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Leiden
The Netherlands

Bridging the sustainability information gap: an assessment of the European sustainable finance framework

Hartman-Ohnesorge, L.G.L.

Citation

Hartman-Ohnesorge, L. G. L. (2026, February 4). *Bridging the sustainability information gap: an assessment of the European sustainable finance framework*. Meijers-reeks.
Retrieved from <https://hdl.handle.net/1887/4288732>

Version: Publisher's Version

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Note: To cite this publication please use the final published version (if applicable).

4 Initial Disclosures for Issuers

How Effective are the Prospectus Regulation and the European Green Bond Standard in Reducing Information Asymmetries?

1 INTRODUCTION

1.1 Previous Chapters

In Chapters 1 and 2, I explained that the aim of the EU Sustainable Finance Framework (“EU SFF”) is to channel more private capital into sustainable investments, ultimately facilitating the transition to a climate-neutral society. This objective aligns with enhancing market efficiency and increasing overall welfare. The primary mechanism of the EU SFF to realize its aim is to enable investors to invest more sustainably by providing them with sustainability information on their potential investments. My research aims to answer the question: *To what extent does the European Sustainable Finance Framework enable investors to make better informed investment decisions that integrate sustainability considerations, and how can this framework be improved to facilitate the reorientation of capital flows toward sustainable economic activities?* I therefore evaluate legislation that provides investors with sustainability information. To make this evaluation, I use Law & Economics (“L&E”) as a qualitative method: I identify which market failures impede the efficient functioning of the market and analyse whether the legislation addresses these market failures. For this, I use a simplified model of financial markets, consisting of issuers, intermediaries, and investors. These three actors represent the investment chain through which capital should be allocated to sustainable investments.

Chapter 3 focusses the information that is provided to investors on the basis of ongoing disclosure requirements from the Corporate Sustainability Reporting Directive (“CSRD”), the European Sustainability Reporting Standards (“ESRS”) and article 8 Taxonomy Regulation (“TR”), which apply to issuers. I evaluated whether these ongoing disclosures overcome information asymmetries between issuer and investor regarding sustainability information. I concluded that in general terms, the CSRD and article 8 TR are an enormous step toward reducing information asymmetries but that some improvements can be made in terms of coherency.

1.2 This Chapter

In this Chapter, I examine the regulatory framework that governs the disclosure of sustainability information in securities issuance – the initial disclosure requirements. I evaluate whether the initial disclosure requirements sufficiently reduce sustainability-related information asymmetries regarding the specific securities that are being issued. This focus can be contrasted with the ongoing disclosure obligations in the annual report that focus on the business in its entirety that I discussed in the previous Chapter. The initial and ongoing disclosures serve complementary roles, with the former focusing on the specific securities issued and the latter on the issuer as a whole. My analysis focuses on the question: *How effective are the initial disclosure requirements from the Prospectus Regulation and the European Green Bond Regulation in reducing information asymmetries regarding sustainability between issuers and investors?*

The analysis in this Chapter encompasses two pieces of legislation: the Prospectus Regulation (“PR”) and the European Green Bond Regulation (“EuGBR”). While only the EuGBR forms part of the EU Sustainable Finance Framework, the PR’s role in regulating initial disclosures makes both instruments essential for understanding the disclosure of sustainability information to investors. The PR, as the primary legislation governing initial disclosures, establishes rules for publishing prospectuses – documents containing information necessary for informed investment decisions regarding publicly offered securities, including initial public offerings.¹ The rationale behind this is to remove the information asymmetries that exist between issuers and investors and enhance the efficient functioning of that market.²

The PR’s scope encompasses securities offered to the public or admitted to trading on regulated markets. Notably, even when issuers qualify for exemptions from prospectus requirements due to offering securities exclusively to qualified investors, many voluntarily publish prospectuses.³ Consequently, most offered securities are accompanied by a prospectus. This makes the PR an essential part of this Chapter’s analysis of sustainability information in initial disclosures.

The EuGBR provides a voluntary standard enabling issuers of European Green Bonds to signal that their proceeds are allocated to Taxonomy-aligned activities. For this, the Regulation introduces *inter alia* requirements for alloca-

1 Article 6 Regulation (EU) 2017/1129 of the European Parliament and of the Council of 14 June 2017 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market, and repealing Directive 2003/71/EC (Prospectus Regulation); Veil R. (ed.), *European Capital Markets Law* (2nd edition), Hart Publishing 2017, p. 282.

2 Recital 3, 7 PR.

3 A prospectus may for example be required by qualified investors when they want to have the opportunity to quickly sell the assets on the regulated market in the case of a financial emergency. This insight was revealed to me in conversation with my thesis supervisors.

tion of proceeds, transparency requirements, as well as requirements for the external reviews of those bonds. While both the PR and EuGBR govern initial disclosures, this Chapter will demonstrate the limited interaction between these instruments.

Beyond the EuGBR, issuers may rely on market standards for the issuances of sustainable financial instruments, such as the ICMA Green Bond Principles and the Sustainability-Linked Bond Principles.⁴ These market-based standards operate independently from the EU legislative framework. As they do not directly inform the effectiveness of EU legislation in reducing sustainability-related information asymmetries between issuers and investors, they fall outside the scope of this Chapter.

In this Chapter, I limit my analysis to bonds, which are transferable debt securities where the issuer is obligated to repay both principal and interest to the holder.⁵ The reason to focus my discussion on bonds is because they are particularly well-suited for financing sustainable projects, as their proceeds can be allocated to specific purposes – unlike shares, which finance an issuer's entire business. Often, bonds that finance sustainable projects are referred to as 'green' bonds.⁶ However, I use the broader term 'sustainable bond' to refer to bonds with an explicit sustainability objective and the term 'conventional bond' to refer to bonds without such an objective.

To answer the question: *How effective are the initial disclosure requirements from the Prospectus Regulation and the European Green Bond Regulation in reducing information asymmetries regarding sustainability between issuers and investors?* I use the same normative framework as in Chapter 3 to guide my analysis (para. 2). In paragraph 3, I assess whether the disclosures that must be made under the PR sufficiently reduce information asymmetries on sustainability information. For this, I focus on those provisions under which sustainability information might be disclosed and consider the information needs that different types of investors may have. In paragraph 4, I analyse the EuGBR and reflect on its prospective popularity – on 2 April 2025, only four issuances

4 ICMA, *Green Bond Principles*, June 2021. The Principles require bond proceeds to be used for eligible Green Projects and provide a non-exhaustive list including renewable energy, energy efficiency, and pollution prevention and control. Rather than establishing definitive eligibility criteria, ICMA references various sustainable finance taxonomies (including the EU Taxonomy) as reference points for project qualification. Consequently, when issuers follow ICMA guidelines or other market-based initiatives, the specific prospectus requirements remain undefined. See also: ICMA, *Social Bond Principles*, June 2021; ICMA, *Sustainability-Linked Bond Principles*, June 2020; ICMA, *The Sustainability-Linked Bond Principles Voluntary Process Guidelines*, June 2024.

5 Wood P., *Law and Practice of International Finance*, Sweet & Maxwell 2008, p. 159-165.

6 See for example the definition in ICMA, *Green Bond Principles*, June 2021, p. 3: "Green Bonds are any type of bond instrument where the proceeds or an equivalent amount will be exclusively applied to finance or re-finance, in part or in full, new and/or existing eligible Green Projects (see Use of Proceeds section below) and which are aligned with the four core components of the GBP."

had taken place that complied with the EuGBR.⁷ Paragraph 5 contains the conclusion to the Chapter as well as general recommendations to better align the initial disclosure regime to the aims of the EU SFF.

2 NORMATIVE FRAMEWORK

As discussed in Chapter 2, this thesis relies on an integrated approach to welfare: all costs and benefits of the potential transaction must be taken into consideration, as well as sustainability costs that are traditionally not accounted for.⁸ To enable investors to consider all costs of their investment decision, the information asymmetry between the business and the investor must be minimized, including those asymmetries relating to sustainability information.⁹ To evaluate how successful the issuer disclosure rules are in reducing information asymmetries on sustainability information, I let the same three factors guide my analysis as in Chapter 3, which provides an elaborate explanation of and justification for the use of these criteria. In short, I evaluate whether the information that is disclosed is:

1. Complete, meaning (a) that the qualitative information covers all four aspects of the double materiality principle and (b) that quantitative data is included in the disclosures; and
2. Coherent, meaning that core terminology and concepts are defined and used coherently throughout the legislation; and
3. Accurate, meaning that qualifying a financial product as sustainable either (a) is based on the Taxonomy Regulation or (b) is warranted by procedural safeguards that ensure the qualification is supported by scientific evidence.

3 THE PROSPECTUS REGULATION

3.1 Introduction

The Prospectus Regulation obliges issuers to publish a prospectus – a document that sets out information on the issuer and the securities that are issued. This document will often contain sustainability information. Although the PR is

7 Leung K., “European Investment Bank sets example with EU Green Bond issuance” (blog-post), *Institute for Energy Economics and Financial Analysis* 14 April 2025, available at: <https://ieefa.org/resources/european-investment-bank-sets-example-eu-green-bond-issuance>, accessed on: 16 April 2025. European Investment Bank, EIB’s inaugural bond under European Green Bond Standard – EUR 3bn benchmark, 2 April 2025, available at: <https://www.eib.org/en/investor-relations/press/all/fi-2025-09-eib-eugbs-eur-2037>, accessed on: 16 April 2025.

8 Paragraph 3.2-3.4 of Chapter 2.

9 Paragraph 3.4 of Chapter 2.

not part of the EU SFF, most securities that are relevant to this research will have a prospectus. The PR thus plays an important role in transmitting sustainability information to investors and therefore is part of my analysis.

In the following paragraphs, I briefly outline the background, objectives, and requirements to publish a prospectus. Currently, the PR does not explicitly demand the publication of sustainability information. This will change after the entry into force of the Listing Act (Regulation), which amends the PR to include the obligation to clarify whether bonds are advertised as taking into account or pursuing ESG factors or objectives (para. 3.9). Apart from that requirement, issuers may be required to make public sustainability information under the open norms of the general materiality principle (para. 3.6), the 'use of proceeds' section (para. 3.7), and the risk factors (para. 3.8). I evaluate how these disclosures align with the criteria established in the normative framework.

3.2 Background and Aims

The history of the current prospectus regime spans more than fifty years. In 1966, the Segré Report investigated how to establish a European capital market and how to overcome the discrepancy between available capital on the one hand and the limited market for investing capital on the other hand.¹⁰ Following this report, three directives were introduced: Directive 79/279/EEC on the conditions for the admission of securities to official stock exchange listings,¹¹ Directive 80/390/EEC on the requirements for the drawing up, scrutiny, and distribution of the listing particulars to be published for the admission to a stock exchange listing,¹² and Council Directive 82/121/EEC on information to be published on a regular basis by publicly traded companies.¹³ Another decade passed before the obligation to issue a prospectus was harmonised by Directive 89/298/EEC.¹⁴ In 2003, the Prospectus Directive

10 Segré C., "The development of a European capital market. Report of a Group of Experts appointed by the EEC Commission", *EU Commission – Working Document* November 1966, available at: <https://aei.pitt.edu/31823/>, accessed on: 19 March 2024; Veil R. (ed.), *European Capital Markets Law* (2nd edition), Hart Publishing 2017, p. 4-5.

11 Council Directive 79/279/EEC of 5 March 1979 coordinating the conditions for the admission of securities to official stock exchange listing.

12 Council Directive 80/390/EEC of 17 March 1980 coordinating the requirements for the drawing up, scrutiny and distribution of the listing particulars to be published for the admission of securities to official stock exchange listing.

13 Council Directive 82/121/EEC of 15 February 1982 on information to be published on a regular basis by companies the shares of which have been admitted to official stock-exchange listing.

14 Council Directive 89/298/EEC of 17 April 1989 coordinating the requirements for the drawing-up, scrutiny and distribution of the prospectus to be published when transferable securities are offered to the public.

was published, containing extensive material requirements for the publication of prospectuses.¹⁵ The national laws that transposed these requirements into Member States' legal frameworks became applicable throughout the EU no later than 1 July 2005.¹⁶ From this point onward, there thus was a substantively harmonized framework for the publication of prospectuses in the EU. In 2019, the Prospectus Directive was repealed by the Prospectus Regulation, which spans more than 70 pages and is supported by four delegated regulations.¹⁷ This current PR will be amended by the Listing Act (Regulation), which contains a number of measures to simplify the listing rules for issuers, particularly for small- and medium-sized issuers.¹⁸

According to recital 7 PR, the aim of the regulation is “to ensure investor protection and market efficiency, while enhancing the internal market for capital.” The PR intends to achieve this by providing information to the investor that is necessary to make an informed investment decision in light

15 Directive 2003/71/EC of the European Parliament and of the Council of 4 November 2003 on the prospectus to be published when securities are offered to the public or admitted to trading and amending Directive 2001/34/EC.

16 Article 29 Directive 2003/71/EC of the European Parliament and of the Council of 4 November 2003 on the prospectus to be published when securities are offered to the public or admitted to trading and amending Directive 2001/34/EC.

17 For an overview of the history, see: Veil R. (ed.), *European Capital Markets Law* (2nd edition), Hart Publishing 2017, p. 4-21; Busch D., Ferrarini G. & Franx J.P. (eds.), *Prospectus Regulation and Prospectus Liability*, Oxford University Press 2020, p. 3-6. Commission Delegated Regulation (EU) 2019/979 of 14 March 2019 supplementing Regulation (EU) 2017/1129 of the European Parliament and of the Council with regard to regulatory technical standards on key financial information in the summary of a prospectus, the publication and classification of prospectuses, advertisements for securities, supplements to a prospectus, and the notification portal, and repealing Commission Delegated Regulation (EU) No 382/2014 and Commission Delegated Regulation (EU) 2016/301; Commission Delegated Regulation (EU) 2019/980 of 14 March 2019 supplementing Regulation (EU) 2017/1129 of the European Parliament and of the Council as regards the format, content, scrutiny and approval of the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market, and repealing Commission Regulation (EC) No 809/2004; Commission Delegated Regulation (EU) 2020/1272 of 4 June 2020 amending and correcting Delegated Regulation (EU) 2019/979 supplementing Regulation (EU) 2017/1129 of the European Parliament and of the Council with regard to regulatory technical standards on key financial information in the summary of a prospectus, the publication and classification of prospectuses, advertisements for securities, supplements to a prospectus, and the notification portal; Commission Delegated Regulation (EU) 2021/528 of 16 December 2020 supplementing Regulation (EU) 2017/1129 of the European Parliament and of the Council as regards the minimum information content of the document to be published for a prospectus exemption in connection with a takeover by means of an exchange offer, a merger or a division.

18 Regulation (EU) 2024/2809 of the European Parliament and of the Council of 23 October 2024 amending Regulations (EU) 2017/1129, (EU) No 596/2014 and (EU) No 600/2014 to make public capital markets in the Union more attractive for companies and to facilitate access to capital for small and medium-sized enterprises.

of the nature of the issuer and the securities being offered.¹⁹ According to the recital, “[t]he appropriate way to make that information available is to publish a prospectus.”²⁰ As such, the prospectus is seen as a solution to the information asymmetries between issuers and investor. The current PR has little information in its recitals on sustainability-related information, except in recital 54 PR, which states that “[a]mong others, environmental, social and governance circumstances can also constitute specific and material risks for the issuer and its securities and, in that case, should be disclosed.” The Listing Act (Regulation), which will amend the PR, does consider that sustainability information plays a role for informed investment decisions and thus should be included in a prospectus – but also contains the caveat that the amended prospectus rules should not overlap with requirements laid down in other Union law.²¹

3.3 Scope

There are two events that trigger the obligation to publish a prospectus: offering securities to the public and admitting them to trading on a regulated market.²² The first trigger is contained in article 3 (1) PR: securities shall only be offered to the public in the EU after publication of a prospectus in accordance with the PR.²³ The second event that triggers the obligation to publish a prospectus is the admission of securities to a regulated market operating within the EU (article 3 (3) PR).²⁴ Prior to its publication, the prospectus must be approved by the relevant competent authority, which checks whether it complies with the relevant rules of the Prospectus Regulation.²⁵

¹⁹ Recital 7 PR.

²⁰ Recital 7 PR.

²¹ Recital 23 Listing Act Regulation.

²² Lieverse K., “The Obligation to Publish a Prospectus and Exemptions”, in: Busch D., Ferrarini G. & Franx J.P. (eds.), *Prospectus Regulation and Prospectus Liability*, Oxford University Press 2020, p. 1147-150.

²³ ‘Securities’ is defined in article 2 (a) PR; ‘offer of securities to the public’ is defined in article 2 (c) PR. The most notable exceptions to the rule to publish a prospectus are that no prospectus need be published whenever (1) the securities are only offered to qualified investors, (2) the securities are offered to less than 150 persons per Member State, (3) the nominal value of an individual security exceeds EUR 100 000, or (4) the securities can only be acquired for a total consideration of at least EUR 100 000 per investor.

²⁴ This obligation does not apply in the case of any of the events listed in article 1 (5) PR. These includes, for example, the event in which the securities that are admitted to trading on the market are fungible with securities already admitted to trading on the same regulated market, provided that they represent less than 20% of the securities already admitted over a period of 12 months.

²⁵ Article 20 PR.

3.4 Format

The Prospectus Regulation allows for several different prospectus formats.²⁶ First of all, article 6 (3) PR sets out that a prospectus may be drawn up as a single document or as separate documents. In the latter case, the prospectus is to be divided into three parts: (i) a registration document that contains information on the issuer, (ii) a securities note detailing information on the securities offered, and (iii) a summary.²⁷ Next to this, the Prospectus Regulation introduces three additional formats: the Universal Registration Document,²⁸ the simplified disclosure regime for secondary issuances,²⁹ and the EU Growth Prospectus.³⁰

3.5 Sustainability Information in the Prospectus: General Observations

3.5.1 Introduction

The PR currently lacks explicit sustainability disclosure requirements. This will partially be addressed by the Listing Act, which will introduce a limited number of explicit sustainability disclosures in the prospectus per 5 June 2026.³¹ However, the current absence of explicit requirements does not mean that a prospectus never needs to contain sustainability information. This is confirmed in recital 54 PR, which states that “[a]mong others, environmental, social and governance circumstances can also constitute specific and material risks for the issuer and its securities and, in that case, should be disclosed.” Under the current PR, sustainability disclosures can be mandatory on the basis of the materiality principle, the use of proceeds section, and the risk factors.³² This framework is supplemented by ESMA’s non-binding guidelines that

26 See Fischer-Appelt D., “Prospectus Formats and Shelf Registration”, in: Busch D., Ferrarini G. & Franx J.P. (eds.), *Prospectus Regulation and Prospectus Liability*, Oxford University Press 2020, p. 296.

27 Article 6 (3) and 10 PR.

28 Article 9 PR.

29 Article 14 PR.

30 Article 15 PR.

31 Article 4 (3) Listing Act. The Listing Act introduces a limited number of explicit sustainability disclosures in article 13 PR.

32 Note that some issuers rely on a voluntary framework when deciding what sustainability information to disclose. This can be a framework developed by the issuer itself, such as the Sustainability Bonds Framework from the Dutch Entrepreneurial Development Bank FMO. It can be a market-based standard such as the ICMA Green Bond and the Sustainability-Linked Bond Principles. Or it can be the European Green Bond standard, developed by the EU legislator. These voluntary frameworks contain rules on what information that is made available in the prospectus.

specifically address sustainability disclosures for non-equity securities with sustainability objectives.³³

In paragraphs 3.6 and 3.7, I analyse what sustainability disclosures must be made for both sustainable bonds and conventional bonds (bonds that do not explicitly pursue sustainability objectives). This analysis is informed by three elements. First, the central role of the materiality principle from article 6 PR (para 3.5.2). Second, the influence of investor types on sustainability disclosures (para 3.5.3). Third, there is divergence between the disclosures for sustainable and conventional bonds (para 3.5.4).

3.5.2 The Central Role of the Materiality Principle

According to article 6 (1) PR, the prospectus must contain all “necessary information which is material to an investor for making an informed assessment of: (a) the assets and liabilities, profits and losses, financial position, and prospects of the issuer and of any guarantor, (b) the rights attaching to the securities, and (c) the reasons for the issuance and its impact on the issuer.”³⁴ Article 6 PR thus establishes the principle of materiality – an open norm – as the baseline for what must be disclosed in the prospectus.³⁵ However, the PR does not define what ‘materiality’ exactly encompasses and what its demarcation lines are.³⁶ This lack of a definition is understandable, as alleged breaches of the materiality principle are adjudicated in national courts under national (tort) laws.³⁷ While an EU-level definition would ensure maximum harmonization of the interpretation of the PR, it would also entail EU sub-

33 ESMA, Public Statement, Sustainability disclosure in prospectuses, 11 July 2023, ESMA32-1399193447-441. In principle, a public statement is not legally binding but it does indicate how ESMA interprets the open norms in the PR in light of sustainability disclosures.

34 Serière V. de, “The Contents of the Prospectus: Non-Financial Information and materiality”, in: Busch D., Ferrarini G. & Franx J.P. (eds.), *Prospectus Regulation and Prospectus Liability*, Oxford University Press 2020, p. 195.

