



EU TECHNICAL EXPERT GROUP ON  
SUSTAINABLE FINANCE

FINANCING A SUSTAINABLE  
EUROPEAN ECONOMY



Report on  
**EU GREEN BOND  
STANDARD**

**TEG REPORT**

**PROPOSAL FOR AN EU GREEN BOND STANDARD**

**June 2019**

### **Disclaimer**

This report represents the overall view of the members of the Technical Expert Group, and although it represents such a consensus, it may not necessarily, on all details, represent the individual views of member institutions or experts. The views reflected in this Report are the views of the experts only. This report does not reflect the views of the European Commission or its services.

The EU Green Bond Standard Working Group would like to thank all parties that have given us feedback and contributed to our work in various ways.

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In addition, the EU GBS Working Group would like to thank Serena Fatica from the Joint Research Centre and the European Commission secretariat.

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<sup>10</sup> Replacing Eric Usher

# Executive Summary

In March 2018 the European Commission published its Action Plan on Financing Sustainable Growth (Action Plan), which sets out a comprehensive strategy to further connect finance with sustainability<sup>11</sup>. In Action 2 of the Action Plan, the European Commission commits to create standards and labels for green financial products.

In June 2018, the European Commission set up a Technical Expert Group on sustainable finance (TEG) to assist in four key areas of the Action Plan through the development of the following: 1) a unified classification system for sustainable economic activities, 2) a European Union (EU) Green Bond Standard, 3) benchmarks for low-carbon investment strategies, and 4) guidance to improve corporate disclosure of climate-related information. The TEG began work in July 2018 and has a one-year mandate, which it carries out through formal plenaries and subgroup meetings for each work stream. The TEG has 35 members from civil society, academia, business and the finance sector, as well as 10 additional members and observers from EU and international public bodies. Members of the current TEG have been appointed as representatives of their organisations (type C members), as individuals appointed in a personal capacity (type A or B members) or as representatives of European entities (type E members)<sup>12</sup>.

The TEG published its interim report on an EU Green Bond Standard on March 6, 2019 for public feedback. The interim report presented the draft EU-GBS, provided a rationale for action and explained how such a standard should be developed and implemented in Europe. More than 100 organisations provided feedback on the interim report and the feedback on the report was generally positive. A large majority of the respondents supported the creation of a voluntary EU-GBS. The TEG has carefully studied the detailed feedback received from participating stakeholders and has created an improved version of the EU-GBS. This report is now presented in an updated form.

The structure of the report is largely unchanged. A section of expected impact of the EU-GBS as well as a template for the Green Bond Framework (GBF) have been added. The recommendations have been reduced in number and sharpened in scope. Moreover, several details of the EU-GBS itself have been clarified. The TEG has continued to work on the premise that the EU Taxonomy for economic activities will be largely based on the legislative proposal on the establishment of a framework to facilitate sustainable investment (also referred to as the 'Taxonomy Regulation'<sup>13</sup> in this report) and the work done by the TEG itself to create criteria for the climate-related environmental objectives.

The report proposes the content of a draft **EU-GBS** (see Chapter 3 and Annex 1), explains its purpose, sets its ambition level, and explains how we think the creation of this EU-GBS will address

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<sup>11</sup> European Commission, "Action Plan: Financing Sustainable Growth", 8 March 2018 available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0097&from=EN>. The Action plan was a response to the Final Report of the High-Level Expert Group on Sustainable Finance established by the Commission in December 2016. The Final Report, published in January 2018, is available at [https://ec.europa.eu/info/sites/info/files/180131-sustainable-finance-final-report\\_en.pdf](https://ec.europa.eu/info/sites/info/files/180131-sustainable-finance-final-report_en.pdf)

<sup>12</sup> [https://ec.europa.eu/info/publications/sustainable-finance-technical-expert-group\\_en](https://ec.europa.eu/info/publications/sustainable-finance-technical-expert-group_en)

<sup>13</sup> Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the establishment of a framework to facilitate sustainable investment, COM(2018) 353 final 2018/0178 (COD), 24 May 2018. <https://ec.europa.eu/transparency/regdoc/rep/1/2018/EN/COM-2018-353-F1-EN-MAIN-PART-1.PDF>



barriers to market development (see section 3.1) and will support its role in channelling substantial financial flows to Green Projects.

The report also provides guidance to the European Commission on the proposed way forward for the EU-GBS, including the creation of a **centralised accreditation scheme for external verifiers** (see Chapter 4 and Annexes 5 to 7).

Last but not least, the report elaborates on possible **incentives** (see Chapter 5), based on the EU-GBS, to enhance the growth of green bond issuance and the links with other sustainable financing instruments in a wider context (see Chapter 6). The EU-GBS should also feed into the work being launched in parallel by the European Commission on a potential EU Ecolabel for financial products.

The TEG recognises that its mandate is limited and focused on the financial sector. However, the TEG highlights that one of the barriers to the green bond market development is the lack of green projects and green assets and that **policy measures to enhance real economy investments in green assets and infrastructure are essential** for achieving the ultimate targets.

The TEG does not plan to organise an additional public call for feedback on the June EU Green Bond Standard report as it is not proposing substantial changes compared to the interim report. However, the TEG will continue to work on creating user guidance on how to interpret the Taxonomy in the context of the proposed EU-GBS. The TEG will also further reflect on the link between the EU-GBS and the EU Taxonomy should any changes be needed due to the negotiations or the taxonomy call for feedback. The TEG may also advise the European Commission on setting up the EU Platform on Sustainable Finance<sup>14</sup> and creating the required ecosystem to ensure the relevance and credibility of the proposed EU-GBS, including the consistency with other developments such as the work on the EU Ecolabel for financial products and the relevant work done by the International Organization for Standardisation (ISO). For these purposes the mandate of the TEG has been extended until the end of 2019.

## Ten recommendations

Taking into account the stakeholder feedback received, the TEG is proposing the following ten recommendations, three of which relate to the establishment of the EU-GBS, and the others relate to ways how European governments, European Institutions, market participants and other stakeholders can support and monitor the implementation of the EU-GBS.

