Investment Managers

For professional clients only
July 2018
Responsible Investment

Our green bond framework

Climate change is one of the most critical issues facing society. As highlighted by the United Nations, its effect is felt worldwide, as it disrupts national economies and impacts people and communities dearly. As a result, immediate action is required if the most catastrophic damages are to be avoided.

But while climate change poses a direct risk to businesses, it also presents us with an unprecedented opportunity to take action against it.

Green bonds, a recent addition to the global fixed income universe, have emerged as a unique and responsible investment opportunity, which can help tackle climate change. Green bonds enable investors to purchase securities debt earmarked for projects which support a low carbon economy. They help finance a myriad of different initiatives, including among many others, renewable energy, pollution prevention, energy efficiency and biodiversity preservation.

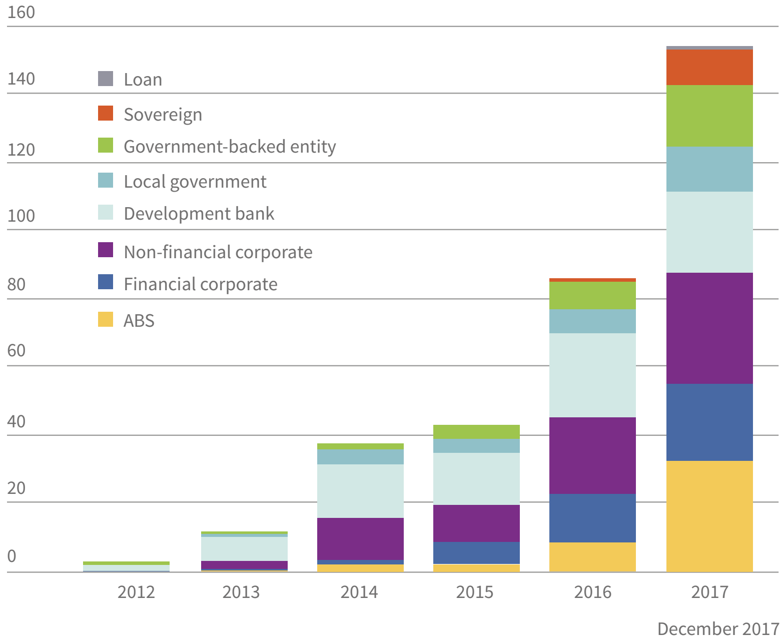
The green bond market's evolution

Since 2007, the green bond market has rapidly developed, mainly thanks to development banks and subsequently local authorities. In 2013, the market exploded with the emergence of private players such as commercial banks and other corporate entities. In 2016, sovereign issuances appeared, a trend which is expected to grow steadily going forward.

Therefore, virtually all types of issuers – sovereign, supranational and agency (SSAs), financials, corporate and sovereigns - have now entered the market. Developing countries and especially China are beginning to take the lead over Europe, and have injected new impetus into the sector. In 2017, global issuance reached USD$155.5bn[1], taking the total market size to more than USD$300bn. Notably, the **Climate Bonds Initiative (CBI)**[2] estimates that green bond issuance will reach USD$250 - $300bn in 2018.

[1] Source : Climate Bonds Initiative
[2] https://www.climatebonds.net/

The green bond market's evolution



The market's development has been accompanied by private governance via the Green Bond Principles (GBP)[3] and the Climate Bonds Initiative (CBI), which together have helped to monitor the sector and make it more credible. These initiatives provide issuers with advice on the key elements needed for launching true green bonds and also help investors gain insights into what is necessary to evaluate the environmental impact of the investments. Importantly however, these guidelines are only voluntary, and do not impose any rules on issuers.

Presently many disparate green bond standards coexist across different regions of the world. But one of the key elements of the European Commission's Action Plan on Sustainable Finance is the establishment of a taxonomy for green and sustainable assets and activities. This will form the basis for the introduction of a European standard for green bonds, where the ultimate aim is to establish formal European certification – a move we are very much looking forward to. As there is currently no overall consensus on what is 'green' and what is not, AXA IM decided to develop its own proprietary green bond assessment framework.