35 Serière V. de, “The Contents of the Prospectus: Non-Financial Information and materiality”, in: Busch D., Ferrarini G. & Franx J.P. (eds.), *Prospectus Regulation and Prospectus Liability*, Oxford University Press 2020, p. 199.

36 In the previous Chapter, the principle of ‘materiality’ was central to determining the content of the annual sustainability report under the CSRD. However, it cannot be assumed that the concept of ‘materiality’ in the PR is the same as in that directive. See also: Schulzke K.S. & Berger-Walliser G., “Toward a Unified Theory of Materiality in Securities Law”, *Columbia Journal of Transnational Law* 2017, vol. 56(6), p. 6. Neither can it be assumed that the term materiality in the PR is the same as in other legislation such as the Market Abuse Regulation (Regulation (EU) No 596/2014 of the European Parliament and of the Council of 16 April 2014 on market abuse (market abuse regulation) and repealing Directive 2003/6/EC of the European Parliament and of the Council and Commission Directives 2003/124/EC, 2003/125/EC and 2004/72/EC).

37 Serière V. de, “The Contents of the Prospectus: Non-Financial Information and materiality”, in: Busch D., Ferrarini G. & Franx J.P. (eds.), *Prospectus Regulation and Prospectus Liability*, Oxford University Press 2020, p. 202.

stantive tort interpretation, which may exceed the EU's legislative competence.³⁸ Nevertheless, this the lack of a precise definition creates uncertainty regarding the exact boundaries of materiality under article 6 (1) PR.

One indicator on the scope of materiality can be derived from recital 65 PR, which addresses information disclosure after prospectus publication but before trading commencement on a regulated market. This recital refers to information "which could influence the assessment of the investment".³⁹ This formulation substantively aligns with the Dutch Supreme Court's interpretation of materiality in the context of the question of whether an incomplete or incorrect statement in a prospectus is sufficiently material to be considered misleading.⁴⁰ The Court considered that materiality in that context concerned information of which: "it may reasonably be assumed that that statement, read in the context within which it is being made, is of material interest to the investment decision of the average investor".⁴¹ Therefore, I understand materiality in the context of article 6 (1) PR to encompass information that could influence the investment decision of an investor.⁴²

In general, two types of sustainability information can be distinguished:

1. *Material sustainability impact information*: information about business's positive and negative impacts on sustainability matters.
2. *Financially material information*: information on the business's sustainability-related financial risks and opportunities.

This distinction is based on the concept of double materiality as it is used in the ongoing sustainability disclosures on the basis of the CSRD/ESRS.⁴³ I have identified two factors that influence the scope and the type of sustainability information that must be included in the prospectus: (a) the type of investors and (b) the type of bonds that are issued.

38 Serière V. de, "The Contents of the Prospectus: Non-Financial Information and materiality", in: Busch D., Ferrarini G. & Franx J.P. (eds.), *Prospectus Regulation and Prospectus Liability*, Oxford University Press 2020, p. 202.

39 Recital 65 PR.

40 Hoge Raad, 27 November 2009, ECLI:NL:HR:2009:BH2162 (Vereniging van Effectenbezitters v. World Online International n.v.), para. 4.10.4.

41 Hoge Raad, 27 November 2009, ECLI:NL:HR:2009:BH2162 (Vereniging van Effectenbezitters v. World Online International n.v.), para. 4.10.4. Translation: Serière V. de, "The Contents of the Prospectus: Non-Financial Information and materiality", in: Busch D., Ferrarini G. & Franx J.P. (eds.), *Prospectus Regulation and Prospectus Liability*, Oxford University Press 2020, p. 202.

42 This interpretation also somewhat aligns to two US notions of materiality that were also discussed in paragraph 2.1.1 of Chapter 3: "matters as to which an average prudent investor ought reasonably to be informed before purchasing the security registered" by the US Securities and Exchange Commission, and "An item [...] if there is reason to believe that knowledge of it would influence the decisions of an informed investor" by the American Accounting Association. Both these definitions of materiality focus too on the question whether the information could influence the investment decision of an investor.

43 Article 19a (1) CSRD; paragraph 3.7 of Chapter 3.

3.5.3 Investor Categories: Impact Investors and Value-Driven Investors

According to article 6 (1) PR, the investors' perspective is leading in determining what material information is. It may be assumed that financial information is always material to investors, which means that financial material sustainability information – information on the business's sustainability-related financial risks and opportunities – should always be disclosed in the prospectus.⁴⁴

This leaves the question of whether a prospectus should include material sustainability impact information unanswered. This depends on whether the sustainability impact information is material to the investor. In principle, different types of investors have different information needs. When it comes to sustainability information, research has shown that, in general, investors take sustainability information into account in their investment decision-making process.⁴⁵ However, when investors incorporate sustainability considerations into their investment decisions, they do this for various reasons, including expectations about long-term returns from sustainable investing, efforts to reduce financial risks, and non-pecuniary motivations.⁴⁶ The variation in investor motivation can be expressed in two archetypal investor categories:

1. *Impact investors*, who are motivated by sustainability impact.
2. *Value-driven investors*, who are motivated by financial motivations.

This distinction, which is made frequently in literature, is important to understand what type of sustainability information is material to investors.⁴⁷ For

44 See: G Strampelli G., "The Contents of the Prospectus: Rules for Financial Information", in: Busch D., Ferrarini G. & Franx J.P. (eds.), *Prospectus Regulation and Prospectus Liability*, Oxford University Press 2020, p. 167.

45 For example: Eccles R.G., Kastrapeli M.D. & Potter S.J., "How to Integrate ESG into Investment Decision-Making: Results of a Global Survey of Institutional Investors", *Journal of Applied Corporate Finance* 2017, vol. 29(4), p. 125; Amel-Zadeh A. & Serafeim G., "Why and How Investors Use ESG Information: Evidence from a Global Survey", *Financial Analysts Journal* 2018, vol. 74(3), p. 87.

46 For example: Heeb F., e.a., "Do Investors Care about Impact?", *The Review of Financial Studies* 2023, vol. 36(5), p. 1737; Jansson M. & Biel A., "Motives to engage in sustainable investment: a comparison between institutional and private investors", *Sustainable Development* 2011, vol. 19(2), p. 135; Hartzmark S.M. & Sussman A.B., "Do Investors Value Sustainability? A Natural Experiment Examining Ranking and Fund Flows", *The Journal of Finance* 2019, vol. 74(6), p. 2789; Bauer R., Ruof T. & Smeets P., "Get Real! Individuals Prefer More Sustainable Investments", *The Review of Financial Studies* 2021, vol. 34(8), p. 3976.

47 Starks L.T., "Presidential Address: Sustainable Finance and ESG Issues – Value versus Values", *The Journal of Finance* 2023, vol. 78(4), p. 1837; Lopez de Silanes F., e.a., "Institutional Investors and ESG Preferences", *Corporate Governance: An International Review* 2024, vol. 32(6), p. 1060; Hong H.G. & Shore E.P., "Corporate Social Responsibility", *Annual Review of Financial Economics* 2023, vol. 15, p. 327; Hong H.G. & Shore E.P., "Corporate Social Responsibility", *Annual Review of Financial Economics* 2023, vol. 15, p. 327: Authors investigate whether shareholder interest in CSR is driven primarily by pecuniary motives or non-pecuniary ones and found confirmation for the latter motivation as the main driver.

impact investors, sustainability impact information will be material as it enables them to evaluate the sustainability aims of the investment and how seriously the issuer is committed to those goals. For value-driven investors, sustainability impact information will be less material. Instead, they will predominantly focus on financially material information, for example, the risk that investments in fossil fuel-intensive industries prematurely devalue due to changes in technology and legislation, commonly referred to as ‘stranded assets’.⁴⁸ As mentioned above, financially material information should always be disclosed in the prospectus, regardless of the type of investor that the prospectus is aimed at. It can, therefore, be concluded that how much sustainability impact information needs to be disclosed under article 6 (1) PR depends on how much investors care about sustainability impact. This is a gliding scale, as is shown in the figure below.

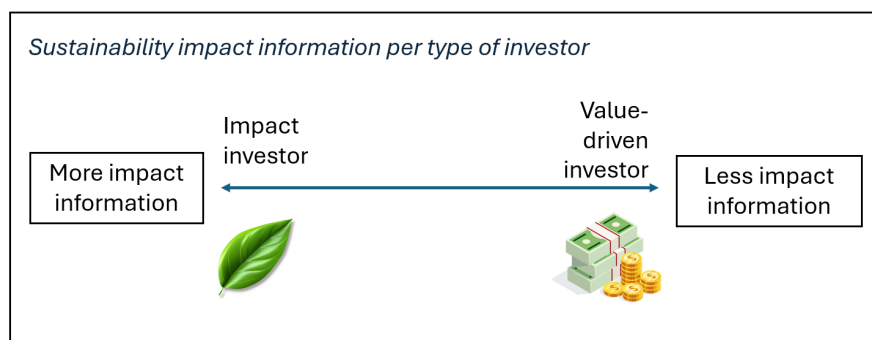


Figure 3: Sustainability impact information per type of investor. Source: Own image.

3.5.4 Sustainable and Conventional Bonds: Two Disclosure Regimes?

Regardless of whether a bond is specifically designated as sustainable or not, all financially material information is to be disclosed, including sustainability-related financial risks and opportunities.⁴⁹ This is because the primary purpose of an investment is financial, as also follows from article 6 (1) PR.⁵⁰ However, for bonds that pursue sustainability aims, the investment is characterised by an additional purpose that reaches beyond financial gains:

48 For example: Ploeg F. van der & Rezai A., “Stranded Assets in the Transition to a Carbon-Free Economy”, *Annual Review of Resource Economics* 2020, vol. 12, p. 218.

49 The disclosures thus are ‘issuer-oriented’ in nature, see: Chiu I. & P. Schammo, “Integrating Sustainable Finance into the Prospectus Regulation” in: Alexander K., Gargantini M., & Siri M. (eds.), *The Cambridge Handbook of EU Sustainable Finance: Regulation, Supervision and Governance*, Cambridge University Press 2025.

50 See: Strampelli G., “The Contents of the Prospectus: Rules for Financial Information”, in: Busch D., Ferrarini G. & Franx J.P. (eds.), *Prospectus Regulation and Prospectus Liability*, Oxford University Press 2020, p. 167.

to positively impact sustainability matters. This can be observed in the two most common types of sustainable bonds: sustainable use of proceeds bonds and sustainability-linked bonds. For sustainable Use-of-proceeds bonds, the proceeds of the bonds are to be used exclusively for a pre-defined sustainable project.⁵¹ Sustainability-linked bonds are bonds whose financial or structural features are dependent on whether the issuer meets a predetermined sustainability performance target (“SPT”).⁵² Next to the fact that sustainability is one of the central characteristics of sustainable bonds, these bonds are aimed at impact investors, to whom, as argued in the previous paragraph, sustainability impact information is material. Therefore, sustainability impact information – information on businesses’ positive and negative impacts on sustainability – should be included in the prospectus for sustainable bonds next to financially material information.

It follows that, as the sustainability disclosures in the prospectus are regulated by the open norm of materiality, different types of bonds and different types of investors require different information to be disclosed. In particular, the information will be different for sustainable bonds and conventional bonds, which effectively means that two disclosure regimes are emerging under the PR. One is for sustainable bonds, for which both material sustainability impact information and financially material information should be disclosed. The other is for conventional bonds, for which primarily financially material information should be disclosed. In the next sections, I elaborate the substantive sustainability disclosures for both regimes under the materiality principle, the use of proceeds sections, and the risk factors.

3.6 Prospectus Disclosures for Sustainable Bonds

3.6.1 Materiality

Sustainable bonds may target both impact investors and value-driven investors. Therefore, the information that has to be disclosed under article 6 (1) PR will include both material sustainability impact information and financially material information.

3.6.1.1 Material Sustainability Impact Information

A prospectus for sustainable bonds should at least disclose sustainability impact information that enables investors to evaluate the sustainability aims

51 ESMA, Public Statement, Sustainability disclosure in prospectuses, 11 July 2023, ESMA32-1399193447-441, p. 4.

52 ESMA, Public Statement, Sustainability disclosure in prospectuses, 11 July 2023, ESMA32-1399193447-441, p. 4; ICMA, *The Sustainability-Linked Bond Principles Voluntary Process Guidelines*, June 2024, June 2024, p. 3.

of the investment and how seriously the issuer is committed to those goals. The reason for this is that impact investors aim to realize a positive impact on sustainability with their investment and will thus base their investment decisions on that information.⁵³ A number of disclosures can be identified that should be made as a minimum. Most of these disclosures stem from the non-binding ESMA Public Statement, “Sustainability disclosure in prospectuses”, and the non-binding Guidelines by the Dutch Financial Markets Supervisor AFM for prospectuses of sustainable bonds (indicated by the respective footnotes in the list below).

1. Information on the scope and sustainability objectives of the project that is financed by the bonds, including:⁵⁴
 - a. A clear definition of the sustainability objectives;
 - b. Information on how the project relates to those objectives;
 - c. How feasible the project and the attainment of goals is;
 - d. The level of Taxonomy-alignment of the project that is financed by the bonds.⁵⁵
2. Information on the implementation plans of the sustainability objectives, including:
 - a. How the business exactly plans to achieve its objectives through the project;
 - b. Whether there is flexibility for deviation from the sustainability objectives, and what the parameters for deviation are.⁵⁶

⁵³ This follows from applying article 6 (1) PR to the information needs of impact investors.

⁵⁴ ESMA, Public Statement, Sustainability disclosure in prospectuses, 11 July 2023, ESMA32-1399193447-441, p. 6.

⁵⁵ Autoriteit Financiële Markten, “Which information does the AFM require in a prospectus for the issuance of sustainable bonds?”, available at: <https://www.afm.nl/en/sector/effectenuitgevende-ondernemingen/prospectustoezicht/duurzame-obligaties>, accessed on: 31 May 2024.

⁵⁶ ESMA, Public Statement, Sustainability disclosure in prospectuses, 11 July 2023, ESMA32-1399193447-441, p. 6.

3. Policies for sustainability impact assessment for the project, including:
 - a. Quantitative and qualitative information;⁵⁷
 - b. How sustainability progress will be monitored over time.
4. Information on feedback mechanisms to keep investors informed on the progress of the project and the sustainability objectives.⁵⁸
5. The use of external experts.⁵⁹
6. The sustainability impact of the issuer as a whole, including the level of Taxonomy-alignment of the issuer.

While points (1) – (5) concern the specific project that is financed by the bonds, point (6) concerns the issuer as a whole. Nonetheless, this is material information for impact investors, as these may decide to refrain from investing in a sustainable project if the issuer behind that project has low sustainability ambitions in general.

3.6.1.2 Financially Material Information

For both value-driven and impact investors, sustainability information relating to the financial performance of the bond and issuer should be disclosed on the basis of the principle of materiality under article 6 (1) PR. This is especially relevant for sustainability-linked bonds, where the achievement of the pre-formulated sustainability performance targets (SPTs) can have direct financial

57 The Dutch Financial Markets Supervisor AFM requires that the prospectuses for sustainable bonds contain *inter alia*:

- sustainability terminology is sufficiently explained;
- any claims about sustainability are substantiated and include quantitative information;
- the issuer describes how it plans to achieve its claims, including progress on these achievements;
- in the case of emission targets, that actual reductions are identified separately from forms of CO2 compensation schemes, that the entire value chain is considered, and that scope 1, 2, and 3 are specified;
- the intended impact is described at issue level or portfolio level;
- alignment to ESG market standards and Taxonomy-alignment is indicated;
- the relationship to the issuers transition plan and sustainability goals is explained;
- if the issuer has its own green bond framework, information on this framework is provided.

Source: Autoriteit Financiële Markten, “Which information does the AFM require in a prospectus for the issuance of sustainable bonds?”, available at: <https://www.afm.nl/en/sector/effectenuitgevende-ondernemingen/prospectustoezicht/duurzame-obligaties>, accessed on: 31 May 2024. The last two sentences provide evidence that this is how the supervisor interprets the materiality norm in this context: “It is important that all material information regarding the sustainable bonds is included in the prospectus and described as specific as possible. Only when all material information is included in the prospectus, potential investors are enabled to make an informed investment decision.”

58 ESMA, Public Statement, Sustainability disclosure in prospectuses, 11 July 2023, ESMA32-1399193447-441, p. 7.

59 ESMA, Public Statement, Sustainability disclosure in prospectuses, 11 July 2023, ESMA32-1399193447-441, p. 6.

consequences for the investor.⁶⁰ For these bonds, it should be disclosed how the attainment of the sustainability objective is related to financial implications for the investor and how it will be measured whether the sustainability objectives have been met. The sustainability performance is also relevant for other sustainable bonds, as failure to reach sustainability objectives can have financial consequences, for example, because of a negative impact on the value of the bond on the secondary market.⁶¹ Next to this, issuers should also disclose any sustainability-related risks, which will be further discussed in paragraphs 3.6.3 and 3.7.3.

3.6.2 Use of Proceeds

A prospectus must contain the reasons for the offer and how the proceeds of the issuance will be used. This obligation is elaborated in delegated regulation 2019/980, which sets out more details on what to disclose in different sections of the prospectus for various types of securities.⁶² For retail bonds, this includes “Reasons for the offer to the public or for the admission to trading. Where applicable, disclosure of the estimated total expenses of the issue/offer and the estimated net amount of the proceeds. These expenses and proceeds shall be broken into each principal intended use and presented in order of priority of such uses [...]”⁶³ As issuers of sustainable bonds intend to use the proceeds for sustainable projects, there will be sustainability disclosure requirements under the ‘use of proceeds’ item.

3.6.2.1 Material Sustainability Impact Information

Sustainability impact information under the ‘use of proceeds’ item should be information that enables investors to evaluate how the proceeds are supposed to positively impact sustainability. This overlaps with information already identified in the previous section:

60 Kölbel J.F. & Lambillon A.-P., “Who Pays for Sustainability? An Analysis of Sustainability-Linked Bonds”, *Swiss Finance Institute Research Paper* 2022, No. 23-07.

61 See also Feldhütter P., Halskov K. & Krebbers A., “Pricing of sustainability-linked bonds”, *Journal of Financial Economics* 2024, vol. 162, 103944.

62 Commission Delegated Regulation (EU) 2019/980 of 14 March 2019 supplementing Regulation (EU) 2017/1129 of the European Parliament and of the Council as regards the format, content, scrutiny and approval of the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market, and repealing Commission Regulation (EC) No 809/2004.

63 For retail non-equity securities, this obligation is contained in item 3.2 Annex 14 of CRD 2019/980, which sets out the contents of the securities note. In essence, the same disclosure requirements apply when the prospectus is drawn up as a single document (article 24 CDR 2019/980).

1. Information on the scope and sustainability objectives of the project that is financed by the bonds and how the proceeds will be used to finance that project.⁶⁴
2. Information on how the performance of the investment will be assessed, including:
 - a. Sustainability impact assessment for the project in quantitative and qualitative terms;⁶⁵
 - b. How sustainability progress will be monitored over time;⁶⁶
 - c. How Taxonomy-aligned the project is.
3. Information on the use of proceeds, including:⁶⁷
 - a. The management of the proceeds;⁶⁸
 - b. How the proceeds are segregated from the general cash flow of the firm;⁶⁹
 - c. For sustainability-linked bonds: the legal mechanism between sustainability performance and financial obligations.⁷⁰

3.6.2.2 Financially Material Information

As discussed in the previous paragraph, whether the project is realised is likely to have financial implications for the value of the investment. The ‘successfulness’ of the bond depends not only on realizing a profitable project but also on achieving the projects sustainability aims: a sustainable bond that is unsuccessful in realizing its aims, may lose value on the secondary market.⁷¹

64 ESMA, Public Statement, Sustainability disclosure in prospectuses, 11 July 2023, ESMA32-1399193447-441, p. 4. The public statement requires the “disclosure about the use and the management of the proceeds and information enabling investors to assess the sustainability ambition underpinning the process for project evaluation and selection” under the ‘use of proceeds’ section for sustainable Use of proceeds bonds. And information on how progress on impact will be measured and what feedback will be provided to investors, could be included in “information [...] underpinning the process for project evaluation and selection.”

65 Autoriteit Financiële Markten, “Which information does the AFM require in a prospectus for the issuance of sustainable bonds?”, available at: <https://www.afm.nl/en/sector/effectenuitgevende-ondernemingen/prospectustoezicht/duurzame-obligaties>, accessed on: 31 May 2024.

66 ESMA, Public Statement, Sustainability disclosure in prospectuses, 11 July 2023, ESMA32-1399193447-441, p. 4.

67 ESMA, Public Statement, Sustainability disclosure in prospectuses, 11 July 2023, ESMA32-1399193447-441, p. 4.

68 ESMA, Public Statement, Sustainability disclosure in prospectuses, 11 July 2023, ESMA32-1399193447-441, p. 4, 6.

69 Chiu I. & P. Schammo, “Integrating Sustainable Finance into the Prospectus Regulation” in: Alexander K., Gargantini M., & Siri M. (eds.), *The Cambridge Handbook of EU Sustainable Finance: Regulation, Supervision and Governance*, Cambridge University Press 2025.