### ***TEG recommendations for the European Commission to establish an EU-GBS:***

- **Recommendation #01: Create a voluntary EU Green Bond Standard.** The TEG recommends that the European Commission creates a voluntary standard to enhance the effectiveness, transparency, accountability, comparability and credibility of the green bond market without disrupting the market, and to encourage bond issuers to issue their bonds as 'EU Green Bonds'. A proposal for such a standard is presented in Annex 1. In order to

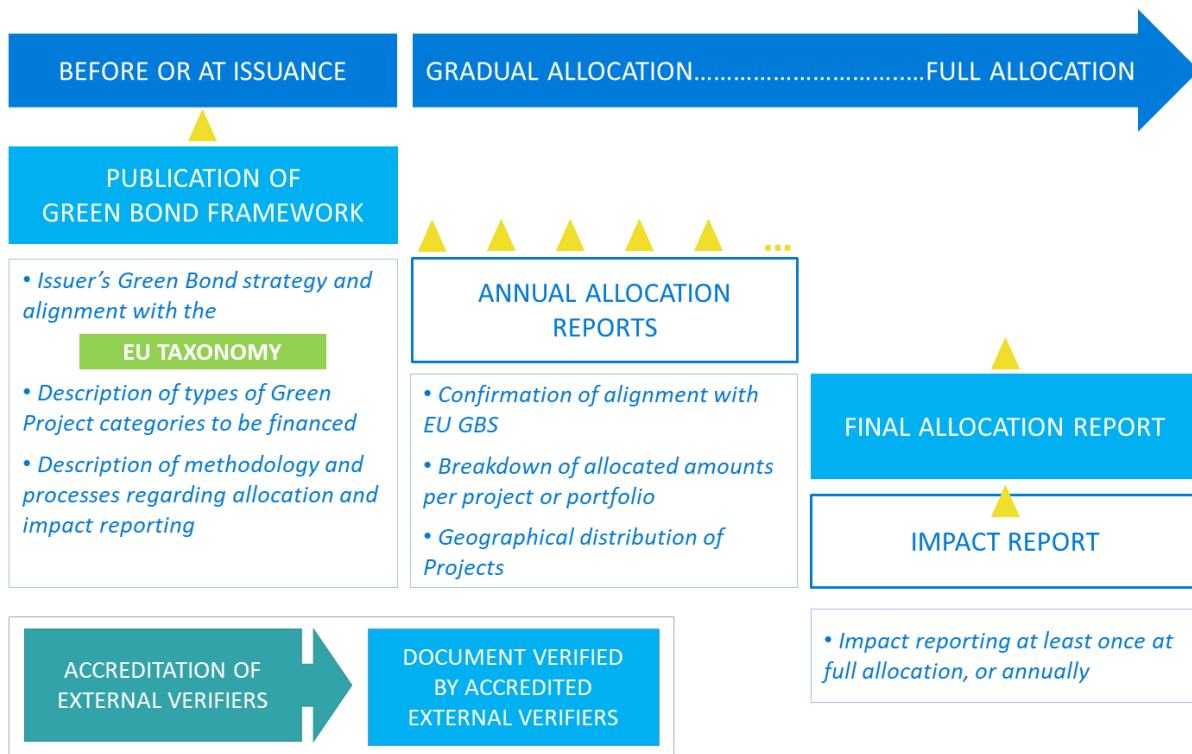
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<sup>14</sup> See: Article 15 of the proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the establishment of a framework to facilitate sustainable investment, COM(2018) 353 final 2018/0178 (COD), 24 May 2018. <https://ec.europa.eu/transparency/regdoc/rep/1/2018/EN/COM-2018-353-F1-EN-MAIN-PART-1.PDF>

respond to market demand the TEG further recommends that the EU-GBS should be created through a European Commission Communication to be published as soon as practicably feasible, and at the latest at the moment, when the Taxonomy Regulation has been agreed by the co-legislators.

- **Recommendation #02: The EU-GBS should comprise four core components: (1) alignment of Green Projects with the EU Taxonomy, (2) Green Bond Framework, (3) reporting and (4) verification by accredited verifiers.** The TEG recommends that the EU-GBS should comprise clear and mandatory requirements related to (1) the alignment of Green Projects with the EU Taxonomy and how green bonds should take into account substantial contribution to the EU Taxonomy's Environmental Objectives, do-no-significant harm, social safeguards, and technical screening criteria (i.e. principles, metrics and thresholds) if and when they are defined by the EU Taxonomy. In addition, the standard should define (2) the scope and content of a Green Bond Framework (GBF) for issuer to provide details on all key aspects of the proposed use-of-proceeds, and its green bond strategy and processes at issuance. The EU-GBS should also comprise (3) requirements for period reporting on use-of-proceeds and environmental impacts, where possible, supported by quantitative metrics and (4) verification of conformity with the standard and related reporting on use-of-proceeds by accredited verifiers. The TEG believes that the most suitable European authority to design and operate such an accreditation regime for Verifiers would be the European Securities and Market Authority (ESMA).
- **Recommendation #03: Encourage the set-up of a voluntary interim registration process for Verifiers of EU Green Bonds for an estimated transition period of up to three years.** While awaiting for the ESMA-led accreditation scheme to come into force and in order to respond to expected market demand in the short term, the TEG also recommends that an interim initiative be set up as soon as practicable, in close cooperation with the European Commission, the future EU Platform on Sustainable Finance, and ESMA, to oversee and operate a transition regime for registration and guidance of registered Verifiers. Such a voluntary interim registration scheme should (1) define robust criteria for Verifiers based on the core components proposed by the TEG (see chapter 4); (2) operate a registration process for verifiers that commit to comply with these criteria on a voluntary basis, (3) keep and maintain a public register of registered verifiers; and (4) inform the European Commission and ESMA, at least annually, on the lessons learned in the implementation of the scheme. The TEG will engage with interested stakeholders to further develop and prepare the implementation of such as scheme over the coming months.

The flowchart below illustrates the interactions between the four core components of the EU-GBS before issuance, and until full allocation.



**TEG recommendations to support and monitor the adoption of the EU-GBS:**

Moreover, the TEG is also proposing seven additional recommendations suggesting how the European Commission, EU Member States and market participants can support of the implementation and the uptake of the EU-GBS through both demand and supply-side measures:

- **Recommendation #04: Investors, in particular institutional investors are encouraged to use the requirements of the EU-GBS when designing their green fixed-income investment strategies and to communicate their preference and expectations actively to green bond issuers as well as to underwriters.** Investors, in particular European institutional investors such as asset managers, pension funds and insurance undertakings as well as banks in their function as underwriter play an essential role in promoting standards. The TEG recommends that investors use the requirements of the EU-GBS in their green fixed-income investment strategy and communicate their expectations actively in their investor dialogue with bond issuers.
- **Recommendation #05: The TEG welcomes the recent political compromise on the sustainability-related disclosures regulation<sup>15</sup> and recommends that the European Commission adopts an ambitious disclosures regime on green bond holdings for institutional investors.** Through the development of delegated acts in the context of the sustainability-related Disclosures Regulation for institutional investors in the EU, the TEG recommends that the European Commission adopts an ambitious regime for periodic disclosure of EU Green Bonds and other green bond holdings by institutional investors such

<sup>15</sup> Sustainable finance: Presidency and Parliament reach political agreement on transparency rules, updated 26 March 2019: <https://www.consilium.europa.eu/en/press/press-releases/2019/03/07/sustainable-finance-presidency-and-parliament-reach-political-agreement-on-transparency-rules>

as asset managers, pension funds and insurance undertakings. Underwriters should also disclose the portion of green bonds underwritten<sup>16</sup>.