This framework not only drives investments towards authentic green projects but also aims to raise the integrity and transparency standards of the whole market. Selectivity is key in ensuring that only the most relevant and impactful green projects receive the necessary financing. This framework has so far been used to review more than 200 green bonds, which in turn has helped us to avoid any possible misuse of funds, risks of unethical practices and greenwashing. Overall, since 2014, our green bond framework has led us to exclude more than 15% of bonds presented to us as green.

AXA IM's commitment to the green bond market

AXA IM has positioned itself as a leader in this field and seeks to play an important role in the growth of the green bond market. Since 2017, we have been a member of the executive committee of the Green and Social Bond Principles (GSBP), and participate actively in several working groups such as Green Projects Eligibility, External Reviews and Impact Reporting.

Additionally, AXA IM also became a Climate Bonds Partner[4] in 2018. Through this collaboration, AXA IM benefits from broad research capabilities and expert insights into the issuers of green bonds and can easily work with peers to share best practices, develop key learnings and drive collective progress on green finance. AXA IM received the French Label for the Energy and Ecological Transition (TEEC) for its green bonds funds[5] in January 2017, guaranteeing transparency and quality of the environmental characteristics of these financial products.

Our green bond framework

AXA IM's green bond framework is composed of four pillars:

1. The environmental, social and governance (ESG) quality of the issuer
2. The use of proceeds,
3. Management of proceeds
4. ESG impact.

For each pillar, our analysts review, assess and monitor several well-defined criteria, many of which are mandatory.

For each pillar, and in order to be selected as investable, the issuer has to at the very least, surpass our 'eliminatory criteria'. If an investment also meets our 'non-eliminatory criteria', it would place the issuer among the green bond leaders, in our view. The factors outlined below are intended to be indicative and non-exhaustive. This is primarily due to the fact that individual green bonds can vary greatly and therefore their individual assessment involves subjective criteria, as is always the case in qualitative analyses.

At AXA IM, we believe that the proceeds set up for a green bond should reflect the issuer's efforts towards improving the environment and its overall environmental strategy. Full transparency in regards to the projects financed and on the tracking of the proceeds is therefore essential to our assessment. We pay particular attention to impact reporting, where both qualitative and quantitative indicators are expected.

[3] https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp
[4] https://www.climatebonds.net/about-us/partners
[5] AXA World Funds Planet Bonds

Pillar 1:
ESG quality of the issuer

The first pillar of our framework relates to the overall ESG quality of the issuer. This pillar is the one that most differentiates AXA IM from the Green Bond Principles, where it is not currently considered a fully-fledged pillar. But at AXA IM, we believe the quality of an issuer is crucial, when it comes to making a considered assessment. This is down to two core convictions, each of which is based around the fact that we want to avoid the financing of controversial companies. Therefore in the first place, a firm needs to demonstrate minimum ESG commitments, as we want to ensure that corporations properly deal with environmental and social risks in the projects financed. Second, we want to make sure the green asset volume for a green bond is going to grow over time and therefore that the green projects financed should be strategic activities. A global coherence between the environmental strategy and issuance is therefore necessary.

Eliminatory criteria

- Issuers with a poor ESG score, according to AXA IM's proprietary scoring methodology, are excluded[6]
- Issuers with severe controversies are excluded[7]
- Green bond projects must be aligned and consistent with an issuer's overall engagement and strategy. It should disclose its objectives, strategy, policy and/or processes relating to environmental sustainability

Pillar 2:
Use of proceeds

Our second pillar focuses on the how the proceeds of a green bond will be put to use. This pillar aims at controlling the quality of the green projects as well as the process for project evaluation and selection. This second pillar merges the Green Bond Principles' two first pillars.

Non-eliminatory criteria

- The issuer should have a highly-qualified and diversified internal committee to select green projects
- The issuer should disclose not only project categories but also in-depth details of each green project
- The issuer should provide an estimate of the share of financing vs. re-financing and the expected look-back period for refinanced projects
- The additionality of the projects should be maximised
- The issuer should have a Climate Bonds Initiative certification
- The issuer should disclose relevant information on the local context of the projects financed