70 ESMA, Public Statement, Sustainability disclosure in prospectuses, 11 July 2023, ESMA32-1399193447-441, p. 8.

71 See also: Feldhütter P., Halskov K. & Krebbers A., “Pricing of sustainability-linked bonds”, *Journal of Financial Economics* 2024, vol. 162, 103944.

Information on how the success of the investment will be measured, including feedback mechanisms, thus also qualifies as financially material information.⁷²

3.6.3 Risk Factors

The obligation to include risk factors in the prospectus can be found in article 7 and 16 PR and is elaborated upon in CDR 2019/980.⁷³ A risk factor describes risks that are “specific to the issuer and/or to the securities and which are material for making an informed investment decision.”⁷⁴ To determine whether a specific risk is material, both the probability of the risk materializing and the magnitude of the expected negative impact should be taken into account.⁷⁵ This elaboration of the concept of materiality in relation to risk factors in article 16 (1) PR is intended to create a more limited disclosure obligation than the general principle of materiality from Article 6 PR.⁷⁶ The legislator specifically intends for issuers to only disclose more relevant and meaningful risks in the risk factors and aims to prevent risk factors from becoming a tool for limiting the potential liability of the issuer.⁷⁷ This need not mean that sustainability information should be excluded from the risk factors. On the contrary, from recital 54 PR follows explicitly that environmental risks may be included in the risk factors (“environmental, social and governance circumstances can also constitute specific and material risks for the issuer and its securities and, in that case, should be disclosed”). This is

72 Note that ESMA’s statement gives guidance on what to include in the ‘use of proceeds’ section of sustainable Use of proceeds bonds. However, there is no clear reason why this should not apply to sustainability-linked bonds, as the intent of those types of bonds too is to realize certain sustainability targets with the proceeds.

73 Article 16 PR; article 24 (1) CRD 2019/980; section 3 Annex 6 CRD 2019/980. For example, for retail bonds in item 2.1 Annex 14 CDR 2019/980.

74 Article 16 (1) PR.

75 Article 16 PR. Guideline 1 ESMA, Guidelines On Risk factors under the Prospectus Regulation, 1 October 2019, ESMA31-62-1293. Note that this had not been explicitly prescribed in the predecessor to the Prospectus Regulation, resulting in the inclusion of generic, unrealistic or theoretical risks, which could make it difficult for investors to gain a good understanding of the risk profile of their investment – see: Evenhuis S.C. & Reutelingsperger T., “De nieuwe Prospectusverordening: risicofactoren en samenvattingen in een nieuw jasje”, *Tijdschrift voor Financieel Recht* 2019, nr. 7/8, p. 385, 386; Ten Have R., “The Summary and Risk Factors”, in: Busch D., Ferrarini G. & Franx J.P. (eds.), *Prospectus Regulation and Prospectus Liability*, Oxford University Press 2020, p. 277-278.

76 Recital 54 PR; Serière V. de, “The Contents of the Prospectus: Non-Financial Information and materiality”, in: Busch D., Ferrarini G. & Franx J.P. (eds.), *Prospectus Regulation and Prospectus Liability*, Oxford University Press 2020, p. 207.

77 Recital 54 PR; Serière V. de, “The Contents of the Prospectus: Non-Financial Information and materiality”, in: Busch D., Ferrarini G. & Franx J.P. (eds.), *Prospectus Regulation and Prospectus Liability*, Oxford University Press 2020, p. 207.

confirmed by the ESMA guidelines on the specificity, materiality and presentation of risk factors.⁷⁸

3.6.3.1 Material Sustainability Impact Information

From the perspective of an impact investor, a central risk is that the sustainability objectives of the project that is financed by the bonds are not realized. Therefore, if any “risks specific concerning the viability and achievement of the sustainable project” should be disclosed.⁷⁹ However, this disclosure is limited. The reason for this is that one of the functions of the prospectus is to limit accountability for the issuer when a risk materializes, as the issuer can argue that the investor had been made aware of and accepted the risk.⁸⁰ However, the prospectus should not be misused to negate liability for the risk of greenwashing.⁸¹ Therefore, risks of not realizing the sustainability objectives should only be disclosed in a limited manner that does not create the opportunity for the issuer to cast those objectives aside.

Another risk that may call for disclosure is that the proceeds are not sufficiently segregated from the general cash flow of the business.⁸² This could result in the funds being used for the business in general instead of for the intended project. This latter risk is especially relevant for sustainable bonds as the fundamental purpose of a sustainable bond is to allocate funds to sustainable projects. If the proceeds sponsor the entire issuer, this effectively

78 Guideline 7, ESMA, Guidelines On Risk factors under the Prospectus Regulation, 1 October 2019, ESMA31-62-1293. It follows from Guideline 7 that the business determines the relevant categories. In the list of examples provided by ESMA, one such category is “Environmental, social and governance risks”.

79 For sustainability-linked bonds, ESMA expects disclosures on the viability of the project, in particular regarding the KPI and sustainability targets, including potential conflicts of interest in the selection and monitoring of those KPIs. The greenwashing problem identified by the AFM is less relevant in this context as the proceeds of SLB’s need not necessarily be used for the financing of sustainable projects. ESMA, Public Statement, Sustainability disclosure in prospectuses, 11 July 2023, ESMA32-1399193447-441, p. 6.

80 Ten Have R., “The Summary and Risk Factors”, in: Busch D., Ferrarini G. & Franx J.P. (eds.), *Prospectus Regulation and Prospectus Liability*, Oxford University Press 2020, p. 267-268.

81 Point 1 of Autoriteit Financiële Markten, “Which information does the AFM require in a prospectus for the issuance of sustainable bonds?”, available at: <https://www.afm.nl/en/sector/effectenuitgevende-ondernemingen/prospectustoezicht/duurzame-obligaties>, accessed on: 31 May 2024.

82 ESMA, Public Statement, Sustainability disclosure in prospectuses, 11 July 2023, ESMA32-1399193447-441, p. 6. ESMA names two risks that may call for disclosure in relation to use of proceeds bonds, namely risks regarding the allocation and management of proceeds and risks concerning the viability and achievement of the sustainable project.

negates the bonds' distinctive sustainable character.⁸³ Therefore, issuers should disclose how the proceeds are managed.⁸⁴

3.6.3.2 Financially Material Information

There are a number of sustainability-related risks that may be financially relevant. First, regarding the specific project: if the sustainability aims are not realized, this may have consequences for the value of the bond on the secondary market.⁸⁵ In general, it may, therefore, be necessary to disclose information on the specific risks to the realisation of the project, with the limitation that this disclosure should not be misused to negate liability for greenwashing.⁸⁶ In the case of a sustainability-linked bond, not realizing the sustainability objective will also have direct financial consequences, for example, because the interest rate on the bonds is adjusted.⁸⁷

Second, if the issuer is exposed to sustainability risks, in particular transition and physical risks, this too can have an impact on the value of the specific investment. These risks, which will be elaborated in paragraph 3.7.3, must be disclosed as well.

3.6.4 Summary

It follows from the analysis in the previous sections that the PR mandates extensive sustainability disclosures for sustainable bonds. These mandatory disclosure obligations can be categorized into two distinct but interconnected dimensions, which partially overlap: (i) material sustainability impact information and (ii) financially material information. The minimum disclosure requirements that emerge on the basis of the PR are:

Material sustainability impact information

1. Information on the scope and sustainability objectives of the project that is financed by the bonds, including:
 - a. A clear definition of the sustainability objectives;

83 Chiu I. & P. Schammo, "Integrating Sustainable Finance into the Prospectus Regulation" in: Alexander K., Gargantini M., & Siri M. (eds.), *The Cambridge Handbook of EU Sustainable Finance: Regulation, Supervision and Governance*, Cambridge University Press 2025.

84 ESMA, Public Statement, Sustainability disclosure in prospectuses, 11 July 2023, ESMA32-1399193447-441, p. 4, 6.

85 See also: Feldhütter P., Halskov K. & Krebbers A., "Pricing of sustainability-linked bonds", *Journal of Financial Economics* 2024, vol. 162, 103944.

86 Point 1 of Autoriteit Financiële Markten, "Which information does the AFM require in a prospectus for the issuance of sustainable bonds?", available at: <https://www.afm.nl/en/sector/effectenuitgevende-ondernemingen/prospectustoezicht/duurzame-obligaties>, accessed on: 31 May 2024.

87 Therefore, the legal mechanism between sustainability performance and financial obligations should also be disclosed. ESMA, Public Statement, Sustainability disclosure in prospectuses, 11 July 2023, ESMA32-1399193447-441, p. 8.

- b. Information on how the project relates to those objectives;
 - c. How feasible the project and the attainment of goals are;
 - d. The level of Taxonomy-alignment of the project that is financed by the bonds.
- 2. Information on the implementation plans of the sustainability objectives, including:
 - a. How the business plans to achieve its objectives through the project;
 - b. Whether there is flexibility for deviation from the sustainability objectives, and what the parameters for deviation are.
- 3. Policies for sustainability impact assessment of the project, including:
 - a. Quantitative and qualitative information;
 - b. How sustainability progress will be monitored over time.
- 4. Information on feedback mechanisms to keep investors informed on the progress of the project and the sustainability objectives.
- 5. Information on the use of proceeds, including:
 - a. The management of the proceeds;
 - b. How the proceeds are segregated from the general cash flow of the firm;
 - c. For sustainability-linked bonds: the legal mechanism between sustainability performance and financial obligations.
- 6. The use of external experts.
- 7. The sustainability impact of the issuer as a whole, including the level of Taxonomy-alignment of the issuer.

Financially material information

- 8. Information on the implementation plans of the sustainability objectives, including:
 - a. How the business plans to achieve its objectives through the project;
 - b. Whether there is flexibility for deviation from the sustainability objectives, and what the parameters for deviation are.
- 9. Policies for sustainability impact assessment for the project, including:
 - a. Quantitative and qualitative information;
 - b. How sustainability progress will be monitored over time.
- 10. Information on feedback mechanisms to keep investors informed on the progress of the project and the sustainability objectives.
- 11. Information on the specific risks to the realisation of the project, with the limitation that this disclosure should not be misused to negate liability for greenwashing.
- 12. Information on the use of proceeds, including:
 - a. The management of the proceeds;
 - b. How the proceeds are segregated from the general cash flow of the firm;
 - c. For sustainability-linked bonds: the legal mechanism between sustainability performance and financial obligations.

- 13. Transition risks at project and issuer level.
- 14. Physical risks at project and issuer level.

3.7 Prospectus Disclosures for Conventional Bonds

3.7.1 *Materiality*

For conventional bonds that do not explicitly pursue sustainability objectives, there may still be material sustainability information to disclose under article 6 (1) PR. As discussed in para. 3.5.3, the scope of article 6 (1) PR depends on the investors' information needs. For conventional bonds, it is less likely that investors are driven by the motivation to positively impact sustainability. Nonetheless, the fact that value-driven investors are not primarily motivated by the desire to positively impact sustainability factors does not mean that sustainability information cannot be material to their investment decisions. As will be discussed in the next two sections, there are several reasons to include sustainability information in the prospectus for conventional issuances, such as: (1) to enable investors to pursue their overall ESG-strategy, (2) ESG scores impact the value of an investment, and (3) for risk assessment purposes.

3.7.1.1 *Material Sustainability Impact Information*

Non-retail investors – specifically investment firms, credit institutions, and insurance companies – are subject to disclosure requirements under the CSRD and TR. The CSRD mandates these entities to publish an annual sustainability report.⁸⁸ This includes the obligation to disclose sustainability information about their investments on an aggregate basis. In particular, these investors must comply with article 8 TR.⁸⁹ This means that these investors have to disclose the proportion of the turnover, capital expenditure, and operating expenditure derived from or related to environmentally sustainable activities in the sense of articles 3 and 9 TR.⁹⁰ To comply with these two disclosure obligations, non-retail investors thus need to know how Taxonomy-aligned their investments are. Issuers of conventional bonds, whose bonds may be purchased by non-retail investors subject to the obligation under article 8 TR,

⁸⁸ Article 19a (2) (d) CSRD.

⁸⁹ Article 8 TR applies to firms that have to comply with article 19a CSRD, see: paragraph 5.1 of Chapter 3.

⁹⁰ Article 8 (2) TR. The exact content and presentation of this information, including the methodology to generate the information, is set out in Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by specifying the content and presentation of information to be disclosed by undertakings subject to Articles 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic activities, and specifying the methodology to comply with that disclosure obligation.

should therefore disclose how Taxonomy-aligned the business is in its entirety, or, in the case that the project that is financed by the bond has a distinct sustainability profile, how Taxonomy-aligned that project is.

3.7.1.2 Financially Material Information

In principle, issuers of conventional bonds should disclose any available ESG scores, as these impact the value of an investment. This has been researched in a meta-study by the NYU Stern Center for Sustainable Business that examined the relationship between ESG and financial performance in over 1,000 research papers from 2015-2020.⁹¹ The authors found a positive relationship between ESG and financial performance in 58% of the corporate studies. Additionally, 13% of the studies showed a neutral impact, 21% had mixed results, and 8% demonstrated a negative relationship.⁹² Therefore, if the issuer has access to ESG scores, these should be included in the prospectus.

However, this disclosure principle is complicated by the fact that not all ESG scores are equally reliable.⁹³ Moreover, methodological inconsistencies between different ESG scoring frameworks diminish the value of ESG scores for investors as a basis for comparing different investments.⁹⁴ Consequently, ESG scores should be accompanied by essential contextual information, particularly:

1. information on the rating agency that provided the scoring and whether that agency is regulated under the ESG Rating Regulation, which introduces rules on the integrity, transparency, good governance, and independence of ESG rating activities and requires authorisation from ESMA;⁹⁵ and

91 Whelan T., e.a., “ESG and Financial Performance”, *Centre for Sustainable Business NYU-Stern* 2021, available at: <https://www.stern.nyu.edu/sites/default/files/assets/documents/ESG%20Paper%20Aug%202021.pdf>, accessed on: 21 June 2024.

92 Whelan T., e.a., “ESG and Financial Performance”, *Centre for Sustainable Business NYU-Stern* 2021, available at: <https://www.stern.nyu.edu/sites/default/files/assets/documents/ESG%20Paper%20Aug%202021.pdf>, accessed on: 21 June 2024: The authors also found positive results in 59 reviewed climate change or low carbon studies related to financial performance.

93 Berg F., Kölbel J.F. & Rigobon R., “Aggregate Confusion: The Divergence of ESG Ratings”, *Review of Finance* 2022, vol. 26(6), p. 1315. See also: Billio M., e.a., “Can you trust ESG ratings? A deep dive into trust, transparency, and regulatory challenges”, *SAFE Finance Blog* 16 April 2024, available at: <https://safe-frankfurt.de/news-latest/safe-finance-blog/details/can-you-trust-esg-ratings-a-deep-dive-into-trust-transparency-and-regulatory-challenges.html>, accessed on: 16 April 2025.

94 Berg F., Kölbel J.F. & Rigobon R., “Aggregate Confusion: The Divergence of ESG Ratings”, *Review of Finance* 2022, vol. 26(6), p. 1315.

95 Regulation (EU) 2024/3005 of the European Parliament and of the Council of 27 November 2024 on the transparency and integrity of Environmental, Social and Governance (ESG) rating activities, and amending Regulations (EU) 2019/2088 and (EU) 2023/2859 (“ESGR”). See also: Kreft T. & Schemmer E., “Die Regulierung von ESG-Rating-Anbietern in der EU”, *Europäische Zeitschrift für Wirtschaftsrecht* 2024, Heft 24, p. 1133. See also: Paragraph 4.6.2-4.6.3 of this Chapter.

2. how Taxonomy-aligned the issuer of the bonds is.

The first element provides transparency regarding the credibility of the ESG rating itself. The second element establishes a reference point for evaluating the ESG rating in relation to the criteria established in the EU Taxonomy framework. Additionally, any sustainability information necessary to fully understand the financial risks that an issuer is facing should be disclosed, in particular transition and physical risk, will be discussed in para. 3.7.3.

3.7.2 *Use of Proceeds*

As conventional bonds do not explicitly intend for the proceeds to be used to positively impact sustainability, there is no reason to assume that the issuer must substantiate how sustainable the project is that is financed by the bonds under the 'use of proceeds' item. It thus is unlikely that the 'use of proceeds' item of a conventional issuance will include sustainability information.

3.7.3 *Risk factors*

Disclosures should be made on specific sustainability risks that may affect the value of the investment. These risks fall into two categories: physical risks and transition risks.⁹⁶ Physical risks are those that relate to the physical damage caused by climate change, such as floods, droughts, and storms.⁹⁷ This can have financial implications for issuers when, for example, their production is directly affected or their supply chains are disrupted.⁹⁸ The potential disruption of supply chains is problematic, as these often encompass a much further geographical area than the production site of an issuer, increasing the risk that climate-related physical risks affect the issuer.

Transition risks refer to financial risks that stem from the transition to a low-carbon economy.⁹⁹ Transition risks encompass legal and policy risks, such as changes in regulation and climate change litigation, which has

96 For example: Financial Stability Board, "Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures", *Financial Stability Board* 2017, p. 6. Note that the recommendation to disclose climate-related financial risk in the report does not specifically relate to disclosures in prospectuses but more generally to, for example, annual financial reporting.

97 Financial Stability Board, "Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures", *Financial Stability Board* 2017, p. 6.

98 Financial Stability Board, "Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures", *Financial Stability Board* 2017, p. 6.

99 Financial Stability Board, "Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures", *Financial Stability Board* 2017, p. 5.

increased in the last few years.¹⁰⁰ A related transition risk is reputational risk – that consumers or investors are less interested in products or investments that have a negative impact on sustainability factors.¹⁰¹ Another transition risk is the risk that technological innovation renders certain production processes obsolete.¹⁰² In general, transition risk is especially pressing for investments in fossil fuel-intensive industries, as these face both legal and policy, reputational, and technological risks.¹⁰³ This increases the risk that investments in those issuers turn out to be investments ‘stranded asset’ – assets that suffer from (excessive) write-downs or devaluation before the end of their anticipated economic lifetime.¹⁰⁴

3.7.4 Summary

For conventional bonds, the following sustainability information should, at a minimum, be included in the prospectus:

Material sustainability impact information

1. Taxonomy-alignment of the issuer;
 - a. If the proceeds of the bonds are used to finance a specific project, Taxonomy-aligned the project that is financed by the proceeds of the bonds.

Financially material information

2. Available ESG scores.
3. Physical sustainability risks.
4. Transition risks.

100 Pouikli K., “Editorial: a short history of the climate change litigation boom across Europe”, *ERA Forum* 2022, vol. 22, p. 569, 577-578. Examples include: Hof Den Haag, 12 November 2024, ECLI:NL:GHDHA:2024:2099 (Shell v Vereniging Milieudefensie e.a.); Tribunal Administratif de Paris, 14 October 2021, N°s 1904967, 1904968, 1904972, 1904976/4-1, (Notre Affaire à Tous e.a. v France); Essen Oberlandesgericht, Claim filed on 23 November 2015, Case No. 2 O 285/15 (Luciano Lliuya v RWE AG).

101 Financial Stability Board, “Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures”, *Financial Stability Board* 2017, p. 6.

102 Financial Stability Board, “Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures”, *Financial Stability Board* 2017, p. 6.

103 This would also be in line with recital 54 PR: “Among others, environmental, social and governance circumstances can also constitute specific and material risks for the issuer and its securities and, in that case, should be disclosed.”

104 Grantham Research Institute on Climate Change and the Environment, “What are stranded assets”, 27 July 2022, available at: <https://www.lse.ac.uk/granthaminstitute/explainers/what-are-stranded-assets/>, accessed on: 23 September 2024. See also: Ploeg F. van der & Rezai A., “Stranded Assets in the Transition to a Carbon-Free Economy”, *Annual Review of Resource Economics* 2020, vol. 12, p. 218.

The list of sustainability information that has to be included in the prospectus for conventional bonds thus is much more concise than the sustainability information to be included in the prospectus for sustainable bonds. For sustainable issuances, some guidance can be found in ESMA's non-binding "Sustainability disclosure in prospectuses", as well as the non-binding guidelines by the Dutch Financial Markets Supervisor AFM for prospectuses of sustainable bonds. Conversely, there are no guidelines for the sustainability information that should be included in the prospectus for conventional bonds. This is problematic, as conventional bonds encompass the largest share of the market, and sustainability risks – physical and transition – are highly relevant to these bonds. I reflect on these shortcomings more extensively in the evaluation of the prospectus regulation as a means to provide investors with sustainability information (para. 3.11) and the conclusion of this chapter (para. 5).

3.8 Minimum ESG Disclosures Listing Act Regulation

On 14 November 2024, the Listing Act Regulation was published in the Official Journal of the European Union.¹⁰⁵ The aim of this Regulation is to ease the rules for small and medium-sized businesses that want to access market-based financing.¹⁰⁶ The current regulatory regime, including the PR, can be an obstacle for those types of businesses to access market-based financing, as the regulatory burden is excessively high.¹⁰⁷ Therefore, the Listing Act amends a number of existing laws, including the PR.