- **Recommendation #06: Consider promoting greening the financial system by expressing and implementing a preference for EU Green Bonds.** The TEG recommends that the European System of Central Banks (ESCB) and the members of the Network for Greening the Financial System (NGFS) consider promoting greening the financial system by expressing and implementing a preference for EU Green Bonds when purchasing green bonds.
- **Recommendation #07: Consider developing financial incentives to support the EU Green Bond Market alignment with the EU-GBS.** The TEG recommends that the European Commission and EU Member States consider developing a full range of short- and long-term financial incentives to support the development of the EU Green Bond Market aligned with the EU-GBS.
- **Recommendation #08: The TEG encourages all types of bond issuers to issue their future green bonds in conformity with the requirements of the EU-GBS.** The TEG encourages all public and private sector bond issuers to use the EU-GBS for their future green bond issuances and communicate openly to which extent they plan to do so.
- **Recommendation #09: Promote adoption of the EU-GBS through the EU Ecolabel for financial products.** The TEG recommends that the European Commission explicitly prioritises the EU-GBS in the technical criteria that are currently being developed for the EU Ecolabel for financial products, especially for funds that may be referred to as 'green bond funds'.
- **Recommendation #10: Monitor impact on the alignment of financial flows with the EU Taxonomy's Environmental Objectives and consider further supporting action including possible legislation after an estimated period of up to 3 years.** The TEG recommends that the European Commission, through the EU Platform on Sustainable Finance, conducts a review of the take up and the impact of the EU-GBS after an estimated interim period of up to 3 years. The European Commission should then consider further appropriate measures including, if relevant, the possible recourse to legislation in support of the implementation of the EU-GBS.

The summary table on the following page presents the key features of the EU-GBS, compared with the guidance provided by the Green Bond Principles and the initial recommendations made by the High-Level Expert Group on Sustainable Finance (HLEG).

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<sup>16</sup> Specific metrics are provided in non-binding guidelines on non-financial reporting that are currently being revised. See: *Consultation document on the update of the non-binding guidelines on non-financial reporting*, European Commission, March 2019, [https://ec.europa.eu/info/sites/info/files/business\\_economy\\_euro/banking\\_and\\_finance/documents/2019-non-financial-reporting-guidelines-consultation-document\\_en.pdf](https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/2019-non-financial-reporting-guidelines-consultation-document_en.pdf)

**Table 1: Key features of the EU Green Bond Standard compared to the Green Bond Principles and the HLEG recommendations**

Specific topic	Green Bond Principles (GBP)	HLEG recommendations <sup>17</sup>	Proposed EU Green Bond Standard (EU-GBS)
<b>Use of Proceeds in legal documentation</b>	Recommended	Required	Required in the legal documentation (for instance, in the Base Prospectus or in the Final Terms).
<b>Eligibility criteria (1): Substantial contribution to environmental objectives</b>	High-level categories for eligible Green Projects	Compliance with a detailed EU Taxonomy	Alignment with a detailed EU Taxonomy, including four requirements (1) substantial contribution to environmental objectives, (2) do-no-significant harm (3) minimum social safeguards; and (4) technical screening criteria (see below and detailed description in section 4.1 of the EU-GBS, Annex 1).  Green Bond Framework (GBF) required (see section 4.2 of the EU-GBS). A template is provided in Annex 2.  Specific requirements, related to capital/operating expenditures and look-back periods are provide in section 4.1 of the EU-GBS (Annex 1).
<b>Eligibility criteria (2): Do-no-significant harm</b>	n/a	n/a	Ensure that economic activities do-no-significant harm to any of the EU Taxonomy's Environmental Objectives
<b>Eligibility criteria (3): Social safeguards</b>	Communicate clearly to investors the "process applied to identify and manage potentially material environmental and social risks associated with the projects"	n/a	Ensure compliance with minimum social safeguards represented by the principles and rights set out in the eight fundamental conventions identified in the International Labour Organisation's declaration on Fundamental Rights and Principles at Work.
<b>Eligibility criteria (4): Technical Screening Criteria</b>	n/a	n/a	Sector specific screening criteria, including principles, metrics and related thresholds on sectors that are deemed environmentally sustainable.
<b>Disclosure of proportion of proceeds used for refinancing</b>	Recommended	Required	Required. Specific technical requirements, see section 4.3 of the EU-GBS (Annex 1). A reporting template is provided Annex 3.
<b>Impact monitoring and reporting</b>	Recommended wherever possible	Required to report whether issuer is monitoring impact or not and if so, disclose estimated/actual impact	Required. A reporting template is provided Annex 3.
<b>External review requirements</b>	Recommended. External review may be partial, covering only certain aspects of an issuer's green bond or associated Green Bond Framework or full, assessing alignment with all four core components of the GBP <sup>18</sup>	Required. External review must confirm, at a minimum, the alignment, at issuance, of the EU green bond with all four core components of the EU-GBS, or alternatively, confirm the alignment of the EU Green Bond programme as a whole.	Required. Verification of the Green Bond Framework and the Final Allocation Report by an accredited verifier to confirm conformity with the EU-GBS.  Detailed requirements are provided in section 4.4 of the EU-GBS in Annex 2.
<b>Publication of external verification</b>	Recommended	Required	Required
<b>Accreditation of external reviewers/ verifiers</b>	Not addressed in GBPs	Sets out accreditation requirements for external verifiers.	A centralised scheme of accredited verifiers, operated by ESMA.  Voluntary interim registration scheme for an estimated transition period of up to 3 years.

<sup>17</sup> Adapted from the final report of HLEG on Sustainable Finance, January 2018, summary table page 32

<sup>18</sup> The four components of the Green Bond Principles are: (1) Use of proceeds; (2) Process for project evaluation and selection; (3) Management of proceeds; and (4) Reporting.

# 1 Introduction

## 1.1 CONTEXT

In March 2018 the European Commission published its Action Plan on Financing Sustainable Growth (Action Plan) which sets out a comprehensive strategy to further connect finance with sustainability. Specifically, the Action Plan aims to: (1) reorient capital flows towards sustainable investment in order to achieve sustainable and inclusive growth; (2) manage financial risks stemming from climate change, resource depletion, environmental degradation and social issues; and (3) foster transparency and long-termism in financial and economic activity. In Action 2 of the Action Plan, the European Commission commits to create standards and labels for green financial products.

