused with the formal CBI certification.

The GBPs were designed to provide a framework for issuing green bonds to companies that are not strategically climate aligned. At the time the principles were written, bonds from "green pure-plays"—companies whose revenues are 100% from green activities—were almost non-existent. Despite the green credentials of their business model, debt issued by pure-play companies does not automatically receive a green label, although this was the intention of the original authors of the Green Bond Principles. In these instances, investors should carry out their own due diligence to gain comfort around the use of proceeds, the environmental credentials of the issuer and the overall "greenness" of the bond.

## Green bond indices

Indices, and by extension passive green bond funds, are bound by eligibility rules. For inclusion, formal labelling and a minimum issue size and certification are usually required. As a result, these indices only cover a fraction of the investible universe of climate-aligned bonds. According to the CBI annual report in 2018, only about one-third of the US$1.45 trillion of climate-aligned bonds in circulation was labelled and therefore index compliant.

## What defines a bond as "green"?

The definition of what qualifies as a green bond is not straightforward. The GBPs are voluntary, but in order to begin to understand what constitutes green financing and the process for whether an instrument complies with the GBPs, it is worth looking at the four components of the Principals:

1. **Use of Proceeds (UOP).** This needs to be adequately defined in the bond prospectus. In standard bonds, the UOP is often just stated as "General Corporate Purposes." To be considered as green, at a minimum the UOP should clearly indicate the projects financed or refinanced by the proceeds and why these projects are environmentally beneficial.
2. **Process for Project Evaluation**. This includes a description of the issuer's sustainability objectives, its process for determining the eligibility of a project as green, and the process for managing environmental and social risks.
3. **Management of Proceeds**. Proceeds from green issuance need to be virtually segregated and linked to the green projects in a credible way.
4. **Reporting.** The issuer should regularly provide up-to-date information on the progress of the projects detailed in the UOP.

## What is external certification?

The GBPs recommend external reviews, and this has certainly emerged as best practice in the industry. External certification is meant to support transparency pre-issue and in ongoing reporting. There are several types of external reviews, including:

- "Second-party opinion" from an organisation that is an expert in environmental sustainability and is sufficiently independent of the issuer to be credible. The review normally addresses how aligned the issue is with the GBPs. Beyond the terms of the issue, this review can look at the issuers' overall environmental strategy.
- "Verification" from an independent operator should be measured against a designated set of criteria, usually focused on the environment and sustainability.
- "Certification" from accredited third parties confirms alignment with a stated green bond standard. It does not make a judgement on the "greenness" of the bond.
- "Rating" from specialised research providers or agencies that typically judges the 'greenness' of the bond.

It is important to be able to comprehend the differing focus areas of these reviews as well as the strengths and weaknesses of the methodologies.

## Seeking to pick the winners

Repayment of most green bonds comes not from one successful project, but from the cash flows generated by the issuer. Satisfaction with the issuer's ability to repay is the first fence any investment must hurdle. In the event of a financial restructuring, there is no automatic additional claim on the assets of the company simply as a result of a green label. Fundamental analysis can then be allied to a top-down review of a company's carbon neutralisation plans and its general climate engagement strategy, which in turn gives insight into the environmental sustainability of that company's business model.

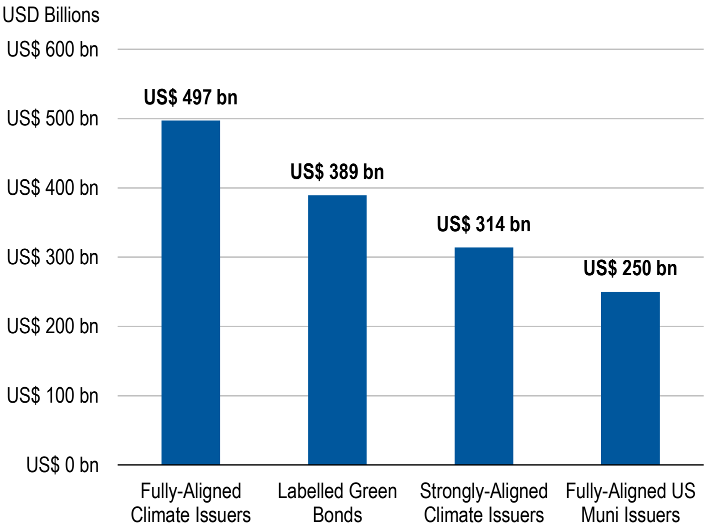
Taken together, these analyses form a rounded view as to the suitability of an individual bond for inclusion in a diversified credit portfolio.