From the moment onward that the Listing Act Regulation applies, a number of sustainability disclosures have to be made in the prospectus.¹⁰⁸ These disclosures differ for equity securities and non-equity securities. For equity securities, the issuer must comply with three new disclosure obligations. First, the key information to be contained in the prospectus summary should include whether the activities of the issuer are Taxonomy-aligned (new art. 7 (6) (a) PR).¹⁰⁹ Second, the prospectus should declare whether the issuer must draw up a sustainability report on the basis of the CSRD (new art. 13 (1) (f) PR).¹¹⁰ Third, the sustainability report should be included (by reference) in the pro-

¹⁰⁵ Regulation (EU) 2024/2809 of the European Parliament and of the Council of 23 October 2024 amending Regulations (EU) 2017/1129, (EU) No 596/2014 and (EU) No 600/2014 to make public capital markets in the Union more attractive for companies and to facilitate access to capital for small and medium-sized enterprises ("Listing Act Regulation").

¹⁰⁶ Recitals 2, 3 Listing Act Regulation.

¹⁰⁷ Recital 3 Listing Act Regulation.

¹⁰⁸ This will be from 5 June 2026 onward for most requirements introduced by the Listing Act Regulation. Article 4 Listing Act Regulation.

¹⁰⁹ Article 1 (7) d Listing Act Regulation.

¹¹⁰ Article 1 (10) a (ii) Listing Act Regulation.

spectus (new article 19 (a) (f) PR). All these requirements will be further elaborated in Commission Delegated Acts.¹¹¹

For non-equity securities, such as bonds, the issuer must disclose whether the bonds are advertised as taking into account ESG factors or are pursuing ESG objectives (new article 13 (1) (g) PR).¹¹² If the bonds are European Green Bonds, the factsheet that has to be drawn up under article 10 EuGBR has to be incorporated by reference (new article 13 (1a) (a) PR).¹¹³ Issuers of sustainability-linked bonds or bonds marketed as environmentally sustainable under the EuGBR can also decide to include the relevant optional disclosure in the prospectus.¹¹⁴

The disclosure requirements of the Listing Act thus are straightforward: especially the requirements for equity securities and those for European Green Bonds overlap with transparency requirements that the issuer is already subject to on the basis of other legislation – the CSRD, TR, and the EuGBR. This is not surprising as one of the main aims of the Listing Act is to increase access to capital markets.¹¹⁵ In line with this objective, the Listing Act aims to reduce regulatory requirements for SMEs and, in general, tries not to overburden issuers with new (sustainability) disclosure requirements. Moreover, recital 23 Listing Act Regulation makes explicit that overlap with other legislation should be avoided. As the EuGBR already provides for an extensive disclosure framework for European Green Bonds, the legislator thus may have concluded that it is not necessary to introduce extensive disclosure requirements in the prospectus.

As I discussed in paragraphs 3.5 – 3.7, a prospectus will have to make a number of sustainability disclosures, for both sustainable and conventional bonds. It is unfortunate that these disclosures, which are based on open norms and therefore not harmonised, are not included in the Listing Act, as I further discuss in the evaluation in 3.10. The only substantively new requirement is that issuers of non-equity securities must disclose whether the bonds are advertised as taking into account ESG factors or are pursuing ESG objectives (new article 13 (1) (g) PR).¹¹⁶ Although now formulated as a straightforward disclosure requirement (yes or no), it remains to be seen what information must exactly be disclosed under the Delegated Acts that will further refine this requirement.

111 Article 1 (17) a (iii) Listing Act Regulation.

112 Article 1 (10) a (ii) Listing Act Regulation.

113 Article 1 (10) b Listing Act Regulation.

114 Article 1 (10) b Listing Act Regulation.

115 Recital 2 Listing Act Regulation.

116 Article 1 (10) a (ii) Listing Act Regulation.

3.9 Supervision

Given the lack of explicit mandatory sustainability disclosure requirements in the PR, the question arises of how compliance should be supervised and whether supervision can be a tool to ensure that the (diverging) information needs on sustainability of investors are met. Compliance with the PR is supervised by the national competent authority (“NCA”) as a prospectus may only be published after the approval of the NCA.¹¹⁷ The NCA must *inter alia* check whether a prospectus is complete, as a prospectus must contain all information that is ‘necessary information which is material to an investor for making an informed assessment’.¹¹⁸ In other words, the NCA must ensure that the prospectus contains all the material sustainability information that has been identified in the previous paragraphs 3.5-3.7. In order to support NCAs in their assessment of completeness, ESMA has published Guidelines ‘On disclosure requirements under the Prospectus Regulation’, which, however, contain no information on sustainability disclosures.¹¹⁹ The fact that the term ‘materiality’ is undefined and that the EU does not regulate prospectus liability for material omissions means that it is ultimately up to national courts to determine whether a certain omission constitutes a breach of the materiality rule.¹²⁰ ESMA’s ‘Final Report on Greenwashing’ focusses on challenges regarding the monitoring and detection of greenwashing risks and occurrences, as well as taking supervisory actions.¹²¹ Regarding prospectus supervision, ESMA recognizes that, given the lack of specific sustainability disclosure requirements, there is a risk of diverging interpretations both among market players and their supervisors.¹²² Two important measures that ESMA has taken to overcome this problem are the facilitation of discussions of supervisory cases and exchanges of experiences among NCAs, and issuing public statements such as ‘Sustainability disclosure in prospectuses’, referenced multiple times in the previous paragraphs.¹²³ However, this is insufficient to fully resolve the divergence in supervisory approaches that is caused by the absence of explicit regulation of sustainability disclosures.¹²⁴ Firstly,

117 Article 3 PR.

118 Article 6 (1) PR.

119 ESMA, Guidelines On disclosure requirements under the Prospectus Regulation, 4 March 2021, ESMA32-382-1138: information on how ESG matters affect the issuers’ earnings, cash flow and material business assets and liabilities should be included (p. 16).

120 Serière V. de, “The Contents of the Prospectus: Non-Financial Information and materiality”, in: Busch D., Ferrarini G. & Franx J.P. (eds.), *Prospectus Regulation and Prospectus Liability*, Oxford University Press 2020, p. 202.

121 ESMA, Final Report on Greenwashing, 4 June 2024, ESMA36-287652198-2699.

122 ESMA, Final Report on Greenwashing, 4 June 2024, ESMA36-287652198-2699, p. 28.

123 ESMA, Final Report on Greenwashing, 4 June 2024, ESMA36-287652198-2699, p. 29. ESMA, Public Statement, Sustainability disclosure in prospectuses, 11 July 2023, ESMA32-1399193447-441.

124 ESMA, Final Report on Greenwashing, 4 June 2024, ESMA36-287652198-2699, p. 30.

‘Sustainability disclosure in prospectuses’ is relatively high-level and does not cover all material sustainability disclosures that I identified in the previous paragraphs. Secondly, it only focuses on disclosures for sustainable Use of proceeds bonds and sustainability-linked bonds. This means that there is no guidance on sustainability disclosures for other types of issuances, such as conventional bonds. Given the limited guidance from ESMA on what sustainability disclosures must be included in the prospectus, in combination with the fact that it is ultimately to national courts to determine whether a certain omission constitutes a breach of the materiality rule, it is unlikely that a coherent framework will be formed by case law on sustainability disclosures in prospectuses.

3.10 Evaluation

3.10.1 Complete

To empower investors to make an informed investment decision that incorporates sustainability information, it is necessary that they can form a complete picture of how the issuer relates to impacts sustainability. To evaluate how successful the EU SFF is in realizing complete disclosure in relation to sustainability matters, I focus on two aspects: (1) whether the qualitative information covers all four aspects of the double materiality principle and (2) whether the disclosures include quantitative data. In Chapter 3, paragraph 2, I explain why these two criteria are essential for investors to reach a well-informed investment decision.

3.10.1.1 Double Materiality

As I analysed in paragraphs 3.5-3.7, it is highly likely that any prospectus will contain sustainability information on the basis of the open norms of materiality, the use of proceeds, and the risk factors. The type of sustainability information, however, depends on two factors: the type of investor that is likely to be addressed by the prospectus and the type of securities that are issued. On investor type, the general rule can be formulated that the more likely that the prospectus addresses impact investors, the more likely that the prospectus should include information on the sustainability impact of the investment. On type of issuance, the rule can be formulated that sustainable securities must disclose more impact information than conventional issuances, as the former have an explicit sustainability objective and thus are more likely to attract impact investors. This has led to the following overview of sustainability information that should be included in the prospectus:

Table 4: Sustainability information that should be included in the prospectus. Source: Own image.

	Material sustainability impact information: information about business's positive and negative impacts on sustainability matters	Financially material information: information on the business's sustainability related financial risks and opportunities
Sustainable bonds	1. Scope and sustainability objectives of the project • Clear definition of the sustainability objectives • How the project relates to those objectives • Feasibility of objectives • Taxonomy-alignment of the project 2. Implementation plans of the sustainability objectives • How the business exactly plans to achieve its objectives • Flexibility for deviation from the sustainability objectives 3. Policies for sustainability impact assessment for the project • Quantitative and qualitative information • How progress will sustainability progress will be monitored 4. Information on feedback mechanisms 5. Information on the use of proceeds • The management of the proceeds • How the proceeds are segregated from the general cash flow of the firm • For sustainability-linked bonds: the legal mechanism between sustainability performance and financial obligations 6. The use of external experts 7. The sustainability impact of the issuer, including the level of Taxonomy-alignment	1. Scope and sustainability objectives of the project • Clear definition of the sustainability objectives • How the project relates to those objectives • Feasibility of objectives • Taxonomy-alignment of the project 2. Implementation plans of the sustainability objectives • How the business exactly plans to achieve its objectives • Flexibility for deviation from the sustainability objectives 3. Policies for sustainability impact assessment for the project • Quantitative and qualitative information • How progress will sustainability progress will be monitored 4. Information on feedback mechanisms 5. Information on the specific risks to the realisation of the project, with the limitation that this disclosure should not be misused to negate liability for greenwashing. 6. Information on the use of proceeds • The management of the proceeds • How the proceeds are segregated from the general cash flow of the firm • For sustainability-linked bonds: the legal mechanism between sustainability performance and financial obligations 7. Transition risks at project and issuer level 8. Physical risks at project and issuer level

	Material sustainability impact information: information about business's positive and negative impacts on sustainability matters	Financially material information: information on the business's sustainability related financial risks and opportunities
Conventional bonds	1. Taxonomy-aligned of the issuer • If the proceeds of the bonds are used to finance a specific project, Taxonomy-aligned the project that is financed by the proceeds of the bonds	1. Available ESG scores 2. Physical sustainability risks 3. Transition risks

It follows from this overview that, in principle, the open norms in the PR lead to disclosures under both sides of the double materiality regime. However, these disclosures far from meet the criteria that I formulated in chapter 3 for determining whether the information is sufficient for investors. Firstly, the impact information should encompass both positive and negative impacts. Whilst there may be an incentive for businesses to only disclose positive impacts, the EU SFF should prevent this as it limits the ability of investors to make informed comparisons and restricts their investment strategies.¹²⁵ Secondly, the disclosures should be guided by specific materiality and disclosure standards. While open-ended impact disclosures might seem ideal as they provide for flexibility, they can lead to great variety in the type and content of information that is disclosed, which undermines the ability of investors to compare the impacts between businesses.¹²⁶ Moreover, open norms increase the risk of 'materiality washing' – not reporting certain impacts or risks by designating them as immaterial.

Lacking any explicit disclosure requirements, the PR fails to meet these criteria that are essential for generating complete, reliable and comparable information. This is also not resolved by ESMA's non-binding 'Sustainability disclosure in prospectuses', as the disclosures are limited to sustainability-linked bonds and Use-of-proceeds bonds. Neither will the Listing Act resolve this problem, as it only reiterates disclosures that issuers already have to make on the basis of other legislation such as the CSRD, TR, and EuGBR but does not explicate the material information of the table above.

125 Ehlers T., Goa D. & Packer F., "A taxonomy of sustainable finance taxonomies", *Bank for International Settlements Papers* 2021, no 118, available at: <https://www.bis.org/publ/bppdf/bispap118.pdf>, p. 15-16; Tröger T. & Steuer S., "The Role of Disclosure in Green Finance", *ECGI Law Working Paper* 2021, available at: https://www.ecgi.global/sites/default/files/working_papers/documents/steuertrogerfinal.pdf, p. 17-18. See also: Eurosystem, "Eurosystem reply to the European Commission's public consultations on the Renewed Sustainable Finance Strategy and the revision of the Non-Financial Reporting Directive", *European Central Bank* 2020, p. 20.

126 Eccles R.G., e.a., "The Need for Sector-Specific Materiality and Sustainability Reporting Standards", *Journal of Applied Corporate Finance* 2012, vol. 24 (2), p. 65.

3.10.1.2 Quantitative Disclosures

The inclusion of quantitative information in the prospectus is essential both because it allows for granular information and because it does not contain normative values.¹²⁷ It enables the investor to better understand qualitative disclosures, and it enhances the ability to compare information between issuers. As there is a need for quantitative sustainability disclosures, this should, in principle, be included in the prospectus on the basis of article 6 (1) PR. However, lacking any explicit sustainability disclosures, it is highly unlikely that issuers will make these disclosures in a harmonised manner, which undermines part of the purpose – comparing investments. This is problematic, as research has shown that lack of reliable data is a significant barrier for institutional investors to consider ESG information in their sustainability decisions.¹²⁸

3.10.2 Coherent

The second criterion that I assess is whether the sustainability information disclosed is coherent, meaning that core terminology and concepts are defined and used coherently throughout the legislation. In the absence of any explicit sustainability disclosure requirements, this criterion is not fulfilled. Neither are the ESMA Guidelines on Greenwashing and the Public Statement ‘Sustainability disclosure in prospectuses’ sufficient to create any coherency. Neither is it resolved by the Listing Act, as this Regulation is more limited in scope and content than the disclosures that I identified for the Prospectus Regulation. This is highly problematic, as the lack of harmonized disclosures undermines the comparative value of any sustainability information that is included in the prospectus.

On a higher level, the Prospectus regime is characterized by coherence between the information disclosed in the annual accounts and the prospectus.¹²⁹ A large part of the prospectus concerns financial information: this is already clear from article 6 PR, which contains general disclosure topics, which include “the assets and liabilities, profits and losses, financial position, and prospects of the issuer and of any guarantor.”¹³⁰ For example, Annex

127 T Tröger T. & Steuer S., “The Role of Disclosure in Green Finance”, *ECGI Law Working Paper* 2021, available at: https://www.ecgi.global/sites/default/files/working_papers/documents/steueretrogerfinal.pdf, p. 17-18.

128 Eccles R.G., Kastrapeli M.D. & Potter S.J., “How to Integrate ESG into Investment Decision-Making: Results of a Global Survey of Institutional Investors”, *Journal of Applied Corporate Finance* 2017, vol. 29(4), p. 125-133. By conducting a global survey of 582 institutional investors, the authors found that the biggest barrier to integrating ESG factors in investment decision-making processes is the lack of high quality data about the ESG performance of companies (p. 130).

129 ESMA, Guidelines On disclosure requirements under the Prospectus Regulation, 4 March 2021, ESMA32-382-1138, p. 10: “The Guidelines relating to the disclosure of financial information have a close relationship with financial reporting.”

130 Article 6 (1) (a) PR.

6 of CDR 2019/980, that contains the disclosure requirements for the registration document of retail non-equity securities (as discussed earlier in this chapter), includes extensive requirements for the inclusion of financial information, often with reference to audited financial information, i.e., the financial statements prepared in accordance with applicable accounting standards and Directive 2014/56/EU on statutory audits of annual accounts and consolidated accounts. This is the same for other types of securities: the financial information to be disclosed in the prospectus is directly linked to the financial information to be disclosed in the annual accounts. This evidences that the prospectus and the annual financial statements fulfil a complementary role when it comes to informing investors: whereas the first provides information on the issuer and the securities at the moment of entering the market, the latter provide ongoing information on the issuer's financial situation.

As has been discussed in Chapter 3, the annual reporting regime has been extended under the EU SFF with the CSRD, which requires issuers to disclose information "necessary to understand the undertaking's impacts on sustainability matters, and information necessary to understand how sustainability matters affect the undertaking's development, performance and position" on an annual basis.¹³¹ Thus, the annual statements now provide ongoing information both on the financial situation of the issuer and on the sustainability matters. It is therefore incoherent that only the financial information is incorporated extensively into the prospectus whilst the sustainability information is merely included in open norms. This incoherency not only undercuts the disclosure of material sustainability information, weakening the efficient functioning of the market, but can undermine the complementary function that these two disclosure frameworks fulfil.

3.10.3 *Accurate*

The last criterion that I use to assess whether the PR is successful in reducing information asymmetries on sustainability matters, is whether the disclosed information is accurate, meaning that qualifying a financial product as sustainable either (a) is based on the Taxonomy Regulation or (b) is warranted by procedural safeguards that ensure the qualification is supported by scientific evidence. As I analysed in paragraphs 3.6 – 3.7, Taxonomy-alignment of the issuer should be disclosed for both sustainable and conventional bonds as this information qualifies as material in the sense of article 6 (1) PR. However, in general, it can be concluded that the PR itself contains few explicit procedural safeguards to ensure that sustainability information that is included in the prospectus is supported by scientific evidence. This is problematic, as the lack of explicit regulation may cause issuers to intentionally or unintentionally misrepresent sustainability information, potentially resulting in a distorted

131 Article 19a CSRD.

impression of how sustainable the project that is being financed by the bonds actually is.¹³²

3.11 Conclusion

The prospectus is one of the central instruments to inform investors on the securities that they are investing in, and therefore, it plays an important role in the transmission of sustainability information between issuer and investor. Although the PR is not formally part of the EU SFF and contains no explicit sustainability disclosure requirements, a prospectus should nonetheless include sustainability information based on open norms: the materiality principle, use of proceeds, and risk factors, as I have demonstrated in paragraphs 3.6 – 3.7. The scope of required disclosures varies according to two key factors: first, the distinct information needs of different investor types, particularly impact investors versus value-driven investors; and second, the nature of the security being issued, as sustainability information that is material for sustainable bonds may differ from that required for conventional bonds. In essence, this leads to the emergence of two disclosure regimes: one for sustainable issuances and one for conventional ones. In section 3.10.1, I have compiled a table of the minimum disclosures mandated under the PR.

Although the PR thus mandates sustainability disclosures in the prospectus, these do not meet the criteria that I formulated for reducing information asymmetries in order to enable investors to make informed investment decisions and compare investment opportunities. The main reason for this is that the lack of explicit disclosure requirements undermines the criteria of completeness, coherency, and accuracy. This results in four major issues.

First, due to the lack of explicit disclosures, the risk of incomplete information is exacerbated. This may happen accidentally, with businesses not fully overseeing their sustainability impacts, risks and opportunities. It may also happen on purpose: whilst issuers should disclose both positive and negative impacts on sustainability matters, there is a clear incentive to primarily focus on the former, undermining the ability of the investor to form a complete picture of the impacts of the business. In an extreme case, the lack of explicit regulation can even lead to ‘materiality washing’, purposefully hiding negative information by designating it as non-material.

Second, the lack of explicit mandatory sustainability disclosures in the PR creates another risk, as described by Chiu and Schammo.¹³³ Issuers may com-

¹³² Which, in turn, creates a liability risk for the issuer whereby national courts will determine whether the misrepresentation is sufficiently severe to constitute a tort or other breach.

¹³³ Chiu I. & P. Schammo, “Integrating Sustainable Finance into the Prospectus Regulation” in: Alexander K., Gargantini M., & Siri M. (eds.), *The Cambridge Handbook of EU Sustainable Finance: Regulation, Supervision and Governance*, Cambridge University Press 2025.

municate a higher commitment to sustainability goals outside of the prospectus than inside the prospectus, using the prospectus as a means to limit accountability.¹³⁴ This concern is supported by the UK Financial Conduct Authority, which analysed a sample of green bond issues and found that “while prospectus disclosures clearly state that an issuer is not obligated to use the proceeds in a specific manner, the Use-of-proceeds bond framework document often implies a stronger commitment.”¹³⁵ The lack of mandatory sustainability disclosures thus also increases the risk that issuers limit accountability and potentially engage in greenwashing. This is exacerbated by the lack of explicit procedural safeguards to ensure that sustainability information included in the prospectus is supported by scientific evidence.

Third, the lack of explicit requirements undermines the comparative value of the sustainability information disclosed in prospectuses. As issuers have no mandatory format to follow, both the qualitative and quantitative sustainability information contained in prospectuses will vary substantially between issuers. This directly undermines the ability of investors to compare investment opportunities.

Fourth, other than the previous three issues, which are mainly relevant for sustainable bonds as they undermine investors’ ability to assess the level of sustainability commitment of the sustainable bond and compare sustainable bonds to each other on that point, a particular problem arises for conventional bonds. For these bonds, the sustainability disclosures that have to be made on the basis of the open norms are far more succinct and mainly focus on risks. As sustainability risks are becoming more relevant, it is crucial that these are well integrated into the prospectus. However, with no explicit requirements, the risk is substantial that this information will be omitted accidentally or purposefully. This fundamentally undermines the ability of investors to form a complete picture of the risks of an investment.