In June 2018, the European Commission set up a Technical Expert Group on Sustainable Finance ('TEG') to assist in four key areas of the Action Plan through the development of the following: (1) a unified classification system for sustainable economic activities, (2) an European (EU) Green Bond Standard, (3) benchmarks for low-carbon investment strategies, and (4) guidance to improve corporate disclosure of climate-related information

The TEG began work in July 2018 and had a one-year mandate, which it carried out through formal plenaries and sub group meetings for each work stream. The mandate of the TEG has recently been extended until end of 2019. The TEG has 35 members from civil society, academia, business and the finance sector, as well as 10 additional members and observers from EU and international public bodies<sup>19</sup>. The TEG published its interim report on an EU Green Bond Standard in March for public feedback. The TEG received 104 replies from a balanced and very relevant group of stakeholders (see Annex 4). Responses came from 22 countries. 28% of responses came from issuers, 18% came from investors, 15% from verifiers, and 39% from others including NGOs, market infrastructure providers, regulators, etc. A strong majority of the respondents supported creating a voluntary EU-GBS standard and the feedback was overall positive to the TEG's work. The TEG has carefully studied the answers to the detailed questionnaire and the 600+ open comments and taken into consideration also the feedback received through targeted outreach. This input has assisted the TEG in improving the draft EU-GBS and the report which is now presented in an updated form.

The TEG has continued to work on the assumption that an EU Taxonomy for economic activities will be created largely based on the proposed Regulation on the establishment of a framework to facilitate sustainable investment (also referred to as the 'Taxonomy Regulation' in this report<sup>20</sup>) and the work done by TEG itself to create criteria for the climate related environmental objectives.

The report proposes the content of a draft **EU-GBS** (see Annex 1), explains its purpose, sets its ambition level, and explains how we think the creation of this EU-GBS will address barriers to market development (see section 3.1) and will support its role in channelling substantial financial flows to Green Projects.

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<sup>19</sup> [https://ec.europa.eu/info/publications/sustainable-finance-technical-expert-group\\_en](https://ec.europa.eu/info/publications/sustainable-finance-technical-expert-group_en)

<sup>20</sup> Proposal for a *REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL* on the establishment of a framework to facilitate sustainable investment, COM(2018) 353 final 2018/0178 (COD), 24 May 2018. <https://ec.europa.eu/transparency/regdoc/rep/1/2018/EN/COM-2018-353-F1-EN-MAIN-PART-1.PDF>



The report also provides preliminary guidance to the European Commission on our proposed way forward for the EU-GBS, including the creation of a **centralised accreditation regime for external verifiers** (see Chapter 4) including an interim solution until the required authority is established.

Last but not least, the report elaborates on possible **incentives** (see Chapter 5), based on the EU-GBS, to enhance the growth of green bond issuance and the links with other sustainable financing instruments in a wider context (see Chapter 6). The EU-GBS should also feed into the work being done in parallel by the European Commission on a potential EU Ecolabel for financial products.

The TEG does not plan to organise an additional public call for feedback on the June EU Green Bond Standard report as it is not proposing substantial changes compared to the interim report. However, the TEG will continue to work on creating user guidance on how to interpret the Taxonomy in the context of the proposed EU-GBS. The TEG will also further reflect on the link between the EU-GBS and the EU Taxonomy should any changes be needed due to the negotiations or the taxonomy call for feedback. The TEG may also advise the European Commission on setting up the EU Platform on Sustainable Finance<sup>21</sup> and creating the required ecosystem to ensure the relevance and credibility of the proposed EU-GBS, including the consistency with other developments such as the work on the EU Ecolabel for financial products and the relevant work done by the International Organization for Standardisation (ISO).

The European Commission will decide on the next steps with respect to an EU-GBS and other potential measures.

## 1.2 CALL FOR ACTION

Financial market participants, together with society at large, have become increasingly aware of the risks related to global warming as well as other environmental and social challenges. The 2015 Paris Agreement on climate, the United Nations Sustainable Development Goals, the October 2018 Intergovernmental Panel on Climate Change Special Report<sup>22</sup>, and many other policy measures urge accelerated climate action by all actors in the global economy – including businesses and financial institutions. Reducing greenhouse gas (GHG) emissions by transitioning to a low-carbon economy is critical to limiting global warming and building a sustainable economic system, as outlined in the European Commission’s “Strategic long-term vision for a prosperous, modern, competitive and climate neutral economy”<sup>23</sup>. However, as a result of this transition, a wide range of carbon-intensive assets risk becoming “stranded” (i.e. unusable)<sup>24</sup>, which may also have a direct effect on the economy at large, and indirectly on sustainable development. It is also important to make sure that this transition is managed in a socially fair way and under consideration of a broader spectrum of environmental objectives.

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<sup>21</sup> See: Article 15 of the proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the establishment of a framework to facilitate sustainable investment, COM(2018) 353 final 2018/0178 (COD), 24 May 2018. <https://ec.europa.eu/transparency/regdoc/rep/1/2018/EN/COM-2018-353-F1-EN-MAIN-PART-1.PDF>

<sup>22</sup> <http://www.ipcc.ch/report/sr15/>

<sup>23</sup> European Commission, “A Clean Planet for all: A European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy”, 28 November 2018 available at [https://ec.europa.eu/clima/policies/strategies/2050\\_en](https://ec.europa.eu/clima/policies/strategies/2050_en)

<sup>24</sup> European Systemic Risk Board Advisory Scientific Committee Report No 6, 2016 available at [https://www.esrb.europa.eu/pub/pdf/asc/Reports\\_ASC\\_6\\_1602.pdf](https://www.esrb.europa.eu/pub/pdf/asc/Reports_ASC_6_1602.pdf)

Current levels of investment are not sufficient to support a climate-resilient, sustainable economic system that mitigates climate change and stops depletion of natural capital (air, water, land and biodiversity). More private capital flows need to be oriented towards sustainable investments to close the wide yearly gap of additional investments needed to meet the EU's 2030 targets under the Paris Agreement (estimated at EUR 180bn<sup>25</sup>). Likewise, even more investments will be needed to achieve climate neutrality by 2050 and to make progress with further environmental objectives of the EU in the field of water, resource efficiency and the maintenance of healthy ecosystems. Moreover, many of these investments are concentrated in sectors related to the energy and resources efficiency, such as transportation, real estate or infrastructures. They correspond to fixed assets enabling a low carbon economy. Given these assets are mainly financed by debt, a large portion of the climate/environmental/social funding gap will have to be financed by bond markets.