## What exactly does pure-play mean, and does it matter?

Pure-play issuers are companies that earn all or most of their revenues from green activities. The CBI defines a company deriving 75%–95% of revenues from green business lines as "strongly climate-aligned," but to be "fully climate-aligned" a company needs to derive 95% or more of its revenues from green business lines. Qualifying business lines are those that are designed to help deliver a low-carbon and climate-resilient economy.[2]

**Climate-Aligned Bond Universe Stand at US$1.45 Trillion**

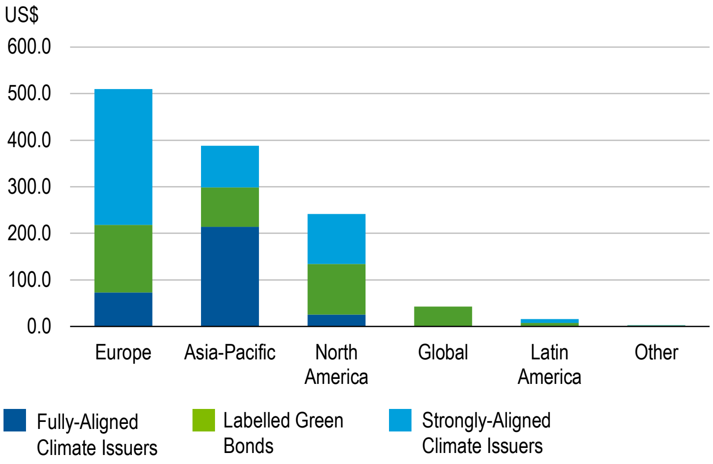
Exhibit 1: Climate-Aligned Bond Universe
As at June 2018




Source: Climate Bonds Initiative, Bonds and Climate Change: The State of the Market 2018, September 2018. For illustrative purposes only.

**Europe has been the Largest Source of Green Bond Issuance**

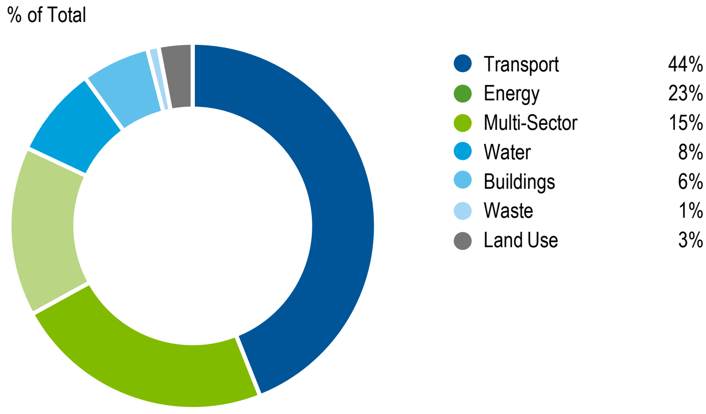
Exhibit 2: Climate-Aligned Bond Issuance by Geography
January 2008 through June 2018




Source: Climate Bonds Initiative, Bonds and Climate Change: The State of the Market 2018, September 2018. For illustrative purposes only.

**Transport and Energy have been the Two Largest Sectors of Issuance**

Exhibit 3: Climate-Aligned Bonds by Sector
As at June 2018




Source: Climate Bonds Initiative, Bonds and Climate Change: The State of the Market 2018, September 2018. For illustrative purposes only.