Eliminatory criteria

- The issuer must use the Green Bond Principles as guidelines
- The issuer must clearly communicate to us the environmental sustainability objectives of the projects
- The issuer must, at least, disclose the expected breakdown of green projects' categories
- All green projects must meet the strict criteria of AXA IM's green activities taxonomy, which are strongly inspired by those proposed by the Green Bond Principles and the Climate Bonds Initiative. Projects relating to fossil-fuel or nuclear energy production are excluded, as well as large hydro-construction projects. Our green activities taxonomy will evolve in line with the European Union's announcements regarding a unified classification system
- The issuer must clearly communicate the process used to select and evaluate the green projects, including eligibility criteria
- The issuer must disclose any green standards or certifications referenced in project selection (e.g. green building certifications)

[6] The issuer must have an AXA IM ESG score greater than '2' (AXA IM ESG scores range from 0-10, with 10 being the highest) – see appendix 1
[7] Issuers with controversies highlighted as Category 5 by Sustainalytics are excluded; issuers with controversies highlighted as Category 4 by Sustainalytics are reviewed – see appendix 2

Pillar 3:
Management of proceeds

Our third pillar, similar to the third Green Bond Principles' pillar, relates to management of proceeds. It aims at controlling how the proceeds will be distributed i.e. that they will exclusively be used to finance the projects outlined by the issuer. This principle is about verifying that an issuer has sufficient guarantees in place, to ensure the proceeds of the bond will effectively finance the eligible projects.

Eliminatory criteria

- The issuer must be transparent on the process used for tracking proceeds. This should be a formal internal process linked to their lending and investment operations for green projects
- The use of proceeds must at least be tracked internally by the issuer in an appropriate manner

Non-eliminatory criteria

- The issuer's proceeds management process should be supplemented by an external verifier / auditor (third party opinion) which can verify the internal tracking method and fund allocation
- The issuer should let investors know the intended types of temporary placement for any unallocated proceeds. Unallocated proceeds should be invested in SRI funds
- The green bond Use of Proceeds should be separated from the mainstream Use of Proceeds - segregated in a different pool of assets (i.e. a sub-account or sub-portfolio)

Pillar 4:
ESG impact

Our last pillar, similar to the fourth Green Bond Principles' pillar, refers to impact reporting. It allows us to demonstrate the positive impact of a green bond on the environment.

Eliminatory criteria

- The issuer must report on, at least, the percentage allocated to certain project categories on an annual basis, until full allocation
- The issuer must report on relevant impact qualitative and quantitative indicators, at least on an aggregated level, on an annual basis, until full allocation. The most common indicators are expected to be covered (e.g. greenhouse gas emissions reduced, avoided or capacity installed, energy produced etc.)

Non-eliminatory criteria

- The issuer should report on a list of projects to which green bond proceeds have been allocated. It should provide a brief description of the projects and the amounts allocated, on an annual basis until full allocation
- The issuer should report on relevant indicators at the project level, on an annual basis until full allocation. Beyond common indicators, additional original key performance indicators are welcomed e.g. the number of vehicles taken off the road per year
- The issuer should disclose the key underlying methodology and/or assumptions used in the quantitative determination

Case Study

The case-study below aims to illustrate the framework by taking two concrete examples of green bond analyses. One led to a positive opinion and another to a negative opinion, from our Responsible Investment analysts.

Positive opinion

- Pillar 1: Attractive ESG profile regarding the low carbon economy mainly focused on gas and renewable energy.
- Pillar 2: Proceeds used to finance the development of new or existing projects related to wind and solar energy projects in the EU.
- Pillar 3: Proceeds tracked internally and by external auditor.
- Pillar 4: Commitment to report annually on greenhouse gas (GHG) emissions avoided, energy production capacity and energy production generated at the project level.

Negative opinion

- Pillar 1: Unambitious targets regarding carbon targets and climate scenario analysis not conducted.
- Pillar 2: Proceeds used to finance energy efficiency projects in refineries and petrochemical plants.
- Pillar 3: Proceeds tracked internally and by external auditor.
- Pillar 4: Commitment to report annually on greenhouse gas (GHG) emissions avoided on an aggregated basis.

Looking ahead - the continued evolution

Based on our green bond framework and regular meetings with issuers, our analysts establish opinions on the majority of green bonds issuances. Fundamentally a positive opinion allows portfolio managers to invest, while a negative one prevents them from doing so. We believe this evaluation is essential in order to determine the quality of a green bond - and more broadly to promote integrity within the market. Our in-house assessment aims at ensuring the environmental benefits, we would expect from green bonds, are met. The goal of our framework is to target and select green bonds, which meet our clients' ambitious environmental strategies. Our analysts meet many issuers to discuss their products, AXA IM's green bonds framework and share good practices with them. Our goal is to highlight what we expect from them, in terms of their green bond issuance and if necessary, help them improve their offering.