Investors and issuers of financial instruments need common metrics and definitions for what activities contribute positively to environmental objectives. Common language and harmonisation would enhance market efficiency and redirect financial flows to support transition towards a more sustainable economy. Time is of essence as the window of opportunity to act is closing – within the next decade or so – both in terms of keeping global warming well below a 2°C increase as well as avoiding possible environmental tipping points with respect to biodiversity, soil degradation, freshwater resources, etc.

### 1.3 THE INTERNATIONAL GREEN BOND MARKET

Green bond markets have grown fast in size and market coverage since the first green bond was issued in 2007 by the European Investment Bank (EIB), and represented by June 2019 a total of approximately EUR 550bn outstanding (EUR 100bn YTD)<sup>26</sup>. According to Moody's<sup>27</sup> global issuance has been largely dominated by issuers based in Europe, North America and Asia-Pacific but European issuers led with 40% of global issuance in 2018, up slightly from 37% in 2017.

Green bonds have given mainstream capital markets a quick way to map how the sustainability and green trends visible in the public debate are reflected in the real economy's investments and functions. Standardisation of this market was greatly facilitated in 2014 when the Green Bond Principles (GBP) were published by several banks, subsequently supported by the International Capital Market Association (ICMA) through a permanent secretariat and adopted by the vast majority of market participants.

The GBP is built around four key mandatory principles: (i) the description of the use of proceeds which need to finance assets and projects with positive environmental impacts, (ii) the requirement of a clear process for the selection of projects and (iii) a description how the funds are allocated or tracked, (iv) reporting on the use of proceeds with, if possible, information on the environmental impact of the projects. In addition, the GBP formulate several recommendations, including the

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<sup>25</sup> European Commission, "Sustainable finance: Making the financial sector a powerful actor in fighting climate change," 24 May 2018, available at [http://europa.eu/rapid/press-release\\_IP-18-3729\\_en.htm](http://europa.eu/rapid/press-release_IP-18-3729_en.htm)

<sup>26</sup> *Environmental Finance* data presented at the annual general meeting of the Green Bond Principles, ICMA, June 2019.

<sup>27</sup> *2019 Global Green Bond Outlook*, Moody's Investor Services, 31 January 2019, <https://www.moodys.com/newsandevents/topics/Green-Bonds-007034>

recommendation to obtain an external review and the recommendation for the issuer to explain the green bonds alignment with the issuer's overall strategy<sup>28</sup>.

Green bonds represent a small but growing share of the total bond market. After an initial period when it was dominated by development banks and agencies, the green bond market has now spread into all debt capital market asset classes from corporate issuers (investment grade and high yield), sovereign issuers, asset-backed securities, projects bonds, emerging market and private placements. Green bond markets now reflect the overall debt market.

Global green bond issuance increased to EUR 140bn in 2018 according to the preliminary data of Bloomberg NEF<sup>29</sup> and the Climate Bonds Initiative (CBI)<sup>30</sup>. Market growth slowed markedly to 3-5% (year on year) in 2018 compared to the 70-80% annual growth of in 2017. The sovereign segment of the green bond market grew, however, dynamically, issuance reached EUR 15bn in 2018 (64% year-on-year), Belgium and Ireland being the most important new issuers in 2018. As shown in the Figure 1, the issuance increased significantly again on the first quarter of 2019 (year on year). Green debt markets are continuously meeting investor demands, by developing new financial product such as green loans. Financial corporates were the most important issuer in 2018 with a total issuance of EUR 45bn, or 29% of the annual global total (14% in 2017).

According to research conducted by Moody's Investor Services, green bond issuances represented more than 2% of global bond issuances in the last two years, rising to 4.4% in the last quarter of 2018. In the European bonds market, the green, social and sustainability bonds, excluding government issuances, already represented, on average, 4-5% since 2017 and have risen constantly to reach approximately 10% of the total amount of bonds issued by European issuers in the last quarter of 2018 (see below).

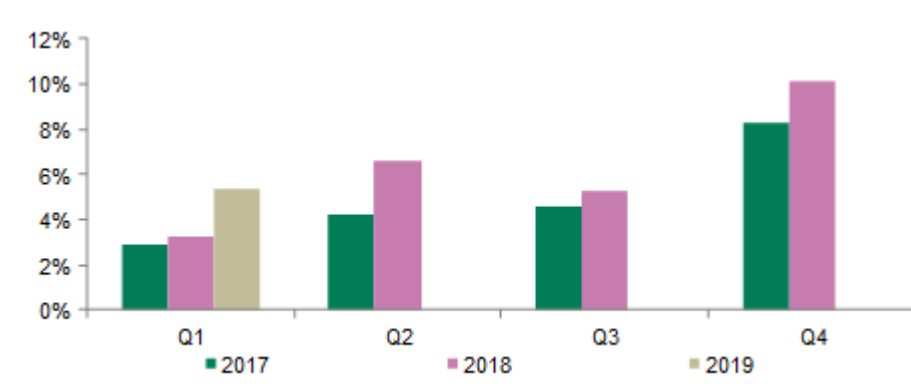
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<sup>28</sup> <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>

<sup>29</sup> <https://about.bnef.com/blog/sustainable-debt-market-sees-record-activity-2018/>

<sup>30</sup> <https://www.climatebonds.net/resources/reports/2018-green-bond-market-highlights>

**Figure 1: Market share of green, social and sustainability bonds in euros markets (courtesy of Crédit Agricole CIB Global Market Research)**



The amount or share of green bonds varies by jurisdictions, economic sectors or size of the issuers. Some of the underlying reasons are linked to the overall dynamics and accessibility of bond markets, whereas other factors may relate to the availability of green assets and factors that are further discussed in Chapter 2. For instance, in Sweden corporates and investors are knowledgeable about sustainability, which is high on the political agenda, and the domestic bond markets require a smaller issue size than Euromarkets. The majority of the Swedish issuers represent the real estate sector or municipalities, and the share of green bonds of all bonds issued in Swedish krona reached 11% in 2018<sup>31</sup>.

## 2 Rationale and fundamentals of EU Green Bond Standard

### 2.1 THE ROLE AND ADDITIONALITY OF GREEN BONDS

The international bond markets are mainly used to raise capital for general (corporate or public) purposes based on the risk profile of the issuer represented by its credit rating and the remuneration offered in the form of interest paid. Traditional bond investors focus on these parameters rather than on the use of proceeds. Bonds are therefore typically refinancing instruments where capital is raised on the strength of the entire balance sheet of the issuer and the optimal level of debt it can support. This maximises the spectrum of potential investors, including retail investors. The international bond markets generally prefer a large minimum issue size (from EUR 300 to 500 million) which is another reason for bonds being a refinancing instrument by nature as balance sheet financing allows for such scale.