It can be concluded that the information needs of investors are not met by the PR, as the disclosures are most likely incomplete, possibly inaccurate, and definitely incoherent across the market. It will be difficult to assess the sustainability position of an issuer based on a prospectus, and even more challenging to compare investment opportunities in terms of sustainability. This issue is further underscored by the fact that institutional investors have

134 I Chiu I. & P. Schammo, “Integrating Sustainable Finance into the Prospectus Regulation” in: Alexander K., Gargantini M., & Siri M. (eds.), *The Cambridge Handbook of EU Sustainable Finance: Regulation, Supervision and Governance*, Cambridge University Press 2025.

135 Financial Conduct Authority, “ESG integration in UK capital markets: Feedback to CP21/18”, Feedback Statement FS22/4, June 2022, available at: <https://www.fca.org.uk/publications/feedback-statements/fs22-4-esg-integration-uk-capital-markets>, accessed on: 1 July 2024.

cited the lack of reliable information as one of the most important reasons for not considering sustainability information in their investment decisions.¹³⁶

The deficiencies in the sustainability information contained in prospectuses seem particularly unnecessary, given that issuers subject to the CSRD will be required to extensively generate this information annually.¹³⁷ The Listing Act will mandate that issuers of securities incorporate their annual sustainability report – based on the CSRD – into the prospectus. However, for other securities such as bonds, without an explicit requirement to integrate that information into the prospectus, these information asymmetries are likely to persist.

4 THE EUROPEAN GREEN BOND STANDARD

4.1 Introduction

One issue that prevents investors from investing in more environmentally sustainable economic activities is the inability to quickly identify which bonds pursue sustainable objectives.¹³⁸ To address this, issuers can issue European Green Bonds, which have been introduced in November 2023 by means of EU Green Bond Standard Regulation (“EuGBR”) and are part of the EU SFF.¹³⁹ This “gold standard” contains initial and ongoing transparency requirements, is backed by the Taxonomy-regulation, and features a rigid system of requirements for external reviewers.¹⁴⁰

136 Eccles R.G., Kastrapeli M.D. & Potter S.J., “How to Integrate ESG into Investment Decision-Making: Results of a Global Survey of Institutional Investors”, *Journal of Applied Corporate Finance* 2017, vol. 29(4), p. 125-133. By conducting a global survey of 582 institutional investors, the authors found that the biggest barrier to integrating ESG factors in investment decision-making processes is the lack of high quality data about the ESG performance of companies (p. 130).

137 See: paragraph 3.3 for the scope of the CSRD (The CSRD applies to, in short, (i) credit institutions; (ii) insurance companies; (iii) all large companies; and (iv) all listed companies regardless of their size. Excluded issuers are *i.a.* non-listed SMEs and listed micro-enterprises).

138 Recital 3 EuGBR.

139 Regulation (EU) 2023/2631 of the European Parliament and of the Council of 22 November 2023 on European Green Bonds and optional disclosures for bonds marketed as environmentally sustainable and for sustainability-linked bonds (“EuGBR”).

140 Lidman E., “The EU Framework on ESG”, in: Kuntz T. (ed.), *Research Handbook on Environmental, Social and Corporate Governance*, Edgar Elgar 2024, p. 387-388; Mulder W.F., “EU Green Bond Standard”, in: Loopik M.J. van & Palm-Steyerberg I.P. (eds.), *The Twin Transition: Digital & Sustainable Finance*, Wolters Kluwer 2022, p. 347-365; Lieveise C.W.M. & Schoonewille T.G., “Duurzaam financieren: green bonds” in: Strijbos F.P.C., e.a. (eds.), *Duurzaam bankieren*, Wolters Kluwer 2023, p. 214; Renner M., “Die geplante „European Green Bond“-Verordnung und ihre (international-)privatrechtliche Durchsetzung”, *Zeitschrift für Bankrecht und Bankwirtschaft* 2023, Band 35, Heft 1, p. 23.

To evaluate whether the EuGBR contributes to an efficient allocation of resources by reducing information asymmetries between investors and issuers, I first discuss the background and aims of the EuGBR (para. 4.2) and its scope (para. 4.3). In paragraphs 4.4 – 4.7, I focus on the rules for the labels usage, transparency requirements, external review criteria, and the system of supervision. To evaluate the EuGBR (para. 4.8), I rely on the normative framework from paragraph 2: whether the information disclosed pursuant to the EuGBR is complete, coherent, and accurate. I also assess the (prospective) popularity of the standard.¹⁴¹ The reason for this is that the EuGBR will not reduce information asymmetries if it is not used in practice, even if it meets the criteria of completeness, coherency, and accuracy.

4.2 Background and Aims

Sustainable bonds encompass a significant market in financial instruments. The exact size of that market depends on what definition is used. The Climate Bond Initiative – which defines sustainable debt to include green, social, sustainability, sustainability-linked, and transition bonds – estimated that the total amount of new sustainable debt in 2022 amounted to USD 858.5 billion.¹⁴² The size of the ‘green’ bond market – defined as those bonds dedicated to environmental benefits – in that year amounted to USD 487.1 billion according to the Climate Bond Initiative.¹⁴³ According to Bloomberg, the issuance of impact bonds – green, social, sustainable and sustainability-linked bonds – amounted to USD 939 billion in 2023.¹⁴⁴ Regardless of the exact definitions used to measure the market volume, it is clear that the sustainable debt market is significant. Moreover, what qualifies as sustainable debt is mainly privately regulated through initiatives such as the popular ICMA Green Bond Principles¹⁴⁵ and the Sustainability-Linked Bond Principles.¹⁴⁶ These principles do not use a closed definition of ‘green’ or ‘sustainable,’ nor do they provide unequivocal requirements for third-party verification. This has led

141 See also: Lieverse C.W.M. & Schoonewille T.G., “Duurzaam financieren: green bonds” in: Strijbos F.P.C., e.a. (eds.), *Duurzaam bankieren*, Wolters Kluwer 2023, para. 8.3.6.

142 The Climate Bond Initiative, “Sustainable Debt Global State of the Market 2022”, 2022, available at: https://www.climatebonds.net/files/reports/cbi_sotm_2022_03e.pdf, accessed on: 15 May 2024, p. 4.

143 The Climate Bond Initiative, “Sustainable Debt Global State of the Market 2022”, 2022, available at: https://www.climatebonds.net/files/reports/cbi_sotm_2022_03e.pdf, accessed on: 15 May 2024, p. 5.

144 Gardiner J. & Freke T., “Green bonds reached new heights in 2023”, Bloomberg 8 February 2024, available at: <https://www.bloomberg.com/professional/insights/trading/green-bonds-reached-new-heights-in-2023/#:~:text=A%20total%20of%20%24190%20billion,bonds%20were%20issued%20in%202021>, accessed on: 15 May 2024.

145 ICMA, *Green Bond Principles*, June 2021.

146 ICMA, *Sustainability-Linked Bond Principles*, June 2020.

to a multitude of definitions for ‘sustainable’, private labels, and differing approaches among third-party verifiers.¹⁴⁷ Paradoxically, the multitude of definitions, labels, and external review methods may negatively impact the market in sustainable investments as the fragmented disclosure framework, in combination with information overload, forms a serious obstacle for reaching an investment decision.¹⁴⁸

The EU aims to counteract these negative effects with the EuGBR. The objective of the EuGBR is to create uniform and specific requirements for the use of the designation ‘European Green Bond’ or ‘EuGB’, increase alignment with the Paris Agreement, and lay down rules for the external reviewers who certify such bonds.¹⁴⁹ Additionally, the EuGBR provides optional disclosure templates for environmentally sustainable bonds and sustainability-linked bonds (further omitted from this research).¹⁵⁰ The widespread use of the EuGBR should enable investors to more easily identify and compare investment opportunities that contribute to the goals laid down in the Paris Agreement and thereby increase investments in environmentally sustainable economic activities.¹⁵¹

4.3 Scope

The EuGBR applies to all issuers who intend to use the designation ‘European Green Bond’ or ‘EuGB’.¹⁵² It can be used by private issuers as well as public issuers such as sovereigns.¹⁵³ Moreover, issuers are not limited to the EU,

147 Ehlers T. & Packer F., “Green bond finance and certification”, *Bank for International Settlements Quarterly Review*, September 2017, available at: https://www.bis.org/publ/qrtrpdf/r_qt1709h.pdf, p. 89, 93-95.

148 Pyka M., “The EU Green Bond Standard: A Plausible Response to the Deficiencies of the EU Green Bond Market?”, *European Business Organization Law Review* 2023, vol. 24, p. 623, 626. On information overload in relation to decision-making in general: Casey C.J., “Variations in Accounting Information Load: The Effect on Loan Officers’ Predictions of Bankruptcy”, *The Accounting Review* 1980, vol. 55(1), p. 36; Eppler M.J. & Mengis J., “The Concept of Information Overload: A Review of Literature from Organization Science, Accounting, Marketing, MIS, and Related Disciplines”, *The Information Society* 2004, vol. 20(5), p. 325; Laud R.L. & Schepers D.H., “Beyond Transparency: Information Overload and a Model for Intelligibility”, *Business and Society Review* 2009, vol. 114(3), p. 365. On information overload in relation to non-financial reporting: Baumüller J. & Schaffhauser-Linzatti M., “In search of materiality for nonfinancial information – reporting requirements of the Directive 2014/95/EU”, *NachhaltigkeitsManagementForum | Sustainability Management Forum* 2018, vol. 26, p. 101, 102.

149 Recitals 6, 7, 8 EuGBR. See also: Lieverse C.W.M. & Schoonewille T.G., “Duurzaam financieren: green bonds” in: Strijbos F.P.C., e.a. (eds.), *Duurzaam bankieren*, Wolters Kluwer 2023.

150 Articles 20-21 EuGBR.

151 Recital 8 EuGBR.

152 Article 1 (a) EuGBR.

153 Recital 3 EuGBR. In principle, the EU thus has chosen for a single standard for both private and sovereign bonds.

and any issuer may choose to make use of the EuGBR except those from a very limited number of jurisdictions that are non-cooperative for tax purposes or high-risk countries.¹⁵⁴ In principle, the EU thus has chosen a single standard for both private and sovereign bonds, although sovereign issuers have slightly more flexibility in the use of proceeds than private issuers.¹⁵⁵

4.4 Use of Proceeds

The main rule of the EuGBR is that the proceeds of a bond must be allocated to an environmentally sustainable economic activity, as defined in the TR, in order to qualify as a 'European Green Bond' or 'EuGB'.¹⁵⁶ Article 3 TR lists the criteria for qualifying as 'environmentally sustainable economic activities':

1. Contribute to one or more environmental objectives set out in article 9 TR in accordance with articles 10-16 TR, including the technical screening criteria based thereupon;
2. Do no significant harm to any of the environmental objectives;
3. Respect minimum safeguards on human and workers' rights (art. 18 TR).

This means that the activity financed by the bonds must meet the strict technical screening criteria ("TSC") set out in the delegated regulations to the TR, as well as the 'do no significant harm' criteria and minimum workers' rights standards.¹⁵⁷ Note that Taxonomy-aligned activities encompass three types of activities: (1) 'normal' Taxonomy-aligned activities; (2) enabling activities; and (3) transitional activities.¹⁵⁸ As discussed in Chapter 3, European issuers

154 Article 9 EuGBR. The non-cooperative jurisdictions for tax purposes are, per 8 October 2024: American Samoa; Anguilla; Fiji; Guam; Palau; Panama; Russia; Samoa; Trinidad and Tobago; The US Virgin Islands; Vanuatu (Annex I to the Council conclusions on the revised EU list of non-cooperative jurisdictions for tax purposes). High-risk countries are, per 23 September 2016: Afghanistan; Bosnia and Herzegovina; Guyana; Iraq; Lao PDR; Syria; Uganda; Vanuatu; Yemen; Iran; Democratic People's Republic of Korea (Annex to Delegated Regulation (EU) 2016/1675).

155 Article 4 (3) EuGBR. For a discussion on the advantages and disadvantages of a single standard for both corporate and sovereign issuers, see: Badenhop N., "Green Bonds: An assessment of the proposed EU Green Bond Standard and its potential to prevent greenwashing", *Policy Department for Economic, Scientific and Quality of Life Policies at the request of the committee on Economic and Monetary Affairs (ECON)*, European Parliament 2022, PE 703.359, p. 46-49.

156 Article 4 EuGBR; Maragopoulos, N., "Toward a European Green Bond Standard: A European Initiative to Promote Sustainable Finance", in: Ramos Muñoz D.R. & Smoleňska A. (eds.), *Greening the Bond Market: A European Perspective*, Springer International 2023, p. 31-34.

157 See: paragraph 5.2 of Chapter 3.

158 See paragraph 5.3.1 of Chapter 3. 'Transitional economic activity' means an economic activity that complies with the requirements laid down in Article 10 (2) TR; 'enabling economic activity' means an economic activity that complies with the requirements laid down in Article 16 TR.

that fall within the scope of the CSRD will already have to familiarize themselves with the Taxonomy Regulation in order to fulfil their annual reporting obligations under the CSRD.¹⁵⁹ This is not the case for non-European issuers, who may be more deterred by the regulatory complexity of the EuGBR than European issuers.

While alignment with the TR is assessed *ex post* under the CSRD obligations, the EuGBR requires *ex ante* alignment of an activity that has not yet been undertaken. In order to qualify as a European Green Bond, the issuer must, therefore, draw up a plan detailing how the capital raised will ultimately contribute to a Taxonomy-aligned economic activity, the so-called CapEx plan.¹⁶⁰ In this CapEx plan, two main categories of expected spending must be distinguished. First, capital expenditure refers to spending on tangible and intangible assets of the business, such as buildings, machines, and technology.¹⁶¹ Second, operating expenditure, which are the costs associated with running the business on a day-to-day basis, including research and development, building renovations, short-term leases, maintenance, etc.¹⁶² The CapEx plan thus provides an overview of how the spending ultimately results in a Taxonomy-aligned activity.

There are two situations in which issuers may allocate 15% of the proceeds to non-Taxonomy aligned activities. The first situation is that there are no TSC yet in force for the activity that the issuer intends to finance.¹⁶³ In this situation, the issuer must ensure that the activity meets the generic 'do no significant harm' criteria set out in CDR 2021/2139, which contains the TSC for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation and for determining whether that economic activity causes no significant harm to any of the other environmental objectives.¹⁶⁴ This exemption is especially significant in the first years after the entry into force of the TR and the EuGBR as the development of TSC is an ongoing process with certain economic activities yet to be fully addressed. The second situation pertains to climate financing under the UNFCCC and development assistance under the OECD.¹⁶⁵ For both, the issuers are under a best efforts obligation to ensure that the activities financed still meet the relevant TSC.¹⁶⁶

¹⁵⁹ See: paragraph 3.3 for the scope of the CSRD (The CSRD applies to, in short, (i) credit institutions; (ii) insurance companies; (iii) all large companies; and (iv) all listed companies regardless of their size. Excluded issuers are i.a. non-listed SMEs and listed micro-enterprises). See paragraph 5.2 for the applicability of the TR on issuers subject to the CSRD.

¹⁶⁰ Article 7 and 2 (13) EuGBR and Annex I point 1.1.2.1 CDR 2021/2178.

¹⁶¹ Annex I point 1.1.2.1 CDR 2021/2178.

¹⁶² Annex I point 1.1.3.1 CDR 2021/2178.

¹⁶³ Article 5 (1) (a) EuGBR.

¹⁶⁴ Article 5 (3) EuGBR.

¹⁶⁵ Article 5 (1) (b) EuGBR.

¹⁶⁶ Article 5 (4) EuGBR.

It follows that the application of the main rule that the proceeds of the bonds must be spend 100% Taxonomy-aligned is rather rigid. This is also reflected in article 6, which limits the use of proceeds for financial assets. This is only allowed if there are no more than three subsequent financial assets in succession, the proceeds from the financial asset last in sequence is used to finance an activity that meets the Taxonomy requirements, and if external reviewers can effectively review the final allocation of proceeds.¹⁶⁷

4.5 Transparency Requirements

In addition to the use of proceed requirements, the EuGBR establishes extensive transparency requirements. Firstly, the issuer must make public a European Green Bond factsheet and pre-issuance review prior to issuing the bonds. Secondly, annual allocation reports and post-issuance reviews of allocation reports must be made available. Thirdly, an impact report must be published once during the lifetime of the bonds and after full allocation of the proceeds. The obligation to publish a prospectus pursuant to the Prospectus Regulation also applies for European Green Bonds.¹⁶⁸

4.5.1 Factsheet and Pre-Issuance Review

Prior to issuing the bonds, the issuer must complete a European Green Bond factsheet.¹⁶⁹ The information that must be included in the factsheet is set out in Annex I to the EuGBR. In essence, the factsheet must contain very detailed information on the allocation of the proceeds to Taxonomy-aligned activities and how the bonds are expected to contribute to environmentally sustainable economic activities in the sense of the TR, as well as the environmental impact of the bonds.¹⁷⁰ All information contained in the factsheet must be approved by an external reviewer.¹⁷¹ As the EuGBR only applies to Taxonomy-aligned bonds, all this information should be substantiated by scientific evidence on how the project financed by the proceeds should meet the TR requirements.

The information contained in this factsheet qualifies as 'regulated information' in the sense of the Prospectus Regulation.¹⁷² This means that the infor-

¹⁶⁷ Article 6 EuGBR.

¹⁶⁸ Article 9 EuGBR.

¹⁶⁹ Article 10 EuGBR. Maragopoulos, N., "Toward a European Green Bond Standard: A European Initiative to Promote Sustainable Finance", in: Ramos Muñoz D.R. & Smoleńska A. (eds.), *Greening the Bond Market: A European Perspective*, Springer International 2023, p. 36.

¹⁷⁰ Annex I EuGBR.

¹⁷¹ Article 10 (1) (b) EuGBR.

¹⁷² Article 14 (3) EuGBR.

mation from the factsheet must be made available in the Prospectus.¹⁷³ This obligation not only stems from the EuGBR but has also been incorporated in the PR by means of the Listing Act, which *inter alia* aims to ensure consistency between information disclosed on the basis of the PR on the one hand, and information to be disclosed on the basis of the EuGBR on the other hand.¹⁷⁴ Hence, according to (the new) article 13 (1a) PR, the factsheet for a European Green Bond must be incorporated by reference into the prospectus.¹⁷⁵ Moreover, the factsheet must be published on the website of the issuer.¹⁷⁶ From 10 January 2030, both factsheet and pre-issuance review must also be made accessible on the European single access point ESAP.¹⁷⁷ This, too, is aligned to the obligation to make accessible information disclosed under the Prospectus Regulation – notably, the prospectus – via the ESAP.¹⁷⁸

4.5.2 Allocation reports and post-issuance review

After issuing the bonds, the issuer must draw up an annual allocation report to demonstrate that the proceeds are allocated to environmentally sustainable economic activities as set out in article 4 EuGBR.¹⁷⁹ The allocation report must contain the information set out in Annex II to the EuGBR. In particular, the report should give insight into the progress that is made on the CapEx plan.¹⁸⁰ The information in the allocation report must be reviewed by an external reviewer, and both the report and review must be made available on the website of the issuer.¹⁸¹

Note that issuers are in general obligated to make available a (half-)yearly financial and management report and review that provides “a true and fair view of the assets, liabilities, financial position and profit or loss of the issuer” on the basis of the rules that apply to issuers whose securities are admitted to trading on a regulated market (Directive 2004/109/EC).¹⁸² However, other than with the factsheet and pre-issuance review, which are explicitly incorpor-

173 Article 19 (1) (c) PR and article 2 (1) (k) Directive 2004/109/EC.

174 Recital 26 Listing Act Regulation.

175 Article 1 (10) (b) Listing Act Regulation.

176 Article 15 (1) EuGBR.

177 Article 15a EuGBR.

178 Article 1 Regulation (EU) 2023/2859 (ESAP Regulation).

179 Article 11 EuGBR. Maragopoulos, N., “Toward a European Green Bond Standard: A European Initiative to Promote Sustainable Finance”, in: Ramos Muñoz D.R. & Smoleňska A. (eds.), *Greening the Bond Market: A European Perspective*, Springer International 2023, p. 37.

