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Does the European Union need another Green Bond Standard?

On February 28, 2023, the European Union (EU) reached a political agreement on a future regulation of green bonds, the European Green Bond Standard (EU GBS). Last Friday, the European Parliament officially adopted this new regulation. The regulation aims to improve the effectiveness, transparency, comparability and credibility of the green bond market in the EU. In this policy brief, we evaluate the potential advantages and limits of this new regulation. The EU GBS certainly makes sense from a political point of view. It could become a reliable benchmark for evaluating the "greenness" of a bond that directly aligns with regulatory and political action. However, the EU GBS is unlikely to be widely accepted by market participants. The already existing market-based green bond standards seem to be well established. Apart from that, the EU GBS can be seen as a combination of some of those already existing labels, but with the additional obligation for issuers to provide some legally binding information in their prospectuses. The latter could indeed discourage green bond issuers from using the EU GBS.

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KEY MESSAGES

- The EU Green Bond Standard makes sense from a political point of view to harmonize all EU financial regulations aimed at fostering the green transition and base them on the EU Taxonomy.
- The EU Green Bond Standard comes with the need for new internal processes for issuers, additional bureaucracy and legal risks.
- The EU Green Bond Standard can be easily replicated by the standard of the International Capital Markets Association plus a second-party opinion.
- Existing green bond standards and external reviews that verify the greenness of bonds are wellaccepted by market participants and translate into a higher financial advantage of green bonds.

GREEN BOND STANDARDS IN THE EU

On February 28, 2023, the European Union (EU) reached a political agreement on a future regulation of green bonds, the European Green Bond Standard (EU GBS). The regulation aims to improve the effectiveness, transparency, comparability and credibility of the green bond market in the EU. The first draft of the EU Regulation on EU Green Bonds was published in 2019 and the legislative proposal in 2021. The proposal is expected to be in force soon. As the whole process of this regulation started some years ago, it might already have influenced European green bonds issued during the last years.

Currently, several established market-based solutions exist for issuers to build up credibility with regard to the "greenness" of a green bond. Green bond issuers can choose to follow the principles of the International Capital Market Association (ICMA), apply for certification by the Climate Bonds Initiative (CBI) or commission a rating agency to assess the properties of the green bond in the form of a second party opinion (SPO). The availability of alternatives to the EU GBS raises the questions as to why the EU GBS is needed and who will benefit from its introduction.

The first international standard for green bonds was initiated by the CBI in 2011, about four years after the European Investment Bank issued the first green bond in 2007. The basis for CBI certification is the CBI taxonomy, which lists assets, activities and projects that are consistent with the goals of the Paris Agreement (CBI, 2021). In the certification process, CBI or approved verifiers act as external reviewers to confirm that the issuers use the proceeds in accordance with the standards.

In 2014, the ICMA announced the first version of its Green Bond Principles (GBP). The GBP constitutes guidelines for the issuance of green bonds, requiring transparency with respect to how bond proceeds are used, how projects are evaluated and selected, and how proceeds are managed. In contrast to the CBI framework, the GBP does not include a taxonomy but only "identify key environmental objectives and high-level eligible project categories" (ICMA, 2021). It defines several relatively broad categories like, for example, renewable energy, energy efficiency, or clean transportation. Other existing rules like the EU Taxonomy, or Chinese or Malaysian standards are also mentioned as examples for issuers to fulfill the ICMA principles. As a consequence, the ICMA label marks a relatively heterogeneous content. In contrast to CBI, external reviews are voluntary, but encouraged, in the ICMA framework.

The primary purpose of an SPO is to verify that an issuer's green bond framework or a single green bond issue is aligned with the standards the issuer claims to follow (e.g. ICMA GBP), and the issuer's sustainability strategy. Some providers of SPOs also offer an assessment of the greenness of a specific issue or green bond framework and its contribution to the UN Sustainable Development Goals. However, the methodology for assessing the greenness of a bond framework or issue differs across SPO providers.

Finally, there are external reviews by consulting firms that only focus on verification without giving any assessment of the greenness of the green bonds.

The EU GBS can be seen as a combination of the CBI and ICMA standards with an SPO. Similar to the CBI, the EU GBS is based on a green taxonomy – the EU Taxonomy – and mandates external reviews in the form of an SPO from approved verifiers. In the case of the EU GBS, SPO providers are required to register with the European Securities and Markets Authority (ESMA), which governs the harmonized rules for how second-party opinion providers have to review bonds and report their results. As do the ICMA GBP, the EU GBS defines extensive disclosure and reporting rules for green bond issuers, for example, governing how and how often the issuers have to report their use of proceeds.