**Green bonds represent a considerable innovation through their focus on green use of proceeds, tracking, impact reporting and external reviews.** They have provided bond investors with an unprecedented degree of transparency as well as a capacity to become involved in corporate strategies in a manner which was previously largely reserved to equity investors. It has also enabled bond markets to become a powerful force in green and climate mitigation finance. The development

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<sup>31</sup> Nordea/ Bloomberg data

of a straightforward and practical approach to asset classification and impact measurement has already fostered accountability and comparability in green finance and the green economy.

**Concerns have been raised that the role of green bonds in financing new and especially additional green and climate mitigation projects has been limited.** The criticism is often that these projects would have in any case been funded by the mainstream bond markets. This arises arguably as the result of a misunderstanding of the structural refinancing role of bonds as described above and from a confusion with project bonds that have fundamentally different characteristics from other bonds.

On the first point, the debt capital markets offer many options for issuers wishing to raise money against their balance sheets and to re-finance projects. This has been especially true in the context of recent and ongoing favourable market conditions. **Green bonds however ensure that refinancing occurs in a manner that is directly linked to the issuer's sustainability objectives and highlights them to all stakeholders.** Projects that are being refinanced through green bonds are presented with full transparency and benchmarked against green definitions and taxonomies with the input of external reviews. The reliable clarification permits the issuer to explain how their use of proceeds contributes to sustainability and permits investors to assess and monitor the development of the green component over time, creating a positive incentive to change. This does not occur with other types of mainstream debt finance. **Refinancing also of course makes additional funds available that can be reinvested into new green projects or to finance an issuer's overall transition strategy.** These projects can be in turn refinanced by new green bonds and so on.

**On the second, project bonds are a small market** that especially finances infrastructure and where investors take a portion of the completion and/or performance risk of the project itself rather than the balance sheet of a corporate. In 2017, the international project finance market amounted to only EUR 58bn<sup>32</sup> corresponding to approximately 1% of bond issuances, or less than 50% of the global green bond market in that year. The green bond market is therefore already a much larger market than project bonds and one that successfully combines the refinancing approach of the mainstream bond markets with innovative visibility and benchmarking on green projects.

Nonetheless, the concerns raised lead to legitimate questions on the actual role of green bonds and their contribution to sustainability. **The benefits of green bonds can be summarised as follows:**

**Converting bond markets to green:** Green bonds have momentum in the international bond markets and are converting increasing number of issuers. This is important because (i) the capital flows being channelled to green projects are now without doubt substantial (EUR 140bn in 2018), (ii) issuers are committing themselves to unprecedented levels of transparency and reporting on their green projects and (iii) are building an investor base that is committed to green issuers and has an inherent interest in follow-on green issues. As outlined above, according to Moody's Investor Services<sup>33</sup>, green bond issuances represented more than 2% of global bond issuances in the last two years, rising to 4.4% in the last quarter of 2018. This may still seem a modest number, but it has more than doubled in 2 years. Bringing this back to the European bonds market, where green bonds have

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<sup>32</sup> Source PFI CA CIB, *Project Bond Focus 2018 – Fundamentals*

<sup>33</sup> *Data from: 2019 Global Green Bond Outlook*, Moody's Investor Services, 31 January 2019, exhibit 5 on page 5  
<https://www.moodys.com/newsandevents/topics/Green-Bonds-007034>

made the most progress, issuance represented 5.3%<sup>34</sup> of the total amount of non-government bonds issued in Europe in 2018, whilst the share of green bonds of all bonds issued in Swedish krona reached 11%.

**Enabling corporate and institutional transition:** Green bonds create unprecedented market, and in some case media, visibility on the sustainability projects of both public and private issuers. The overwhelming majority of these issuers are aligned with the GBP which have been increasing the emphasis on issuers communicating an overall transition strategy to the market and their investors by recommending that issuers position their green projects within their “overarching objectives, strategy, policy and/or processes relating to environmental sustainability”<sup>35</sup>. Issuers are subject to intense scrutiny from investors as well as from civil society on this point. At the issuer level, many executives have also testified within the context of regular feedback to the GBP Executive Committee that the process associated with green issuance represents a strong in-house knowledge sharing and awareness building exercise that connects the treasury, business, sustainability, investor relations and reporting functions with the corporate organisation in a way that is seen as an important and unforeseen benefit.

**Making green and climate investible:** the green bond market has considerably progressed the debate on what is green by facilitating the emergence of both market-based and regulatory definitions of green eligibility and their transparent comparison<sup>36</sup>. These include for example the high-level project categories of the GBP, the Climate Bonds Taxonomy<sup>37</sup>, and People’s Bank of China Green Bond Catalogue and the MDB-IDFC Common Principles for Climate Change Tracking<sup>38</sup>. In parallel, an ecosystem of firms and organisation drawn from the academic, audit, rating and consulting worlds (referred to collectively as “external reviewers”) has developed to provide advisory services on how to interpret and verify green projects. This ecosystem has allowed the markets to invest with much greater confidence in green projects without being held back by the detail of ongoing scientific or academic debates on green definitions. The European Commission’s objective to develop a Taxonomy builds on the classifications that have been developed for the international green bond market.

**Progressing the policy debate on green finance:** the green bond market has also provided policy makers an example of a largely market driven and successful initiative addressing green challenges and climate change mitigation. This has stimulated debate on how it may be further supported and how it may inform wider policy initiatives. This is illustrated by the European Commission’s own plans as reflected by this report and by the work of the TEG, as well as the previous report from the HLEG. The G20 has also recognised the significance of the emergence of the green bond market both in official statements and through the reports of the G20 Green Finance Study Group<sup>39</sup>. A number of governments have developed public policies to facilitate the issuance of green bonds. This has been

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<sup>34</sup> Source CA CIB

<sup>35</sup> Green Bond Principles June 2018

<sup>36</sup> For a detailed analysis: China Green Finance Committee and EIB, White Paper on the Need for a Common Language in green Finance”, November 2017” <https://www.eib.org/attachments/fi/white-paper-green-finance-common-language-eib-green-finance-committee.pdf>

<sup>37</sup> <https://www.climatebonds.net/standard/taxonomy>

<sup>38</sup> [https://www.eib.org/attachments/documents/mdb\\_idfc\\_mitigation\\_common\\_principles\\_en.pdf](https://www.eib.org/attachments/documents/mdb_idfc_mitigation_common_principles_en.pdf)

<sup>39</sup> G20 GFSG (2016) Green Bonds: country experiences, barriers and options, G20 Green Finance Study Group, Prepared by the OECD, ICMA, CBI, and the Green Finance Committee (GFC) of China Society for Finance and Banking. The lead authors are Ma Jun (People’s Bank of China and GFC), Christopher Kaminker (OECD), Sean Kidney (CBI) and Nicholas Pfaff (ICMA).



the case in China (government guidelines for green bond issuance in various sector, capital and repo rates incentives), France (official label for green funds), ASEAN countries (definition of an ASEAN Green Bond standard) and India (listing disclosure requirements for Green Bonds on the Securities Exchange Board of India). Furthermore, ISO is currently developing a Green Bonds Standard (ISO 14030).