180 If the obligation to have such a plan applies, which is likely.

181 Article 11 (4), article 13 (1) EuGBR.

182 Article 5 (2) (c) Directive 2004/109/EC. NB.: Although the Directive mandates the publication of (half-)yearly financial reports, this obligation often exists on a quarterly basis on the basis of national law or the rules of the regulated market to which the securities are admitted or on the own initiative of the issuer in accordance with article 6 (3) Directive 2004/109/EC.

ated into the prospectus-regime, the allocation reports and post-issuance review are stand-alone obligations from the EuGBR and is not explicitly linked to Directive 2004/109/EC. Nonetheless, it can be expected that the disclosures to be made via the allocation report may accompany the (half-)yearly management report. From 2030 onward, the post-issuance reviews and the annual allocation reports must also be accessible on the ESAP.¹⁸³ This obligation, too, runs parallel to the obligation to make available the (half-yearly) financial and management report and review via the ESAP.¹⁸⁴

4.5.3 Impact Report

After the full allocation of the proceeds of the bonds, and at least once during the lifetime of the bonds, the issuer must draw up an impact report on the environmental impact of the use of the bond proceeds.¹⁸⁵ This impact report must contain the information specified in Annex III, which includes an estimation of the positive and negative environmental impacts in aggregated form, as well as the relevant metrics, methodologies, and assumptions. Other than the factsheet and the allocation report, it is not mandatory to have the impact report reviewed by an external reviewer.¹⁸⁶ The impact report, too, must be made available on the issuer's website and from 2030 onward be made accessible on the ESAP.¹⁸⁷ A second difference from the factsheet and allocation report is that no similar obligation applies to issuers on the basis of other Union law: there is no specific legal obligation to disclose the impact of the allocation of proceeds of 'regular' bonds, as this information is (to some extent) included in the (half-)yearly financial and management report. The reason for this could be that 'normal' bonds may not be as intimately linked to realizing a specific and scientifically measurable (environmental) objective, whereas European Green Bonds carry the explicit promise to result in Taxonomy-aligned activities. For these bonds, it thus may be more necessary to have some form of check that the proceeds have not only been spent in an economically justifiable manner but also in line with the environmental objectives that initially intended to be achieved. It thus is all the more surprising that the impact report need not be reviewed by an external reviewer.

183 Article 15a EuGBR.

184 Article 1 Regulation (EU) 2023/2859 (ESAP Regulation).

185 Article 12 EuGBR. Maragopoulos, N., "Toward a European Green Bond Standard: A European Initiative to Promote Sustainable Finance", in: Ramos Muñoz D.R. & Smoleňska A. (eds.), *Greening the Bond Market: A European Perspective*, Springer International 2023, p. 38.

186 Article 12 (3) EuGBR.

187 Article 15 (1) (h), article 15a (1) EuGBR.

4.6 External Reviewers

Most information that issuers disclose under the EuGBR must be reviewed by an external reviewer, who must “ensure that their reviews provide an opinion based on a thorough analysis of all information available to them.”¹⁸⁸ Specifically, the pre-issuance fact sheet and the post-issuance allocation reports require mandatory external review, while such review is optional for the impact report. This approach aligns with other prominent green bond frameworks, such as the CBI Climate Bond Standard and the ICMA Green Bond Principles, which similarly incorporate external review mechanisms.¹⁸⁹ The rationale behind this practice is that independent external reviewers can validate the “greenness” of the bond, thereby mitigating investors’ concerns about greenwashing and self-labelling.¹⁹⁰ Moreover, research suggests that issuers who seek external reviews are likely to be more sustainable compared to those who do not seek such validation.¹⁹¹

The reliance on external reviewers, however, presents potential risks. I discuss some of these risks by (partially) relying on literature that has been written on Credit Rating Agencies (CRAs), given the parallels between CRAs and external reviewers.¹⁹² Both are independent entities that provide the market with independent information, and both can significantly influence the market in which they operate.¹⁹³ Moreover, both operate under the so-called “issuer-pays” model that can potentially compromise their independence and create a conflict of interest.¹⁹⁴ This has the potential to undermine the purpose of the green bond label itself – while external reviews are meant to

188 Article 31 (1) EuGBR. The EuGBR does not contain a specific standard of assurance.

189 See also: Brückbauer F., e.a., “Does the European Union need another green bond standard?”, ZEW – Leibniz-Zentrum für Europäische Wirtschaftsforschung, Mannheim Policy Brief No. 10/2023, available at: <https://hdl.handle.net/10419/279678>. Note that external review is voluntary but encouraged for the ICMA Green Bond Principles.

190 Simeth N., “The value of external reviews in the secondary green bond market”, *Finance Research Letters* 2022, vol. 46, 102306, p. 6. See also: Lewandowski W. & Smoleńska A., “Member States Sovereign Green Bond Issuance and the Development of Local Green Bond Markets in the EU”, in: Ramos Muñoz D.R. & Smoleńska A. (eds.), *Greening the Bond Market: A European Perspective*, Springer International 2023, p. 75.

191 Dinh T., Eugster F. & Husmann A., “Corporate Green Bonds: The Role of External Reviews for Investment Greenness and Disclosure Quality *Swiss Finance Institute Research Paper* 2023, No. 22-23.

192 Rogge E. & Ohnesorge L., “The Role of ESG Rating Agencies and Market Efficiency in Europe’s Climate Policy”, *Hastings Environmental Law Journal* 2022, vol. 28(2), p. 113, 130-133.

193 Rose P., “Certifying the ‘Climate’ in climate bonds”, *Capital Markets Law Journal* 2019, vol. 14(1), p. 59, 61; Escrig-Olmedo, E., e.a., “Rating the Raters: Evaluating how ESG Rating Agencies Integrate Sustainability Principles”, *Sustainability* 2019, vol. 11, 915.

194 See generally on conflict of interest for CRAs: Bai L., “On Regulating Conflicts of Interest in the Credit Rating Industry”, *N.Y.U. Journal of Legislation & Public Policy* 2010, vol. 13, p. 253. Also: Verheij D.J., *Credit rating agency liability in Europe*, Eleven International Publishing 2021, p. 84.

increase investor confidence in the credibility of the bond, awareness of the potential conflict of interest may actually erode investor trust in the independence of the external reviewer.¹⁹⁵ This challenge is also recognized by the European Commission, which has introduced elaborate requirements for external reviewers under the EuGBR. I discuss the challenges surrounding the independence of external reviewers and legislative responses in more detail in the following sections.

4.6.1 Gatekeeping and Conflicts of Interest

External reviewers play a dual role in the EuGBR framework. The primary role of external reviewers is to verify information disclosed by the issuer.¹⁹⁶ By performing this task, they help reduce information asymmetries by ensuring that investors can trust in the accuracy of the disclosures of the issuer.¹⁹⁷ This verification function is fundamental for market efficiency. As I discussed in Chapter 2, when investors cannot reliably assess the accuracy of the information that is disclosed about a product, such as the sustainability information that is disclosed for a bond, they cannot accurately determine its market value.¹⁹⁸ The second role that external reviewers perform is that of professional gatekeepers.¹⁹⁹ What is meant by this is that through their verification services, external reviewers effectively determine which bonds are genuine European Green Bond and therefore should be invested in, and which bonds do not qualify as European Green Bond and should thus be avoided by investors seeking to invest in environmentally sustainable economic activities.²⁰⁰ This gatekeeping role makes external reviewers essential for the functioning of the EU SFF by ensuring that capital is allocated to projects that genuinely help transition to a climate-neutral future. They are thus an integral part of the market is sustainable finance.²⁰¹

195 For example: Allman E. & Lock B., “External reviews and green bond credibility”, *Journal of Climate Finance* 2024, vol. 7, 100036.

196 For example: Allman E. & Lock B., “External reviews and green bond credibility”, *Journal of Climate Finance* 2024, vol. 7, 100036.

197 For example: Lewandowski W. & Smoleńska A., “Member States Sovereign Green Bond Issuance and the Development of Local Green Bond Markets in the EU”, in: Ramos Muñoz D.R. & Smoleńska A. (eds.), *Greening the Bond Market: A European Perspective*, Springer International 2023, p. 75.

198 See: paragraph 3.4.1 of Chapter 2 on Information Asymmetries and the “Lemon Problem”.

199 García E.C. & Agostini F., “The Green Bonds Market in the Light of European Commission’s Proposal: Implications for Greenwashing Liability”, in: Ramos Muñoz D.R. & Smoleńska A. (eds.), *Greening the Bond Market: A European Perspective*, Springer International 2023, p. 155; Coffee J.C., “Understanding Enron: “It’s About Gatekeepers, Stupid””, *The Business Lawyer* 2002, vol. 57(4), p. 1403, 1405.

200 Smyth S., e.a., “From gatekeepers to constructors: Credit rating agencies and the financialization of housing associations”, *Critical Perspectives on Accounting* 2020, Vol. 71, 102093, p. 5.

201 Smyth S., e.a., “From gatekeepers to constructors: Credit rating agencies and the financialization of housing associations”, *Critical Perspectives on Accounting* 2020, Vol. 71, 102093, p. 5.

The reason why the EuGBR relies on external reviewers rests on the presumption that they face fewer incentives to manipulate sustainability information than the issuers of European Green Bonds. After all, issuers have a clear motivation to mispresent their compliance with the standard when they do not meet the criteria set in the EuGBR: failing to meet the standards will not only deter investors but also can create reputational damage for the issuer – although misrepresentation in itself also creates reputational and liability risks.²⁰² Not being able to meet the requirements of the EuGBR thus has direct financial consequences for issuers of European Green Bonds. Conversely, external reviewers should face fewer direct financial consequences from negative assessments, which leads to the presumption that their reviews carry greater credibility than the issuer disclosures.²⁰³ What complicates this line of reasoning is the fact that the external reviewers are paid by issuers and thus depend financially on the issuers whom they evaluate.²⁰⁴ This creates an inherent conflict of interest: rather than providing independent, potentially negative reports, external reviewers may be incentivized to cater to the needs of the issuers upon whom they are financially dependent. Against this, it can be argued that in the long run, an external reviewer that compromises its integrity risks reputational damage.²⁰⁵ This reputational risk should, in theory, discourage reviewers from prioritizing issuer's preferences over an objective assessment.²⁰⁶

The experience with CRAs has led to the identification of other circumstances that undermine this model of external reviews, in particular, the lack of competition and inadequate supervision.²⁰⁷ These are practical problems related to how the market for external reviewers operates, which may or may not arise

202 Coffee J.C., "Understanding Enron: 'It's About Gatekeepers, Stupid'", *The Business Lawyer* 2002, vol. 57(4), p. 1403, 1405.

203 García E.C. & Agostini F., "The Green Bonds Market in the Light of European Commission's Proposal: Implications for Greenwashing Liability", in: Ramos Muñoz D.R. & Smoleňska A. (eds.), *Greening the Bond Market: A European Perspective*, Springer International 2023, p. 154-158.

204 This is referred to as the issuer-pays model, which is common for third-party verifiers. For a discussion on ESG ratings and the issuer-pays model, see: Lovo S. & Olivier J., "Who should pay for ESG ratings?", *HEC Paris Research Paper Forthcoming* 2025, available at SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5106010.

205 For example: White L.J., "The Credit Rating Agencies and Their Role in the Financial System", in: E. Brousseau (ed.), *Oxford Handbook on Institutions, International Economic Governance, and Market Regulation*, Oxford University Press (forthcoming) June 2018, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3192475.

206 For example: L White L.J., "The Credit Rating Agencies and Their Role in the Financial System", in: E. Brousseau (ed.), *Oxford Handbook on Institutions, International Economic Governance, and Market Regulation*, Oxford University Press (forthcoming) June 2018, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3192475.

207 See for an inventory of reasons why the gatekeeper system failed in the context of the global financial crisis of 2008: Coffee J.C., "Understanding Enron: 'It's About Gatekeepers, Stupid'", *The Business Lawyer* 2002, vol. 57(4), p. 1403, 1409-1416.

in the context of EuGBR reviewers. However, early research on ESG verifiers suggests that similar concerns may materialize. For example, Avetisyan and Hockerts find that the market for ESG verifiers suffers from lack of competition and concentrates among a handful of large players.²⁰⁸ Rose points out another practical problem, namely that there may be a general lack of scientific knowledge and expertise required to conduct sustainability reviews as the market is still developing.²⁰⁹

There thus are a number of concerns that underscore why it is necessary that EuGBR contains robust regulation for external reviewers. This framework should be informed by the following three points. First, external reviewers should possess the capacity to produce high-quality, objective reviews. Second, the regulatory framework must contain sufficient safeguards against potential conflicts of interest and to the gatekeeper role that external reviewers fulfil. Third, without a properly functioning mandatory external review system, the credibility of the European Green Bond will be weakened, and the EuGBR could become a failure. The success of the external review system will thus largely dictate the success of the EuGBR and its intended objective of facilitating more investments in environmentally sustainable economic activities.

4.6.2 Regulation of External Reviewers under the EuGBR

Articles 22 – 43 EuGBR contain the rules that apply to external reviewers. In this paragraph, I highlight three key components.

First, all external reviewers must register with ESMA and satisfy the conditions set in article 23 EuGBR.²¹⁰ These entry-requirements *inter alia* focus on organisational capacity by addressing elements such as the experience of the senior management and members of the board regarding “quality assurance, quality control, the performance of pre-issuance, post-issuance and impact report reviews”, as well as the number of analysts employed by the external reviewer and their level of knowledge, experience and training.²¹¹ While article 23 EuGBR establishes in general that external reviewers must have sufficient capacity to perform the reviews, the requirements will be further detailed in regulatory technical standards.²¹² Notably, the registration regime

208 Avetisyan E. & Hockerts K., “The Consolidation of the ESG Rating Industry as an Enactment of Institutional Retrogression”, *Business Strategy and the Environment* 2017, vol. 26(3), p. 316.

209 Rose P., “Certifying the ‘Climate’ in climate bonds”, *Capital Markets Law Journal* 2019, vol. 14(1), p. 59, 63, 70-73.

210 Article 22 (1) EuGBR. See also: Maragopoulos, N., “Toward a European Green Bond Standard: A European Initiative to Promote Sustainable Finance”, in: Ramos Muñoz D.R. & Smoleňska A. (eds.), *Greening the Bond Market: A European Perspective*, Springer International 2023, p. 40-42.

211 Article 23 (2) (a) and (b) EuGBR.

212 Article 23 (6) EuGBR.

will only commence on 21 June 2026.²¹³ Before that period, a transitional regime will apply, which merely requires the issuer to notify ESMA and provide the information specified under article 23 (1) EuGBR.²¹⁴ During the transition period, the external reviewers are under a best efforts obligation to comply with article 24-38.²¹⁵

Second, the EuGBR imposes significant organisational and governance requirements on external reviewers.²¹⁶ For example, external reviewers must implement systems to monitor and evaluate the adequacy of their procedures, ensure their personnel possesses appropriate qualifications and receives adequate training, and maintain permanent compliance mechanisms.²¹⁷ Again, these requirements will be elaborated in regulatory technical standards.²¹⁸ Of particular significance is article 35 EuGBR, which concerns the management of conflicts of interest. While the regulation does not define what is meant by a conflict of interest, it does establish several measures to minimize the risk of any such conflict. These include:

- The duty to conduct pre-contractual assessment of whether there is an actual or potential conflict of interest.²¹⁹
- The obligation to disclose any actual or potential conflict of interest regarding analysts, employees, shareholders, contractually related persons, and any person approving the reviews.²²⁰
- The prohibition to issue a review when an actual or potential conflict of interest was identified.²²¹
- The fees charged for the review may not depend on the results of the work performed.²²²
- Analysts and employees of the external reviewer are bound by secrecy.²²³
- Measures against fraud, theft, or misuse.²²⁴

The EuGBR does not demand that different external reviewers be used for the pre- and post-issuance verification. Lewandowski and Smoleńska point

²¹³ Article 69 EuGBR.

²¹⁴ Article 69 EuGBR. These are mainly logistical details, such as the full name, address and legal entity identifier of the applicant.

²¹⁵ Article 23 (2) last paragraph EuGBR.

²¹⁶ Article 26 – 36 EuGBR. See also: Maragopoulos, N., “Toward a European Green Bond Standard: A European Initiative to Promote Sustainable Finance”, in: Ramos Muñoz D.R. & Smoleńska A. (eds.), *Greening the Bond Market: A European Perspective*, Springer International 2023, p. 42-44.

²¹⁷ Articles 26 – 29 EuGBR.

²¹⁸ Article 26 EuGBR. ESMA shall submit the draft regulatory technical standards to the Commission by 21 December 2025.

²¹⁹ Article 35 (2) EuGBR.

²²⁰ Article 35 (1) EuGBR.

²²¹ Article 35 (2) EuGBR.

²²² Article 35 (3) EuGBR.

²²³ Article 35 (4) EuGBR.

²²⁴ Article 35 (5) EuGBR.

out that using the same reviewer for pre- and post-issuance verification may create a conflict of interest, while the use of different reviewers adds an additional level of control.²²⁵

Third, the EuGBR contains rules on third-country external reviewers based on the principle of equivalence.²²⁶ The EuGBR does not require that the reviewer be located in the EU. This makes sense given that non-EU issuers may use the EuGBR and that the projects which are financed by the bonds may also be located outside of the EU. Instead, the regulation contains a third-country regime for external reviewers on the basis of the principle of equivalence.²²⁷ In essence, the principle of equivalence entails that the Commission can issue an equivalence decision stating that a third country is considered to be equivalent to the EU in regard to a particular service, the consequence of which is that a provider of such a service from that country has access to the EU market.²²⁸ In general, EU law currently recognizes 40 different mechanisms for equivalence decisions.²²⁹ In the EuGBR, the equivalence decision for external reviewers is regulated in articles 39 – 43. The Commission may consider the regulatory framework of the third country equivalent to that of the EU if the external reviewers in that country are subject to registration or authorization requirements, effective supervision and enforcement, adhere to organizational requirements regarding internal control, and follow suitable conduct of business rules.²³⁰

It is worth noting that parallel to the EuGBR, the EU also intends to regulate other ESG rating providers by means of the Regulation on the transparency and integrity of Environmental, Social and Governance (ESG) rating activities (“ESGR”).²³¹ According to this regulation, ESG rating providers established in the EU require authorization from ESMA.²³² Moreover, this regulation

225 Lewandowski W. & Smoleńska A., “Member States Sovereign Green Bond Issuance and the Development of Local Green Bond Markets in the EU”, in: Ramos Muñoz D.R. & Smoleńska A. (eds.), *Greening the Bond Market: A European Perspective*, Springer International 2023, p. 66, 75.

226 Maragopoulos, N., “Toward a European Green Bond Standard: A European Initiative to Promote Sustainable Finance”, in: Ramos Muñoz D.R. & Smoleńska A. (eds.), *Greening the Bond Market: A European Perspective*, Springer International 2023, p. 44-45.

227 Recital 45 EuGBR.

228 Schürger J., *Equivalence and Substituted Compliance in Financial Markets Law*, Oxford University Press 2023, Chapter 2. See also: Commission Staff Working Document: EU equivalence decisions in financial services policy: an assessment SWD(2017) 102 final.

229 Schürger J., *Equivalence and Substituted Compliance in Financial Markets Law*, Oxford University Press 2023, Chapter 2.

230 Article 40 (2) EuGBR.

231 Regulation (EU) 2024/3005 of the European Parliament and of the Council of 27 November 2024 on the transparency and integrity of Environmental, Social and Governance (ESG) rating activities, and amending Regulations (EU) 2019/2088 and (EU) 2023/2859 (“ESGR”). See also: Kreft T. & Schemmer E., “Die Regulierung von ESG-Rating-Anbietern in der EU”, *Europäische Zeitschrift für Wirtschaftsrecht* 2024, Heft 24, p. 1133.

232 Article 5 ESGR.

will introduce rules on the integrity, transparency, good governance and independence of ESG rating activities.²³³ Regardless of the fact that the ESGR and the regulation of external reviewers in the EuGBR topically overlap and contain similar requirements regarding the integrity, transparency, governance, and independence of third-party verifiers, the ESGR does not apply to the external reviewers under the EuGBR.²³⁴ This will effectively result in two regimes for third-party verifiers: one for the external reviewers for European Green Bonds and one for ESG rating providers for other sustainable financial products, such as sustainable bonds.

4.6.3 Potential Issues

As I discussed in paragraph 4.6.1, the success of the external review system under the EuGBR depends on (1) external reviewers having sufficient capacity to produce high-quality reviews, (2) robust safeguards against conflicts of interest, and (3) external reviewers effectively fulfilling their gatekeeper role to maintain the credibility of European Green Bonds. In general, the rules contained in articles 22 – 43 of the EuGBR should ensure that these points are sufficiently met. Given the extensive scope of external reviewer regulation under the EuGBR, the question arises whether the Regulation strikes an appropriate balance between market integrity and operational feasibility or whether it imposes a disproportionate regulatory burden on external reviewers. This impression is confirmed by the responses to a consultation that ESMA held regarding its draft technical standards to which 15 parties responded.²³⁵ All respondents expressed concerns about the regulatory burden imposed by the external review system and its additional draft technical standards. As one respondent formulated it: “implementation of the criteria proposed by ESMA could be disproportionate in terms of effort and cost, particularly for small audit firms, leading to a low number of accreditations and concentration of the EU green bond assurance market.”²³⁶ This concern seems in part validated by the fact that per 31 January 2025, only 14 external reviewers had registered themselves with ESMA.²³⁷

²³³ Article 1 ESGR.

²³⁴ Article 2 (2) (h) ESGR.

²³⁵ ESMA, Consultation Paper, Technical Standards on the European Green Bond Regulation, 26 March 2024, ESMA84-2037069784-2116.

²³⁶ Compagnie Nationale des Commissaires aux Comptes-CNCC, Reply to Consultation Paper on technical standards on the European Green Bonds Regulation 26 March – 14 June 2024, available at: <https://www.esma.europa.eu/press-news/consultations/consultation-european-green-bond-regulation>, p.4.