As the development of the green bond market highlights, debt markets can play a key role in funding projects that contribute to environmental sustainability - and the already substantial growth is an encouraging sign. Nevertheless, we should view this expansion in context. After all, the projected \$250bn - \$300bn in global green bond issuance expected for 2018 pales in comparison to the \$6.9 trillion investment needed in infrastructure per year over the next 15 years - infrastructure which is vital if we are to keep the rise in global temperatures within the 2°C scenario. But this situation leaves the door open to potentially great innovation across the still expanding, green bond universe.

Appendix 1

Corporate ESG scores framework

ESG QUALITY	ESG SCORES	RI QUALITATIVE RECOMMENDATION
POOR	0 - 2	The company has not evidenced adequate ESG risk management and/or the company has faced numerous controversies that are material
BELOW AVERAGE	2 - 4	The company is not mitigating its key or main ESG risks and this could represent a material risk for its core business in the foreseeable future
MEDIUM	4 - 6	The company as taken steps to mitigate ESG risks but sustainability is not clearly integrated in mainstream strategy
ABOVE AVERAGE	6 - 8	The company has robust ESG risk management and sustainability is integrated as part of mainstream strategy but it still has some progress to do
HIGH	8 - 10	Leading company for whom sustainability is a core part of its strategy and/or business model

[8] Source : OECD, 2017

Appendix 2

Sustainalytics Controversies Scale

Exhibit 5: Critical rating elements and raw score of each Controversy Category Rating

Controversy Category Rating	Critical Rating Elements (Ratings are typically based on a combination of the elements)	Raw Score
Category 0	No evidence of relevant incidents.	100
Category 1	▪ Impact and risk are low. ▪ There are no major outstanding risks. ▪ Level of involvement in misconduct is very low; therefore, the impact that is attributed to the company is also low. ▪ Cases are isolated, non-recurring.	99
Category 2	▪ Impact and risks are moderate. ▪ There are some outstanding risks (perhaps unforeseen or the incidents are ongoing). ▪ Cases may be recurring but recurrence is infrequent. ▪ Management systems are adequately able to address the issue.	80
Category 3	▪ Impact and risk are significant. ▪ There are notable oustanding risk to the company (e.g. ongoing litigations, investigations). ▪ Cases are typically recurring or there is a pattern of many isolated events. ▪ Level of involvement is consistent with a few peers. ▪ It is questionable whether the management systems are able to mitigate the issue in a satisfactory manner.	50
Category 4	▪ Impact and risk are high and potentially irreversible. ▪ The case is exceptional. ▪ Impact of the misconduct is on a broad range of stakeholders over a long duration. There is a high likelihood of an increased cost to society. ▪ There are serious risks posed to the company. ▪ The company is directly responsible for the misconduct. ▪ The level of involvement is exceptional among peers in a few respects. ▪ Cases are recurring and have not been addressed. ▪ Company response is missing or has been inadequate. ▪ Management systems are structurally unsound or their implementation is poor.	20
Category 5	▪ The "worst of the worst" in the peer group or sector. ▪ Impact and risk are severe and irreversible. ▪ The case is highly exceptional. ▪ Impact of the misconduct in on a broad range of stakeholders over a long duration, and imposes a clear cost on society. ▪ There are a serious ongoing risks posed to the company. ▪ The company is directly responsible for the misconduct. ▪ The level of involvement is exceptional among peers in numerous respects. ▪ Cases are recurring and have not been addressed adequately or at all. ▪ The company has failed to demonstrate the ability to remediate the issue. ▪ The company has refused to address the issue and/or has tried to conceal the wrongdoing and/or its involvement.	0

Design & Production : Internal Design Agency (IDA) | 07/2018 | 27 - 10149

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Société de gestion de portefeuille titulaire de l'agrément AMF n°GP 92-08 en date du 7 avril 1992
S.A. au capital de 1 384 380 euros, 353 534 506 RCS Nanterre.