**Expanding the green loan market:** Green bonds have facilitated further green debt financing by creating frameworks, processes and criteria that can for the relevant part be applied to green loans to corporates, SMEs and households. These loans are refinanced on capital markets with green bonds issued by the commercial and development banks in line with the banks role of intermediating capital and thus **widening the scope of green financing** to a wider group of borrowers and products.

## 2.2 BARRIERS TO GREEN BOND MARKET DEVELOPMENT

As discussed earlier, the green bond market has grown steadily in all debt asset classes during recent years and is not faced with any major market dysfunction. That said, the pricing advantage experienced by some issuers and the relatively low liquidity of green bonds in the secondary markets indicates an imbalance between investor demand and insufficient supply from issuers.

Based on discussions with market participants, the TEG has acquired the conviction that this relative lack of supply can be mainly attributed to the difficulty for some potential issuers to reach sufficiently clear views on the relative advantages of green bond issuance versus other financing options and concerns related to unclear definitions of what is green that may lead to potential reputational risks. More specifically, the current barriers to the market's further development can be summarised as follows:

**Lack of eligible green projects and assets:** Most green assets financed with green bonds have been in renewable energy, real estate, green transport or sustainable water management. The public feedback received on the interim report highlights that currently the investor demand for green bonds outstrips the capacity of issuers to identify eligible green projects and assets for financing. Besides lack of real green investments this may be due to the uncertainty about what would be perceived as green by the markets. Direct policy measures will be needed to enhance real economy investments in green assets and infrastructure.

**Issuer concerns with reputational risks and green definitions:** Issuers will only proceed with green bonds if they do not create additional risks or liabilities compared to the alternatives. The issuance of green bonds entails choices related to the definition of green projects, to the reporting or to the issuance processes. In a limited number of cases, issuers have experienced reputational issues from negative market comments from media, NGOs, shareholders, etc. As a result, the fear of such adverse publicity for example because a deal is deemed "insufficiently green" has prevented some issuers from tapping the market. This is particularly true for issuers in economic sectors that are very important for the transition to a low carbon economy, but where the identification of green assets and projects is not straightforward.

**The absence of clear economic benefits for issuers:** For a company owning green assets, issuing a green bond implies relatively limited additional external costs compared with a standard bond

(usually less than EUR 40.000 corresponding principally relating to fees paid to the external verifier/reviewers). However internal costs related to the additional effort by issuers teams to manage the green bond process and related reporting requirements can be deemed to be substantial. As a benefit, the company usually experience a diversification of their investor base combined with higher demand providing benefits during the execution, which may be evidenced by lower new issue premium, or for larger and/or longer maturity transactions.

The pricing advantage from issuing a green bond, if any, appears to be small to date and not universal. Research in this area is inconclusive. A study by Schiereck (2018) shows that there are no significant price differences between green and similar conventional bonds. The same conclusion is reached from various banks on a selected number of corporate issuers. Another research piece by CBI (2018), Zerbib and Baker (2018) find a moderate green bond pricing advantage for the issuer (few bps). Karpf and Mandel (2017) find a lower green bond yield in secondary markets in comparison to conventional bonds of the same issuer. A recent JRC research<sup>40</sup> comes to a similar conclusion for primary markets. The pricing advantage is heterogeneous across types of non-governmental issuers. Recent research also seems to suggest that there is evidence that issuing a green bond could lead to lower long-term financing costs and could have a positive impact on share prices in the short-term<sup>41/42</sup>.

**Complex and potentially costly external review procedures:** There is a wide array of market practices for the external reviews related to green bonds, as well as potential conflicts and quality control issues. As summarised in Chapter 4, the market has seen a broad range of firms including credit rating agencies and non-financial rating agencies, auditing firms, academics, certification bodies, and environmental consulting firms provide external review services, before or after the transactions, and with very diverse approaches. As an example, in the current market, such external reviews may include a consideration on the ESG rating of the issuer (or not), rely on GBP projects categories (or not), may be valid for several transactions (or not), be a pre-issuance opinion or a post-issuance verification, etc. This large range of approaches provided by players with very diverse levels of expertise on environmental matters create uncertainties for issuers and investors on the actual value, quality and impact of the external reviews. It can also lead to duplication and increased costs.

**Labour intensive reporting procedures:** It is market practice that green bonds are associated with the publication of reporting on the projects and activities financed by such bonds. This reporting often includes information on the environmental impacts of these projects and is provided annually until the proceeds have been fully allocated. The preparation and maintenance of this reporting is typically perceived as a significant additional burden by issuers making issuance of a green bond less attractive. Issuers are indeed facing a general increase in reporting requirements, including on the non-financial side, and they are generally reluctant to add to their workload the requirements associated with a green bond reporting.

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<sup>40</sup> *The pricing of green bonds*, Serena Fatica Roberto Panzica Michela Rancan (European Commission – Joint Research Centre), <https://ec.europa.eu/jrc/en/publication/pricing-green-bonds-are-financial-institutions-special>

<sup>41</sup> *How do stock prices react to green bond issuance announcements?*, Dejan Glavas, ESCP PhD candidate, presentation at the EC Research conference “Promoting Sustainable Finance, January 2019, <https://ec.europa.eu/jrc/en/event/conference/promoting-sustainable-finance>

<sup>42</sup> *Greeniums and “Halo” effect – green bonds make financial sense*, May 2019, [https://www.natwestmarkets.com/content/dam/natwestmarkets\\_com/News-and-Insight/greeniums-and-halo-effect.pdf](https://www.natwestmarkets.com/content/dam/natwestmarkets_com/News-and-Insight/greeniums-and-halo-effect.pdf) , also quoted in: <https://www.marketsmedia.com/green-bonds-may-have-halo-effect/>, accessed 24 May 2019.