²³⁷ List of firms that have notified ESMA and meet the obligations under Article 69 or Article 70 of Regulation (EU) 2023/2631, available at: <https://www.esma.europa.eu/esmas-activities/investors-and-issuers/external-reviewers-european-green-bonds>, accessed on: 4 February 2025.

The ESMA consultation process highlights a number of factors that play a role in the regulatory burden that is caused by the extensive requirements for external reviewers, which can be summarised into three main concerns. Firstly, compliance burden may discourage new businesses from entering the market for external reviewers, as well as discourage existing players from expanding their business into providing external reviews for European Green Bonds. The latter group, often audit firms, are already subject to detailed regulatory regimes, so it is cumbersome to comply with a new, additional regime for providing services. A second and related problem is that the external reviewers will be supervised directly by ESMA. However, it is to be expected that mainly audit firms will provide external review services. Audit firms, in general, are subject to supervision by national competent authorities. Splitting the supervision of audit firms between NCAs and ESMA may be an additional reason for auditors not to engage in the provision of external review services as the supervisory architecture becomes increasingly complex. Thirdly, audit firms may be deterred from providing external review services if they also provide 'normal' ESG ratings that will be regulated by the ESG Rating Regulation as this would again entail a parallel regulatory regime. One negative consequence could thus be that the market for external reviewers will concentrate among a handful of players, which can render external reviews as a service more expensive. As already mentioned, there are currently only 14 external reviewers registered with ESMA, confirming this concern. A low number of external reviewers, in turn, can deter issuers from making use of those services and thus decide not to issue European Green Bonds.

The regulatory challenge, therefore, lies in finding the right balance between market integrity and operational viability. The regulation of external reviewers must be robust enough to ensure sufficient capacity for providing the reviews and minimizing conflicts of interest. However, the framework must not be disproportionately burdensome that it effectively undermines the market in external reviewers, and thus in European Green Bonds.

4.7 Supervision

In principle, the national competent authority ("NCA") of the home Member State is responsible for supervising whether the issuer complies with the transparency requirements from articles 10 – 15a EuGBR.²³⁸ Supervision of issuers under the EuGBR thus runs parallel to supervision of issuers under the PR. External reviewers are, however, directly supervised by ESMA, which

238 Article 44 (1) EuGBR; García E.C. & Agostini F., "The Green Bonds Market in the Light of European Commission's Proposal: Implications for Greenwashing Liability", in: Ramos Muñoz D.R. & Smoleńska A. (eds.), *Greening the Bond Market: A European Perspective*, Springer International 2023, p. 140-142.

has the power to withdraw the registration of an external reviewer, prohibit them from carrying out their activities, and to impose fines.²³⁹ This results in a three-layer system of review regarding the creditability of a European Green Bond: (i) external reviewers conduct the pre- and post-issuance reviews, (ii) NCA's supervise the issuers, and (iii) ESMA supervises the external reviewers.²⁴⁰

One rationale for dividing the supervision of issuers and external reviewers between the NCA and ESMA is to lower transaction and supervisory costs.²⁴¹ The idea is that the information that has to be disclosed by the issuer in the factsheet on the basis of article 10 EuGBR must be contained in the prospectus of the issuer, which is approved by the NCA.²⁴² Moreover, it can be expected that the annual allocation reports of the EuGBR will be made available alongside the (half-)yearly management reports that issuers have to disclose, which is also a matter of national supervision.²⁴³ It makes sense that the impact report too will fall under the supervision of the NCA, as the report is intimately linked with the factsheet and the annual allocation reports. The supervision of the reports that have to be made available under the EuGBR, thus can follow the already present infrastructure for prospectus and (half-)yearly financial and management reports with the NCAs. The reasoning seems to be that there is no available infrastructure yet for the supervision of external reviewers, which are a new type of business. Therefore, it may be efficient to have these supervised by ESMA, as this centralizes the expertise.²⁴⁴ Moreover, ESMA already directly supervises credit rating agencies, indicating that there is expertise in this type of oversight.²⁴⁵ However, as indicated in responses to ESMA's consultation on draft Technical Standards, auditing firms will likely dominate the external review market.²⁴⁶ These auditing firms are supervised by NCAs. This dual supervision – NCAs for auditing activities, ESMA for external review activities – may be inefficient from the perspective of the auditing firm as it is facing two supervisory regimes.

239 Article 59 (1) EuGBR; García E.C. & Agostini F., "The Green Bonds Market in the Light of European Commission's Proposal: Implications for Greenwashing Liability", in: Ramos Muñoz D.R. & Smoleńska A. (eds.), *Greening the Bond Market: A European Perspective*, Springer International 2023, p. 140-142.

240 García E.C. & Agostini F., "The Green Bonds Market in the Light of European Commission's Proposal: Implications for Greenwashing Liability", in: Ramos Muñoz D.R. & Smoleńska A. (eds.), *Greening the Bond Market: A European Perspective*, Springer International 2023, p. 155.

241 Recitals 42, 53 EuGBR.

242 Article 14 (3) EuGBR; article 31 PR.

243 Article 19 Directive 2004/109/EC (Accounting Directive).

244 Recital 42 EuGBR.

245 Article 4, 21 Regulation (EC) No 1060/2009 of the European Parliament and of the Council of 16 September 2009 on credit rating agencies.

246 ESMA, Consultation Paper, Technical Standards on the European Green Bond Regulation, 26 March 2024, ESMA84-2037069784-2116.

4.8 Evaluation

4.8.1 Complete

The criteria that I formulated in paragraph 2 to evaluate completeness are (a) that the qualitative disclosures covers all four aspects of the double materiality principle and (b) that quantitative data is included in the disclosures data.²⁴⁷ However, for the EuGBR, this test is not appropriate since the Regulation does not enable the investor to form a complete picture of the sustainability situation of the issuer or the activity that is financed by the bonds. Instead, the EuGBR focusses on one specific piece of information: whether the proceeds of the bonds issued are used for Taxonomy-aligned activities. Therefore, in the specific context of the EuGBR, I consider the information to be complete if it (a) clearly communicates whether the bonds are Taxonomy-aligned and (b) enables the investor to monitor whether the issuer fulfils its commitment of Taxonomy-alignment.

4.8.1.1 Taxonomy-Alignment

The first criterion is fulfilled. As the qualification European Green Bond can only be used for bonds of which the proceeds must be allocated to Taxonomy-aligned activities, the EuGBR enables investors to determine at a glance whether a bond is Taxonomy-aligned. The EuGBR thus can be seen as a tool that makes it easier to interpret information in the factsheet, the Prospectus, and other sources. One important aspect of completeness in the light of information asymmetries is that complete disclosures should enable the investor to compare different investment opportunities. To this, the EuGBR somewhat contributes: it enables an easier comparison on the point of whether a bond is Taxonomy-aligned. The EuGBR thus divides the market in a binary manner: investments are either Taxonomy-aligned or they are not. In a market susceptible to information overload due to disclosures made on the basis of the prospectus and the CSRD – which can form a serious obstacle to reaching an (investment) decision – the EuGBR label is exceptionally easy to interpret and is therefore an incredibly valuable tool.²⁴⁸

²⁴⁷ See: paragraph 2 of this Chapter, also: paragraph 2.1 of Chapter 3.

²⁴⁸ On information overload in relation to decision-making in general: Casey C.J., "Variations in Accounting Information Load: The Effect on Loan Officers' Predictions of Bankruptcy", *The Accounting Review* 1980, vol. 55(1), p. 36; Eppler M.J. & Mengis J., "The Concept of Information Overload: A Review of Literature from Organization Science, Accounting, Marketing, MIS, and Related Disciplines", *The Information Society* 2004, vol. 20(5), p. 325; Laud R.L. & Schepers D.H., "Beyond Transparency: Information Overload and a Model for Intelligibility", *Business and Society Review* 2009, vol. 114(3), p. 365. On information overload in relation to non-financial reporting: Baumüller J. & Schaffhauser-Linzatti M., "In search of materiality for nonfinancial information – reporting requirements of the Directive 2014/95/EU", *NachhaltigkeitsManagementForum | Sustainability Management Forum* 2018, vol. 26, p. 101, 102.

While acknowledging the value of the EuGBR, there are drawbacks to this manner of transmitting information in the form of a binary labelling system that may limit investors' abilities to compare businesses and consequently diminish their range of investment strategies.²⁴⁹ The label may be too inclusive or exclusive: activities may not receive the label 'sustainable' even though they are not necessarily unsustainable and vice versa.²⁵⁰ Moreover, a binary system may impair the ability of investors to compare opportunities within one category.²⁵¹ This is especially problematic in regard to investment opportunities that are not Taxonomy-aligned and EuGBR certified. These investments encompass the vast majority of the market but lack an interpretative tool that is as easily accessible and reliable as the EuGBR. It would be helpful if a wider range of (mandatory) labels would exist to help investors to quickly discern the sustainability position of other investments. The traffic light system used by the Climate Bond Initiative in their Climate Bond Taxonomy can be used as an example for this.²⁵² To indicate in how far an asset is aligned with the Climate Bond Taxonomy, four categories exist: green for full compatibility; orange for potential compatibility if certain criteria are met; red for incompatible; and grey to indicate that the compatibility has yet to be determined.²⁵³ A similar system is discussed in the report "The Extended Environmental Taxonomy: Final Report on Taxonomy extension options supporting a sustainable transition" by the Platform on Sustainable Finance – an advisory body established under article 20 of the Taxonomy Regulation.²⁵⁴ An alternative approach would be to mandate disclosure of the precise percentage of proceeds allocated to Taxonomy-aligned activities for all bonds, for example, via the PR. This granular disclosure requirement would enable investors to make more nuanced comparisons between investment opportunities, and overcome the limitations of the current binary classification into European Green Bonds that are by definition Taxonomy-aligned and all other bonds.

249 Ehlers T., Goa D. & Packer F., "A taxonomy of sustainable finance taxonomies", *Bank for International Settlements Papers* 2021, no 118, available at: <https://www.bis.org/publ/bppdf/bispap118.pdf>, p. 15-16.

250 Platform on Sustainable Finance, "The Extended Environmental Taxonomy: Final Report on Taxonomy extension options supporting a sustainable transition", *European Commission* March 2022, p. 17.

251 Ehlers T., Goa D. & Packer F., "A taxonomy of sustainable finance taxonomies", *Bank for International Settlements Papers* 2021, no 118, available at: <https://www.bis.org/publ/bppdf/bispap118.pdf>, p. 15-16.

252 The Climate Bond Initiative, "Climate Bonds Taxonomy – A guide to climate aligned assets & projects", September 2018, available at: <https://www.climatebonds.net/files/files/CBI-Taxonomy-Sep18.pdf>, accessed on: 6 May 2024.

253 The Climate Bond Initiative, "Climate Bonds Taxonomy – A guide to climate aligned assets & projects", September 2018, available at: <https://www.climatebonds.net/files/files/CBI-Taxonomy-Sep18.pdf>, accessed on: 6 May 2024, p. 1.

254 Platform on Sustainable Finance, "The Extended Environmental Taxonomy: Final Report on Taxonomy extension options supporting a sustainable transition", *European Commission* March 2022.

4.8.1.2 Monitoring of Commitment

The second criterion, the availability of monitoring tools for the investor to ascertain compliance with the Taxonomy-aligned spending, is also fulfilled. The EuGBR requires the proceeds of the bond to be spent on Taxonomy-aligned activities that have not yet been undertaken. Therefore, in essence, the label initially merely contains a promise that the proceeds will be spent in a Taxonomy-aligned manner. To qualify as a European Green Bond, the issuer must draw up a plan detailing how the capital raised will ultimately contribute to a Taxonomy aligned economic activity, the so-called CapEx plan.²⁵⁵ To enhance the credibility of the bond, it is therefore important that there are sufficient monitoring tools for the investor to ascertain that the issuer is indeed on track with the Taxonomy-aligned activity.²⁵⁶ Here, the annual allocation report plays an important role, which must, among other things, give insight into the progress that is made on the CapEx plan.²⁵⁷ The information in the allocation report must be reviewed by an external reviewer, and both the report and review must be made available on the website of the issuer.²⁵⁸ In addition to the annual allocation report, the issuer must draw up an impact report on the environmental impact of the use of the bond proceeds after the full allocation of the proceeds of the bonds and at least once during the lifetime of the bonds.²⁵⁹ Other than the allocation report, the impact report need not be verified by an external reviewer.

The ongoing reporting of the issuer on the progress made on the CapEx plan, as well as the allocation report, provide investors with substantive tools to monitor the issuers. However, the fact that impact reports do not require external verification may potentially limit the ability of investors to fully assess the environmental outcomes of their investments. Nevertheless, these reporting obligations represent a significant step forward in ensuring that investors have sufficient monitoring tools to assess whether the issuer is fulfilling its sustainability commitments.

²⁵⁵ Article 7 and 2 (13) EuGBR and Annex I point 1.1.2.1 CDR 2021/2178.

²⁵⁶ Lewandowski W. & Smoleńska A., “Member States Sovereign Green Bond Issuance and the Development of Local Green Bond Markets in the EU”, in: Ramos Muñoz D.R. & Smoleńska A. (eds.), *Greening the Bond Market: A European Perspective*, Springer International 2023.

²⁵⁷ If the obligation to have such a plan applies, which is likely.

²⁵⁸ Article 11 (4), article 13 (1) EuGBR.

²⁵⁹ Article 12 EuGBR. Maragopoulos, N., “Toward a European Green Bond Standard: A European Initiative to Promote Sustainable Finance”, in: Ramos Muñoz D.R. & Smoleńska A. (eds.), *Greening the Bond Market: A European Perspective*, Springer International 2023, p. 38.

4.8.2 *Coherent*

To determine whether the information disclosed under the EuGBR is coherent, I evaluate whether core terminology and concepts are defined and used coherently throughout the legislation. While the core terminology and concepts in the EuGBR are generally clearly defined and used consistently, four coherency issues can be observed.

First, as the EuGBR is intimately linked to the Taxonomy Regulation, deficiencies in the core terminology and concepts of the TR that I discussed in Chapter 3 reverberate throughout the EuGBR. The most problematic one is the definition of the term ‘Taxonomy-aligned economic activity’. This term is not defined in the TR itself but in CDR 2021/2178. The term is used frequently in the EuGBR, for example, in the annexes that contain the format for the factsheet, allocation report and impact report. However, the EuGBR does not explicitly connect the term ‘Taxonomy-aligned economic activity’ to CDR 2021/2178. This means that strictly speaking, the term is not properly defined – as it is neither defined in the EuGBR itself nor in the Taxonomy Regulation to which the annexes refer. While the broader legal framework makes the intended meaning clear, namely that it is to be understood in the sense of CDR 2021/2178, it would be better to define it in article 2 EuGBR.

Second, an inconsistency exists in the integration of EuGBR disclosures with existing reporting frameworks. While the factsheet can be directly incorporated into the prospectus in accordance with article 14 (3) EuGBR, there is no equivalent rule compelling the issuer to include the annual allocation reports in the (half-)yearly management report, even though this would be obvious and practical as it would integrate the EuGBR into existing disclosure frameworks.

A third incoherency exists in the external review requirements. These reviews are mandatory for both the pre-issuance factsheet and annual allocation reports. They are, however, not required for the impact report published after full proceeds allocation. This raises questions on the consistency of the regulatory approach to transparency and verification.

Finally, at a higher level of abstraction, the planned introduction of the ESGR will create two parallel regimes for the verification of sustainability information: a general one that applies to all issuers in the EU for the use of ESG rating providers and one that specifically applies to the providers of external reviews under the EuGBR.

4.8.3 *Accurate*

According to the criteria that I set out in the normative framework in paragraph 2, the EuGBR is considered accurate if it either (a) is based on the Taxonomy Regulation or (b) the quality of the information is warranted by sufficient procedural safeguards.

Evidently, this criterion is fulfilled: the designation ‘European Green Bond’ or ‘EuGB’ can only be used when the proceeds of the bond are allocated to activities that qualify as environmentally sustainable economic activities under the TR.²⁶⁰ Deviation from this is only possible in line with article 5 EuGBR, under which 15% of the proceeds may be allocated to an activity that does not comply with the TR – either because no TSC exist for this activity or because it pertains to climate financing under the UNFCCC and development assistance under the OECD.²⁶¹ In the first case, the issuer still has to meet the generic ‘do no significant harm’ criteria from the TR. In the second case, the issuer must make a best effort to meet relevant TSC.²⁶² It thus can be concluded that the label ‘EuGB’ or ‘European Green Bond’ accurately reflects alignment with the Taxonomy Regulation.

Moreover, the accuracy of the information disclosed under the EuGBR is guaranteed by external reviewers who must provide a positive opinion on the pre-issuance factsheet before issuing European Green Bonds and who review the annual allocation reports.²⁶³ In general, the extensive regulation of the external reviewers should suffice to guarantee that their reviews are accurate and do not suffer from, for example, a lack of expertise or conflicts of interest. One point of concern is that there is no mandatory review for the impact report that has to be drawn up after the proceeds have been fully allocated.²⁶⁴ It is not clear why the impact report has been exempted from mandatory review, but it seems that this is a missed opportunity. One function of the impact report is to hold the issuer accountable when the proceeds have not been spent according to plan. However, if investors can only be certain that the plan is Taxonomy-aligned but there is no external verification that the proceeds have been spent according to plan, the integrity of the label may be affected. Therefore, the impact report, too, should be subject to a mandatory external review that should indicate clearly whether the proceeds have been used to realize the Taxonomy-aligned economic activities set out in the pre-issuance factsheet.

4.8.4 Usability

To evaluate how successful the EuGBR is in reducing information asymmetries, it is necessary to assess an additional criterion: the (prospective) popularity of the standard.²⁶⁵ If the standard is not (widely) used by issuers, its informat-

²⁶⁰ Article 3 EuGBR.

²⁶¹ Article 5 (1) (b) EuGBR.

²⁶² Article 5 EuGBR.

²⁶³ Article 10 (1) (b) and article 11(4) EuGBR.

²⁶⁴ Article 12 (3) EuGBR.

²⁶⁵ See also: Lieverse C.W.M. & Schoonewille T.G., “Duurzaam financieren: green bonds” in: Strijbos F.P.C., e.a. (eds.), *Duurzaam bankieren*, Wolters Kluwer 2023, para. 8.3.6.

ive value is greatly diminished, as well as its capacity to reduce information asymmetries.

The primary advantage of the EuGBR over market-based labels is that it is a very robust framework. The mandatory allocation of the proceeds of the bond to Taxonomy-aligned activities distinguishes the EuGBR from market-based standards, which have a more flexible approach to the allocation of proceeds. For example, the ICMA Green Bond Principles do not use absolute thresholds to qualify an activity as sustainable.²⁶⁶ Moreover, the EuGBR demands that both the pre-issuance factsheet and the allocation reports are verified by external reviewers, who are themselves subject to strict regulation. This can be contrasted to market-based labels, which do not have a similarly strict regime for external verification. For example, external review is encouraged but not mandatory under the ICMA Green Bond Principles.²⁶⁷ All this greatly reduces the opportunity for greenwashing and increases the credibility of the European Green Bond label.²⁶⁸ The EuGBR thus really represents the “gold standard” when it comes to sustainable investing. Hence, European Green Bonds are likely to appeal to sustainability-minded investors, especially those subject to public accountability such as governments and public investment banks, as well as institutions with explicit environmental commitments, including numerous Dutch pension funds.²⁶⁹ This expected demand for European Green Bonds is a positive indication for the future usage of the standard.

Unfortunately, the factors that make European Green Bonds attractive for investors – the strict use of proceeds requirements, the extensive initial and ongoing disclosures, and external verification of the disclosed information – may also be exactly what makes these bonds less popular for issuers. Taxonomy-alignment and the extensive disclosure requirements represent a high regulatory burden, which may make issuing European Green Bonds more expensive than using an alternative standard.²⁷⁰ Another problem that may negatively impact the usage of the EuGBR is that the Taxonomy requirements are so strict that it may be difficult to find eligible projects, especially outside of the EU. Moreover, issuers face the risk that they lose the European Green

266 ICMA uses ‘eligible Green Project’ categories – a list that is both open-ended and contains generic descriptions such as: “Renewable energy (including production, transmission, appliances and products)”, ICMA, *Social Bond Principles*, June 2021, p. 6.

267 An external review is one of ICMA’s key recommendations to heighten transparency, ICMA, *Social Bond Principles*, June 2021, p. 7. See also: ICMA, *Guidelines for Green, Social, Sustainability and Sustainability-Linked Bonds External Reviews*, June 2022.

268 Ziegenbalg M., “EU Green Bond Standard: stringent requirements bring greater clarity”, *Bundesanstalt für Finanzdienstleistungsaufsicht* 19 January 2024, available at: <https://www.bafin.de>, accessed on: 16 May 2024.

269 Pensioen Federatie, “Responsible investing”, available at: <https://www.pensioenfederatie.nl/website/responsible-investing#:~:text=Virtually%20all%20the%20Dutch%20pension,in%20the%20years%20to%20come>, accessed on: 13 May 2024.