The EU Green Bond Standard has been agreed upon

International green bond standards have existed since 2011

The EU Green Bond Standard combines aspects of the existing standards Table 1 shows a brief summary of the main characteristics of the already existing CBI and ICMA standards as well as the future EU standard. The last column of the table illustrates the development of the three standards by highlighting their most relevant versions in force over time.

	USE OF PROCEEDS	EXTERNAL REVIEW	EVOLUTION OF THE STANDARD
CBI Climate Bond Standard (CBS)	CBI Taxonomy	Mandatory	2011 (v1.0), 2015 (v1.9 and v2.0), 2017 (v2.1), 2019 (v3.0), 2023 (v4.0)
ICMA Green Bond Principles (GBP)	ICMA list of categories and suggestion to use an accepted interna- tional taxonomy	Encouraged, but voluntary	2014 (v1), 2015 (v1, second edition), 2018 (v2), 2021
EU Green Bond Standard (GBS)	EU Taxonomy	Mandatory	2018 (Action Plan on Sustainable Finance), 2019 (first proposal), 2021 (legislative pro- posal), 2023 (political agreement)

TABLE 1: OVERVIEW OF THE MOST IMPORTANT GREEN BOND STANDARDS IN THE EU

GREEN BOND STANDARDS ARE WIDELY USED IN THE EU GREEN BOND MARKET

Figure 1 shows market shares of the most important green bond standards and external review options for green bonds issued in Europe since 2014. While 'ICMA GBP', 'SPO', 'ESG verification/ assurance', and 'CBI certified' are labels that are initiated by the green bond issuers, the assessment 'CBI aligned' seems to constitute only a preliminary and independent assessment of alignment with the CBI taxonomy by the CBI and was not necessarily initiated by the green bond issuer. Bond data and the information on labels and external reviews were retrieved from Refinitiv Eikon/Datastream.

Figure 1 shows that the ICMA GBP has become the de facto industry standard. Since its introduction in 2014, the market share of ICMA GBP has increased from around 40 percent to close to 100 percent in 2022. The increase in the use of the ICMA GBP has been accompanied by an increase in the use of SPOs, which have become the dominant form of external verification. In contrast to SPOs, ESG verification or assurance only plays a minor role in the European green bond market. The combined usage of both forms of external verification peaked in 2018 with a market share of about 10 percent and decreased to about 2 percent in 2022. Figure 1 also reveals that, while nearly all green bonds issued in the EU since 2014 are classified as aligned with CBI, only a few issuers have applied for CBI certification. Similar to 'ESG verification/assurance', CBI certification peaked in 2018 and has lost in importance since then. The peak in the usage of CBI certification falls together with the announcement of the EU to work on an EU Taxonomy. The ICMA GBP is the most important standard

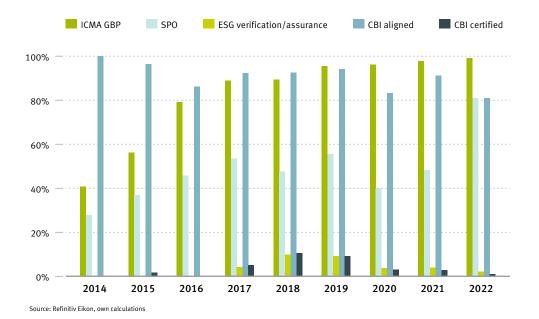


FIGURE 1: GREEN BOND ISSUANCES BY THE MOST IMPORTANT GREEN BOND STANDARDS AND EXTERNAL REVIEWS IN THE EU

GREEN BOND STANDARDS AND EXTERNAL REVIEWS AFFECT THE GREEN SPREAD

A majority of academic publications show that green bonds trade at the same or a lower yield as conventional bonds. This negative yield difference, or green spread, gives issuers of green bonds a financial advantage of several basis points over conventional bonds. For investors, it means that they voluntarily forego part of the yield they could otherwise earn when investing in conventional bonds.

MacAskill et al. (2021) show in a systematic review of the academic publications until 2020 that governance factors which are intended to increase the "green" credibility of the issuer are an important factor explaining this financial advantage of green bonds. Their study particularly mentions external reviews and the CBI certification label as important governance factors.

The recent literature corroborates the relevance of the verification of the "greenness" of a green bond by an external review for explaining the (relatively) lower yield (Fatica et al. (2021), Kapraun et al. (2021), Dorfleitner et al. (2022)). However, external reviews might not be enough to reach a high credibility. Bonds with a particularly clear focus on selected green ("dark green") projects confirmed by a second-party opinion (Dorfleitner et al. (2022)) or by inclusion in a green bond index (Caramichael and Rapp (2022)) exhibit the highest financial advantage relative to conventional bonds.