## European actions we're watching

Under the methodology used by the CBI, in the labelled green bond space, Europe already has the highest volume of issuance, at US$509 billion (from 1,418 issuers, as noted in Exhibit 2 above).[3] The euro is the second largest currency of issuance, following the US dollar. Transport and Energy, which are the two largest sources of greenhouse gas (GHG) emissions, are the two largest sectors of issuance. In addition, European investors have been driving a significant portion of flows to the asset class.

Under the European Climate Change Programme (ECCP), the EU has a long history of leading efforts to combat climate change. It is on track to meet its 2020 climate targets set as part of the Kyoto Protocol.[4] Territorial emissions in the 28 member states of the EU have been falling steadily for the last two decades.[5] The European Commission has made a clear commitment to remain at the forefront of decarbonising the economy, with a commitment to reduce GHG emissions by 40% versus 1990 levels by 2030.[6] Beyond that, the EU has launched a vision of a zero net GHG emissions economy by 2050.

These plans require annual investments in climate projects of €180 billion for the next 10 years,[7] much of which will have to be funded by the private sector. The EU recognises the crucial role that will be played by financial markets. Additionally, the plans outline the need for a clear and stable regulatory environment that is aligned with long-term sustainability and allows the allocation of capital with confidence. The EU also recognises the need to attract investments into areas identified as underpinning the sustainability of the EU model. The European Commission recently launched its much-anticipated EU Taxonomy, a comprehensive and scientifically rigorous green project classification tool.

The European Commission has proposed €45 billion a year be dedicated to climate projects in the next budget (2021–2027), representing around 25% of the total. There are two further pieces of legislation due to be presented in the near term (although the May 2019 European elections may delay the passage of some legislation):

- Investor duties and disclosures—asset managers and institutional investors need clarity on what duties they have for taking sustainability into account in both their investment process and disclosure requirements.
- The creation of two new categories of benchmark to improve transparency and to avoid suspicions of "green-washing":
    1. A low-carbon or decarbonised version of standard indices.
    2. A positive-carbon impact benchmark that will allow portfolios to be better aligned with the Paris Agreement objective of limiting global warming to below 2° Celsius.

A mixture of corporate, sovereign and EU-backed bonds may be needed to bridge the gap between the investment backed by the EU budget and the required total. Policymakers are also keen to persuade investors to support much longer-term issuance to better match asset lives, and this may require incentivisation.

## Do green bonds make a difference?

Green bonds have faced a certain amount of scepticism. Some investors harbour suspicions that green issuance is simply an attempt to rebrand a company, without changing any of its climate-damaging behaviours. We view this level of scrutiny as welcome and valuable in a market that is still in its early stages. We think it is essential to consider the broader strategy and behaviour of the issuer, its environmental performance and track record, and whether the governance and management in place can ensure successful delivery of the project.

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## Are green bonds priced in line with their "brown" counterparts?

In terms of demand, green issuances are oversubscribed. We believe this suggests that the size of the investor base interested in supporting the transition to a lower-carbon economy is significant. Data from the CBI for the first half of 2018 showed 72% of green bonds had tighter spreads than ordinary bonds after seven days, and 62% were tighter after 28 days. In our opinion, this implies that there is very strong demand for these bonds in the secondary market.

In periods of risk aversion, anecdotal evidence has suggested green bonds may exhibit lower volatility as investors tend to hold on to these bonds. However, while it is too early to mark this as a trend, in the future, we believe lower volatility could develop into green bonds permanently trading tighter to the issuer's yield curve, particularly for longer maturities.

Lower volatility could also create opportunities for active managers to switch into bonds at longer maturities, with consequently higher spreads, without having an unacceptable impact on potential short-term volatility. In our view, there is also the possibility that national governments could offer incentives; this could be especially useful in compensating investors for committing capital to longer-term climate projects.

## Conclusion

Green bonds are already a key tool in the attempt to decarbonise the global economy and are set to see continued rapid growth. The climate ambitions of the EU alone will require investment of €180 billion annually over the next decade, but only a portion of these bonds will be eligible for inclusion in indices.

We believe a well-balanced green bond portfolio should have a wider remit, otherwise the debt of companies that are crucial to the growth of the low-carbon economy will be excluded. Hence, an active approach to investing in green bonds allows a portfolio manager to apply discretion while still investing in bonds that provide environmental benefits. We believe this approach can also deliver compelling risk-adjusted return for clients.