270 Gianfrate G. & Peri M., “The green advantage: Exploring the convenience of issuing green bonds”, *Journal of Cleaner Production* 2019, vol. 219, p. 127, 132.

Bond label during the maturation of the bond, in the case that the project is no longer on track with Taxonomy-alignment.²⁷¹ Although losing the label in that situation is justified, the potential reputational damage may be an extra deterrent to issuing such bonds in the first place. Using the EuGBR will especially be burdensome for third-country issuers, who do not have to map out which of their activities are Taxonomy-aligned on the basis of the CSRD and therefore cannot exploit any synergy between the EuGBR and other disclosure requirements that they are subject to.

This problem is exacerbated by the strict regulation of external reviewers. As explained in para. 4.6.1, external reviewers are essential in turning the EuGBR into a success by the gatekeepers' function that they fulfil. While the stringent regulation of these reviewers is, therefore, logically justified, the demanding requirements imposed by the EuGBR and the relevant RTS may have unintended consequences. In particular, the requirements can discourage businesses from providing external review services, which can potentially diminish the market for this service and consequently drive up the costs. This can lead to the paradoxical situation in which the strict rules of the EuGBR, intended to increase its credibility, actually end up impeding the widespread adoption of the standard.

4.9 Conclusion

The introduction of the European Green Bond is a positive development for the ability of investors to discern whether an investment opportunity is sustainable: the use of the designation 'European Green Bond' enables investors quickly to ascertain whether a potential investment will be Taxonomy-aligned. This is a welcome development in a market that is at the risk of suffering from information overload.

On the question of whether the EuGBR is successful in contributing to the efficient allocation of capital to environmentally sustainable economic activities, the verdict is somewhat nuanced. As set out at the beginning of this chapter, I evaluate this question by assessing whether the law decreases information asymmetries and enables investors to better compare investment opportunities. For this, I have focussed on four criteria: whether the EuGBR ensures complete disclosure, whether the legal framework is coherent, whether the information disclosed is accurate, and whether the European Green Bond is expected to become a popular standard. In the previous paragraphs, I have argued that, in general, the EuGBR is coherent and accurate – albeit that external review should be made mandatory for the impact report as well.

271 Maragopoulos, N., "Toward a European Green Bond Standard: A European Initiative to Promote Sustainable Finance", in: Ramos Muñoz D.R. & Smoleňská A. (eds.), *Greening the Bond Market: A European Perspective*, Springer International 2023, p. 34.

On the criterion of completeness, the EuGBR fails to convey a spectrum of information as the label is binary, only indicating that an investment is Taxonomy-aligned (or not, in the absence of the label). However, a binary system may impair the ability of investors to compare opportunities within one category. This is especially problematic for the investment opportunities that are not European Green Bonds, which encompass the vast majority of the market. As I discussed in paragraph 3, the PR neither decreases information asymmetries regarding sustainability information for this market, as it contains open norms that are too wide to serve as a reliable basis for sustainability disclosures. For this entire market, the EuGBR does not contribute to reducing information asymmetries. To accommodate comparisons between investment opportunities and to decrease information asymmetries more effectively, it would be better to introduce a labelling system that encompasses all investment opportunities. This could, for example, be done by a traffic light system as proposed by the Platform on Sustainable Finance. Such a system would need to be mandatory as there is little incentive for non-Taxonomy aligned issuers to participate.

On the criterion of (prospective) popularity, the EuGBR does not score particularly well. On 2 April 2025, the European Investment Bank issued priced EUR 3 billion of bonds that complied with the EuGBR.²⁷² This, however, was only the fourth issuance of European Green Bonds in the first three months since the EuGBR came became applicable in December 2024.²⁷³ This number has risen to 13 issuances of European Green Bonds by September 2025, nine months after the EuGBR became applicable.²⁷⁴ While it may be too early to draw any definite conclusions about the popularity of the standard, it is likely that the label will only see limited use due to the regulatory burden imposed and the limited projects that qualify as Taxonomy-aligned.²⁷⁵ This is exacerbated by the stringent criteria for the mandatory external reviews,

272 European Investment Bank, EIB's inaugural bond under European Green Bond Standard – EUR 3bn benchmark, 2 April 2025, available at: <https://www.eib.org/en/investor-relations/press/all/fi-2025-09-eib-eugbs-eur-2037>, accessed on: 16 April 2025.

273 Leung K., "European Investment Bank sets example with EU Green Bond issuance" (blog-post), *Institute for Energy Economics and Financial Analysis* 14 April 2025, available at: <https://ieefa.org/resources/european-investment-bank-sets-example-eu-green-bond-issuance>, accessed on: 16 April 2025.

274 Webb D., "EU Green Bonds stocktake: Strong investor demand but technical hurdles persist", *Responsible Investor* 24 September 2025, available at: <https://www.responsible-investor.com/eu-green-bonds-stocktake-strong-investor-demand-but-technical-hurdles-persist/>, accessed on: 25 November 2025.

275 Per 20 February 2025, an ABN AMRO report found that only three European Green Bond issuances had taken place. However, given that this was only two months after the EuGBR entered into force, it may be too early to reach any conclusions based on that number. See: Barros Fritz L. de, "Uptick of EU GBS will be limited and restricted to a few sectors", *ABN AMRO ESG Strategist* 20 February 2025, available at: <https://www.abnamro.com/research/en/our-research/esg-strategist-uptick-of-eu-gbs-will-be-limited-and-restricted-to-a-few>, accessed on: 16 April 2025.

which can discourage businesses from providing external review services. The conclusion that EuGBR may not be widely adopted is also drawn in a report by ABN AMRO bank published on 20 February 2025.²⁷⁶ The report specifically identified the Taxonomy-alignment requirement as a principal obstacle for potential issuers, alongside the observation that European Green Bonds must generally satisfy more stringent criteria than alternative frameworks such as the ICMA Green Bond Principles.²⁷⁷ Moreover, the report highlighted that among currently outstanding euro-denominated green bonds, merely 9% would satisfy the Taxonomy alignment requirements, indicating that the eligible issuer base for European Green Bonds is slim.²⁷⁸ Furthermore, those issuers that could potentially issue European Green Bonds were concentrated among two sectors: utilities and financial services, which suggests that widespread adoption across economic sectors is unlikely.²⁷⁹ However, given the short amount of time that has passed since the entry into force of the EuGBR and the publication of this report, it may be too early to draw any definite conclusions yet about the popularity of the standard. In paragraph 5.2.2, I discuss that a mandatory and more varied system of labelling, such as the traffic light system mentioned above, in combination with a more balanced approach to the regulation of external reviewers, could help increase the popularity of European Green Bonds.

5 CONCLUSION

5.1 Evaluation

In this chapter, I analysed the sustainability information that investors receive from issuers in initial disclosures. These disclosures are primarily made on the basis of two instruments: the PR, which requires the publication of a

276 Barros Fritz L. de, “Uptick of EU GBS will be limited and restricted to a few sectors”, *ABN AMRO ESG Strategist* 20 February 2025, available at: <https://www.abnamro.com/research/en/our-research/esg-strategist-uptick-of-eu-gbs-will-be-limited-and-restricted-to-a-few>, accessed on: 16 April 2025.

277 Barros Fritz L. de, “Uptick of EU GBS will be limited and restricted to a few sectors”, *ABN AMRO ESG Strategist* 20 February 2025, available at: <https://www.abnamro.com/research/en/our-research/esg-strategist-uptick-of-eu-gbs-will-be-limited-and-restricted-to-a-few>, accessed on: 16 April 2025.

278 Barros Fritz L. de, “Uptick of EU GBS will be limited and restricted to a few sectors”, *ABN AMRO ESG Strategist* 20 February 2025, available at: <https://www.abnamro.com/research/en/our-research/esg-strategist-uptick-of-eu-gbs-will-be-limited-and-restricted-to-a-few>, accessed on: 16 April 2025.

279 Barros Fritz L. de, “Uptick of EU GBS will be limited and restricted to a few sectors”, *ABN AMRO ESG Strategist* 20 February 2025, available at: <https://www.abnamro.com/research/en/our-research/esg-strategist-uptick-of-eu-gbs-will-be-limited-and-restricted-to-a-few>, accessed on: 16 April 2025.

prospectus and is no part of the EU SFF, and the EuGBR, which is a voluntary label that mandates the disclosure of sustainability information when an issuer qualifies its bonds as European Green Bonds. My analysis focusses on the question: *how effective are the initial disclosure requirements from the Prospectus Regulation and the European Green Bond Regulation in reducing information asymmetries regarding sustainability between issuers and investors?* I evaluated whether the information disclosed under both regulations is complete, coherent, and accurate.

At the end of paragraph 3, I concluded that since the PR does not contain any explicit disclosure requirements on the topic of sustainability, disclosures in a prospectus are most likely incomplete, possibly inaccurate, and definitely incoherent across the market. It will, therefore, be difficult for investors to assess the sustainability position of an issuer based on a prospectus, and even more challenging to compare investment opportunities in terms of sustainability. Therefore, the PR cannot be considered a successful legislative instrument for reducing information asymmetries between issuer and investor in relation to sustainability information.

In paragraph 4, I concluded that although the information disclosed under the EuGBR is coherent and accurate, it is not complete, as the label indicates that the proceeds are used for Taxonomy-aligned economic activities, rather than conveying a spectrum of sustainability impacts. However, this limitation should be viewed in the context of the aim of the Regulation: the EuGBR was not designed to provide comprehensive sustainability information but to succinctly indicate that a bond is used exclusively for the financing of Taxonomy-aligned activities. A great concern, however, is the regulatory burden that is imposed by the EuGBR on issuers that choose to use the label. Issuing a European Green Bond is much more burdensome than relying on a market-based standard for sustainable bonds. Moreover, the stringent requirements for mandatory external reviews under the EuGBR may hinder businesses from providing this service. The combination of these two factors, the stringent criteria for the bond itself and the limited availability of external reviewers, has the potential to undermine the widespread use of the label, which can seriously undermine the effectiveness of the EuGBR in contributing to the reduction of information asymmetries.

The limited success of both instruments in reducing information asymmetries is not surprising. After all, the PR is no part of the EU SFF, while the EuGBR focusses on a very limited segment of the market. Unfortunately, this also means that there is little synergy between the instruments: because the EuGBR only has such a limited reach, it is not capable of resolving the lacunae of the PR regarding sustainability information.

Therefore, the question of whether the current legislative regime on initial disclosures effectively reduces information asymmetries between businesses and investors on the topic of sustainability must be answered negatively. This means that there is a significant risk that the market failure of information

asymmetry between issuer and investor in general persists in initial disclosures. From an L&E perspective, this may warrant regulatory intervention. In this next paragraph, I propose two measures to minimize this risk.

5.2 Recommendations

From the previous paragraphs, it follows that the initial disclosure regime under the PR and EuGBR is not suitable to successfully address information asymmetries on sustainability. The source of this problem is that, on the one hand, the PR predates the EU SFF and has not incorporated explicit sustainability disclosures, and on the other hand, the EuGBR has too limited a reach to resolve this shortcoming of the PR. To overcome this shortcoming, I propose two actions: (1) introducing explicit mandatory disclosures of sustainability information in the prospectus and (2) striking a better balance between rigid requirements for issuing European Green bonds and useability of the standard.

5.2.1 *Mandatory Disclosure of Sustainability Information in the Prospectus*

To resolve the issues of incomplete, incoherent and inaccurate disclosures of sustainability information in prospectuses, I propose that explicit minimum mandatory disclosures of sustainability information be introduced in the PR. These minimum mandatory disclosures can best be introduced in a CDR as the Prospectus Regulation itself is too general to include specific content requirements. For example, CDR 2019/980 on the format, content, scrutiny and approval of the prospectus could be added to include disclosure of sustainability information. Sustainability information should be disclosed in the registration document (annex 6) if it concerns the issuer and in the securities note (annex 14) if it concerns the securities.

The mandatory disclosure should distinguish between issuances of conventional bonds and sustainable bonds since the information needs of investors differ for these categories, as explained in para. 3. I propose that the disclosures that I identified and summarized in paragraph 3.10, as shown in the table below.

Table 4: Sustainability information that should be included in the prospectus. Source: Own image.

	Material sustainability impact information: information about business's positive and negative impacts on sustainability matters	Financially material information: information on the business's sustainability-related financial risks and opportunities
Sustainable bonds	1. Scope and sustainability objectives of the project • Clear definition of the sustainability objectives • How the project relates to those objectives • Feasibility of objectives • Taxonomy-alignment of the project 2. Implementation plans of the sustainability objectives • How the business exactly plans to achieve its objectives • Flexibility for deviation from the sustainability objectives 3. Policies for sustainability impact assessment for the project • Quantitative and qualitative information • How progress will sustainability progress will be monitored 4. Information on feedback mechanisms 5. Information on the use of proceeds • The management of the proceeds • How the proceeds are segregated from the general cash flow of the firm • For sustainability-linked bonds: the legal mechanism between sustainability performance and financial obligations 6. The use of external experts 7. The sustainability impact of the issuer, including the level of Taxonomy-alignment	1. Scope and sustainability objectives of the project • Clear definition of the sustainability objectives • How the project relates to those objectives • Feasibility of objectives • Taxonomy-alignment of the project 2. Implementation plans of the sustainability objectives • How the business exactly plans to achieve its objectives • Flexibility for deviation from the sustainability objectives 3. Policies for sustainability impact assessment for the project • Quantitative and qualitative information • How progress will sustainability progress will be monitored 4. Information on feedback mechanisms 5. Information on the specific risks to the realisation of the project, with the limitation that this disclosure should not be misused to negate liability for greenwashing. 6. Information on the use of proceeds • The management of the proceeds • How the proceeds are segregated from the general cash flow of the firm • For sustainability-linked bonds: the legal mechanism between sustainability performance and financial obligations 7. Transition risks at project and issuer level 8. Physical risks at project and issuer level

	Material sustainability impact information: information about business's positive and negative impacts on sustainability matters	Financially material information: information on the business's sustainability-related financial risks and opportunities
Conventional bonds	1. Taxonomy-aligned of the issuer • If the proceeds of the bonds are used to finance a specific project, Taxonomy-aligned the project that is financed by the proceeds of the bonds	1. Available ESG scores 2. Physical sustainability risks 3. Transition risks

As discussed in paragraphs 3.6-3.8, these disclosures should already be made under the current PR, as they respond to the information needs of investors and thus fall into the scope of the general materiality principle from article 6 (1) PR. However, explicitly including these disclosures in the PR will resolve most of the issues that currently stand in the way of an efficient transmission of sustainability information from issuers to investors in relation to prospectuses. First of all, explicit minimum disclosure requirements clarify what should be included under the open materiality norm and will contribute to the completeness of the information. Second, it will ensure a baseline-level coherency of both terminology and concepts. This is especially so regarding the disclosure of the level of Taxonomy-alignment, which will provide investors with valuable information and enable them to compare different investment opportunities across the market on sustainability. Third, the information will be accurate as it is based on the Taxonomy framework. Lastly, there will be coherence with the ongoing disclosure regime in the CSRD and thereby also coherence with the ongoing and initial financial disclosures.

In general, these disclosures also should not impose a disproportionate burden on issuers as they have to gather most of this information anyway. As explained in the previous Chapter, issuers are subject to the CSRD, which means 1) they have to publish an elaborate sustainability report that will most likely contain most of the information identified in the table above and 2) that they have to comply with article 8 TR. Under article 8, issuers will have to describe to what extent the business engages in Taxonomy-aligned activities, which is to be expressed in three key performance indicators:

- The proportion of turnover derived from Taxonomy-aligned activities;
- The proportion of capital expenditure related to Taxonomy-aligned activities;
- The proportion of operating expenditure related to Taxonomy-aligned activities.

The disclosures for sustainable bonds appear to bring about a higher regulatory burden than those for conventional bonds due to their extensive nature. This is justifiable for two reasons. First, these disclosures simply explicate what is contained in the principle of materiality of art. 6 PR. Second, harmonization

is essential not only for investors' ability to compare but also to create a level playing field between sustainable issuers. Currently, there is a risk that issuers keep sustainability disclosures to a minimum for sustainable bonds in order to evade commitment and decrease costs. This can undermine investors' trust in the market. Moreover, it disadvantages those issuers who try to best meet the needs of investors. Creating a level playing field by explicitly introducing sustainability disclosures in the prospectus would resolve this tension.

5.2.2 Softening the EuGBR Criteria

As indicated above, the main problem in the interaction between the prospectus and the EuGBR is the limited usability of the EuGBR. Whilst the instrument provides complete information, is coherent, and is accurate, it does little to diminish information asymmetries in the market as the EuGBR may not be an attractive label for issuers due to the extremely burdensome criteria imposed by the Regulation. However, when issuers prefer market-based labels over the EuGBR, investors may suffer from information overload as a common frame of reference is absent. I propose two measures to increase the usability of European Green Bonds: a multiple-category model for sustainability impacts and alignment between the rules for external reviewers under the EuGBR and the ESG Rating Regulation.

5.2.2.1 Traffic Light System

Currently, it is only possible to issue green bonds if the proceeds of the bond are used entirely for Taxonomy-aligned activities. This is a high threshold to pass, which could be softened by introducing a multiple-category model that encompasses a more nuanced categorisation of sustainability impacts, for example, a five-category model.

High negative impact	Low negative impact	Neutral impact & non-eligible activities	Low positive impact - non-aligned but positive impact	High positive impact - fully Taxonomy-aligned
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Figure 4: Five-category model

Proposals for such systems can be found in the Climate Bond Taxonomy by the Climate Bond Initiative and in "The Extended Environmental Taxonomy: Final Report on Taxonomy extension options supporting a sustainable transi-

tion” by the Platform on Sustainable Finance.²⁸⁰ Such a system has two significant benefits. First, it enhances the ability of investors to better compare investment opportunities as investors receive more nuanced information that is nonetheless easy to comprehend. Second, this system creates the opportunity to broaden the European Green Bonds label to encompass activities with a positive sustainability impact that do not meet the strict criteria of the Taxonomy-Regulation. In the five-category model, this would entail the light and dark green categories. This expansion would better serve the overarching objective of channelling private investment toward sustainable activities by increasing the range of activities eligible for the EuGBR label. However, introducing a multiple-category model for sustainability impacts would also require extensive revision of the current regulatory framework. Firstly, the TR itself would need to be updated in order to create clarity on what the categories would entail. To realize this for all activities in the delegated acts to the Taxonomy Regulation would require an enormous legislative effort.

Secondly, for such a labelling system to work optimally, it must be made mandatory for all economic activities. The primary reason for this is that a voluntary system creates no incentive for issuers to adopt labels that indicate negative impacts. Without market-wide adoption, the model’s comparative value is significantly diminished, as investors cannot effectively evaluate investment opportunities across the market. Obviously, it is to be expected that there will be considerable resistance from the market to adopt a mandatory system. However, this concern can be addressed with two counterarguments. First, issuers already (more or less) possess the data to determine what category their economic activities fall into due to the data that they have to collect on the basis of the CSRD. After all, the CSRD demands that issuers determine how Taxonomy-aligned their activities are, even at asset or site level, if appropriate.²⁸¹ The second argument to introduce a multiple-category labelling system through the TR is that the regulatory burden for issuers of European Green Bonds will become less disproportionate to the regulatory burden for issuer conventional bonds. Currently, the issuers of European Green Bonds face a much higher regulatory burden, partly due to the requirement to only finance Taxonomy-aligned activities. This effectively creates an incentive to not issue those bonds, which inhibits the market in European Green Bonds to grow, which in turn, undermines the flow of private capital to sustainable activities. This disadvantage should be mitigated as much as possible, and

280 The Climate Bond Initiative, “Climate Bonds Taxonomy – A guide to climate aligned assets & projects”, September 2018, available at: <https://www.climatebonds.net/files/files/CBI-Taxonomy-Sep18.pdf>, accessed on: 6 May 2024; Platform on Sustainable Finance, “The Extended Environmental Taxonomy: Final Report on Taxonomy extension options supporting a sustainable transition”, *European Commission* March 2022.

281 ESRS 1 para. 54 on level of disaggregation.

a multiple-category system could be a step toward a more balanced regulatory burden for both conventional bonds and European Green Bonds.

5.2.2.2 Harmonized Regime for External Reviewers and ESG Ratings

Currently, there are two regimes for external reviewers: one governing ESG rating providers under the ESG Rating Regulation and another for external reviewers under the EuGBR. While these regimes overlap substantially, they operate as mutually exclusive frameworks due to the explicit exclusion of external reviewers from the ESG Rating Regulation's scope. Moreover, external reviews may be conducted by auditing firms, but these same firms are prohibited from providing ESG ratings under the ESG Rating Regulation. The existence of these parallel regimes can potentially limit issuers from engaging established ESG rating agencies for external reviews under the EuGBR, which may restrict the pool of available external reviewers. This, in turn, can increase the costs of issuing EuGBR, as there may be limited competition on the market for external reviewers. One solution to this would be to introduce an equivalence regime for ESG rating providers under the ESG Rating Regulation that would enable ESG rating providers to conduct external reviews for European Green Bonds without having to comply with the specific external reviewer criteria from the EuGBR.