Overall, the research on green bonds underscores the relevance of transparent and strict green bond standards and the verification of the issuers' promises by reliable external reviews and second-party opinions. However, the related yield difference on secondary markets compared to conventional bonds seems modest with up to 5 basis points depending on the type of label or verification mechanism considered. Higher "green" credibility translates into a higher financial advantage

WHAT COULD BE THE ROLE OF THE EU GREEN BOND STANDARD?

Existing green bond standards, in particular the ICMA standard, and verification mechanisms are widely used and accepted among market participants. They seem to provide green bonds with the necessary credibility so that investors with green preferences are willing to forgo some financial return in exchange for the expected green impact of their investment. In other words, issuers of green bonds benefit from a modest financial advantage relative to issuing conventional bonds when they make use of the existing green bond standards and verification mechanisms. And even if some of the existing standards and verification mechanisms do not yield significant financing advantages, the details of the external reviews, the reporting of the issuer at the time of the bond issuance and the regular reports until the bond matures are valuable information for market participants to achieve their own evaluation. Another standard like the EU GBS therefore does not seem to be necessary at first glance.

However, the existing green bond standards are heterogeneous and still relatively opaque regarding the true greenness of the issued bonds. This is particularly true for the ICMA label because it can be achieved when the bond framework is aligned to any accepted green bond standard (e.g., the Chinese or the Malaysian green bond standard, the CBI or the EU Taxonomy). To obtain the ICMA label, the bond framework does not need any second-party opinion or an external review. Common labels like "ICMA plus external review" are still heterogeneous as this label does not per se inform about how the proceeds are used and what the external review tells about the greenness. Here, a second-party opinion should be a better signal to the market as it assures that the use of proceeds is aligned to a specific standard like the EU Taxonomy. In addition, from the academic literature, it is unclear so far whether the observed green spread compensates for the additional costs of increased reporting and external verification that come with the issuance of a green bond.

What does this mean for the EU GBS and its influence on the market for green bonds in the EU? Most notably, an ICMA label with an alignment to the EU Taxonomy which is verified by a secondparty opinion is a close substitute for the EU GBS. Thus, it is questionable if the introduction of the EU GBS makes any difference to market participants given that it will be a voluntary standard for issuers in the EU. In contrast to the new EU standard, the ICMA label is well-known to investors worldwide and well-accepted. Therefore, market participants have little incentive to use the EU standard and it will likely only be used by a few issuers, as is the case with the CBI certification. The EU GBS can become of some importance for the market if the EU member states use it for their own green bond issuances.

In addition, and beyond what CBI and GBP require, the EU GBS requests green bond issuers to include information about how they intend to use the proceeds of their green bonds in their bond prospectuses. This requirement will easily open the door for legal actions if issuers do not use proceeds as promised and may thus discourage issuers from using the EU GBS.

Nevertheless, for firms, the advantage is that the standard is consistent with other reporting directives in the EU and therefore they can economize on data collection and presentation. Most importantly, the EU Green Bond Standard makes sense from a political point of view to base all financial market regulations for the green transition on the EU Taxonomy. In contrast to the CBI standard, which is based on its own taxonomy, the EU GBS can also directly align regulatory and political action as the governing bodies (EU Commission, Parliament and Council) are the same. Existing green bond standards yield significant advantages

The EU Green Bond Standard can easily be replicated by existing instruments

REFERENCES

Caramichael, J. and A.C. Rapp (2022). The Green Corporate Bond Issuance Premium. International Finance Discussion Paper No. 1346, Washington: Board of Governors of the Federal Reserve System, https://doi.org/10.17016/IFDP.2022.1346.

Climate Bonds Initiative (2021). Climate Bonds Taxonomy

Dorfleitner, G., S. Utz, and R. Zhang (2022). The Pricing of Green Bonds: External Reviews and the Shades of Green. Review of Managerial Science, 16, 797–834.

Fatica, S., R. Panzica, and M. Rancan (2021). The Pricing of Green Bonds: Are Financial Institutions special? Journal of Financial Stability, 54: 100873.

ICMA (2021). Green Project Mapping

Kapraun, J., C. Latino, Chr. Scheins, and Chr. Schlag (2021). (In)-Credibly Green: Which Bonds Trade at a Green Bond Premium? Proceedings of Paris December 2019 Finance Meeting EUROFIDAI – ESSEC, Available at SSRN: https://ssrn.com/abstract=3347337

MacAskill, S., E. Roca, B. Liu, R.A. Stewart, and O. Sahin (2021). Is there a green premium in the green bond market? Systematic literature review revealing premium determinants. Journal of Cleaner Production, 280, 124491.



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