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1. Source: International Capital Market Association.
2. Source: C2ES Centre for Climate and Energy Solutions.
3. Source: Climate Bonds Initiative, Bonds and Climate Change: The State of the Market 2018, September 2018.
4. Source: European Commission.
5. Source: European Commission.
6. Source: European Commission.
7. Source: European Commission.

## Glossary

**CBI Climate Bonds Standard and Certification Process**
The CBI has created a tool to allow investors and advisors to assess the green qualities of bonds. An integral part of that standard is an independent certification process that addresses pre- and post-issuance requirements for a bond to be described as compliant, including Use of Proceeds, tracking of funds and ongoing reporting. This is an entirely voluntary process from an issuer's perspective.

**Climate-aligned Bonds**
Fixed income instruments, either labelled or unlabelled as green bonds, for which proceeds are intended to finance projects and activities that contribute to a low-carbon and climate-resilient economy. No formal classification exists in mainstream data portals, such as Bloomberg.

**Climate Bond Initiative (CBI)**
The CBI is an organisation seeking to promote understanding and standards for bonds and projects necessary for a rapid transition to a low-carbon and climate-resilient economy. The CBI reports on the size of the climate-aligned market and developed the Climate Bond Standard and Certification scheme and the Climate Bond Taxonomy. It is funded by public and private bodies, including asset managers.

**Environmental, Social and Governance (ESG)**
Generic term used by capital market participants to assess corporate behaviour as part of an analysis of a company's potential financial performance.

**European Climate Change Programme (ECCP)**
The European Community's comprehensive package of policy measures to reduce greenhouse gas emissions has been initiated through the ECCP. Each member state has also put into place its own domestic actions that build on or complement the ECCP measures.

**Green Bond Principles (GBP)**
The ICMA's framework of the key components involved in the issuance of a credible green bond. The framework is broadly similar to the CBI Climate Bonds Standard and Certification Process.

**Green Bond Indices**
Fixed income indices that offer investors an objective and robust measure of the global market for debt securities issued to fund projects with direct environmental benefits. Examples are Bloomberg Barclays MSCI Green Bond Index and the S&P Green Bond Index.

**Greenhouse Gas (GHG)**
Any gas that can absorb infrared radiation in the atmosphere. Such gases trap heat within the lowest level of the atmosphere. Surface temperatures increase as a result of the "greenhouse effect."

**International Capital Market Association (ICMA)**
The ICMA brings together debt market participants from the wholesale and retail portions of that market. Its mission is to promote a resilient and well-functioning debt securities market. As part of this, the ICMA develops appropriate and broadly accepted guidelines and rules, including the Green Bond Principles. It has over 550 members in 60 countries.

**Kyoto Protocol**
An international treaty committing states to reduce GHG emissions, the Kyoto Protocol has since been superseded by the Paris Agreement. The central aim of both is to strengthen the global response to the threat of climate change by keeping the global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to strengthen the ability of countries to deal with the impacts of climate change.

**Paris Agreement**
The Paris Agreement is an agreement within the United Nations Framework Convention on Climate Change, signed in 2016. It is a landmark agreement to combat climate change and to accelerate and intensify the actions and investments needed for a sustainable low-carbon future.

**Taxonomy**
A scheme of classification. A crucial component in the creation of any framework of rules and standards.

**WHAT ARE THE RISKS?**

**All investments involve risks, including possible loss of principal.** The value of investments can go down as well as up, and investors may not get back the full amount invested. Bond prices generally move in the opposite direction of interest rates. Thus, as prices of bonds in an investment portfolio adjust to a rise in interest rates, the value of the portfolio may decline. Changes in the financial strength of a bond issuer or in a bond's credit rating may affect its value. Floating-rate loans and high-yield corporate bonds are rated below investment grade and are subject to greater risk of default, which could result in loss of principal—a risk that may be heightened in a slowing economy. Investments in foreign securities involve special risks including currency fluctuations, economic instability and political developments.

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