**Uncertainty on the type of assets and expenses that can be financed:** To date, green bonds have financed fixed assets, loans backed by such fixed assets, various type of capital expenditures linked to such green assets, but also various types of operating expenses and subsidies which are sometimes linked to green assets, and sometimes not. Clarification on what can constitute an eligible green use of capital would lift uncertainty and would increase the scope of projects that can be finance in a controlled and legitimate manner.

## 2.3 UNDERLYING PRINCIPLES OF THE EU-GBS

Green bonds have shown a remarkable capacity to develop and grow while at the same time serving the purpose of driving the awareness of sustainability in the economy and the financial markets at large. The EU-GBS aims to facilitate this development by further clarifying how economic activities can be combined with positive environmental impacts in a credible and measurable way. This also contributes to the EU's long-term competitiveness, as well as its economic and environmental resilience in multiple ways. To achieve this, it is important to create a standard that promotes market integrity while building on existing and successful market practice as represented by the GBP and the CBI. Accordingly, the EU-GBS should be underpinned by underlying principles that maximise its impact and acceptance in the European and international bond markets, as well as its relevance to all stakeholders.

**The EU-GBS should be a voluntary standard:** For any new transaction, any issuer of a bond or any other capital market debt instrument would have an option to align with the EU-GBS or choose to follow other practices. If the EU-GBS is followed, this would need to be verified by an EU accredited external verifier. The verification process and accreditation of independent verifiers are described in chapters 4. The TEG expects that, even if only voluntary, the EU-GBS would rapidly gain a large market recognition as issuers and investors would naturally push for the adoption of a standard supported by the EU and its implied reliability and integrity.

The rapid adoption of new market practices initially thought to be too ambitious has been a frequent phenomenon in green bond markets. For instance, features such as impact reporting, ex-post verification of allocations, external reviews, CBI certification, etc. were initially considered to be too complex and costly, but they have nevertheless become widespread standards thanks to market emulation.

**The EU-GBS should be built on market best practices:** As mentioned above, the European and international green bond market does not suffer from significant market dysfunction and it benefits from structured and reactive best market practice embodied by the GBP. This best practice is based on transparency and on the combination of guidance on green project categories, proceeds management, reporting and independent advice (referred to as External Reviews). These are applied by the vast majority of issuers and expected by investors, especially in Europe. The TEG has therefore decided to use them as a starting point for the EU-GBS.

**The EU-GBS should be both a European and international standard:** It is the TEG's recommendation to create a standard that most green bond issuers would be able to comply with over time and that could become an international best practice benchmark. As a result, the EU-GBS should be available for any type of issuer globally and could be applied to any type of bond issued in

different forms (listed/unlisted, public/private) and structure (ABS, covered bonds, project bonds, financial sector bonds, corporate bonds), provided the bond complies with all the requirements of the EU-GBS.

**The EU-GBS should be open to existing green bond transactions and to all types of issuers:** Current green bond issuers should have the option to align their existing bonds with the EU-GBS at their discretion (e.g., depending on the size and remaining maturity of the bond). The standard should be open to corporate issuers, all types of financial institutions as well as sovereign, sub-sovereign or agency issuers. This will enable its early adoption by all willing market players allowing the EU-GBS to become an important reference in the market relatively quickly.

**Recommendation #01: Create a voluntary EU Green Bond Standard.** *The TEG recommends that the European Commission creates a voluntary standard to enhance the effectiveness, transparency, accountability, comparability and credibility of the green bond market without disrupting the market, and to encourage bond issuers to issue their bonds as ‘EU Green Bonds’. A proposal for such a standard is presented in Annex 1. In order to respond to market demand the TEG further recommends that the EU-GBS should be created through a European Commission Communication to be published as soon as practicably feasible, and at the latest at the moment, when the Taxonomy Regulation has been agreed by the co-legislators.*

### 3 Proposal for EU Green Bond Standard and its Implementation

#### 3.1 ADDRESSING THE BARRIERS TO MARKET DEVELOPMENT

The EU-GBS and its related recommendations (see section 4 and 5) aim to address the barriers to the development of the green bond market identified in chapter 2. The table below summarises the barriers identified at this stage and how the EU-GBS seeks to address them.

**Table 2: EU-GBS responses to barriers to green bond market development**

Barriers to green bond market development	How the draft EU-GBS and related recommendations seek to address these barriers
<b>Lack of Green Projects</b>	<p>The EU-GBS builds on the proposed EU Taxonomy Regulation to clarify and potentially expand the universe of eligible Green Projects. Further, it can complement, but not substitute, policy measures that would directly increase real economy investments in green assets and operations.</p> <p>The development of green finance should be facilitated, and complemented by other types of direct policy measures and incentives in the real economy.</p>
<b>Issuers’ concerns with reputational risks and green definitions</b>	<p>The EU-GBS builds on the proposed EU Taxonomy regulation to clarify green definitions (see section 3.2.1).</p> <p>It also foresees a robust accreditation scheme for External Verifiers and a clarification of their role and responsibilities to verify green definitions, aiming to reduce controversies and thus reputational risks.</p> <p>Furthermore, reporting is expanded and standardised, requiring issuers to report</p>

	on impact as well as clarify up front their impact reporting methodology.
<b>Absence of clear economic benefits for issuers</b>	The standardisation represented by the EU-GBS, and its proposed endorsement by the European Commission, lays the basis for policy-makers to design policies and instruments to incentivise green bond issuance (if and when appropriate). Some potential incentives to support and stimulate market growth, both supply and demand side measures, are described in Section 5. They include a possible subsidy to offset the additional cost of external verification, and enhanced disclosure of EU-GBS holdings by institutional investors to indirectly stimulate demand.
<b>Complex and potentially costly procedures for reporting and external review</b>	Standardised verification process with a clear scope of services focusing on the essential components are expected to streamline the verification process, avoid duplication of effort and, ultimately, reduce costs of external reviews.
<b>Labour intensive reporting procedures</b>	The EU-GBS streamlines the reporting requirements by providing clarity on what is necessary in the Green Bond reporting. It simplifies the reporting requirements by distinguishing between the Allocation Reporting, which needs to be verified, and the Impact Reporting, for which verification is encouraged, but not required. Furthermore, only one Allocation Reporting is necessary for Green Bonds Programmes (programmes with several bond issuances under the same Green Bond Framework).
<b>Uncertainty on the type of assets and expenses that can be financed</b>	The EU-GBS defines and broadens the scope of eligible expenditures (see 3.2.1 and section 4 of Annex 1).

**The implementation of the EU-GBS would provide a robust market standard backed by the European Commission, which is a pre-requisite for policy-makers to design potential policy instruments to support market growth.** Such incentives and supporting measures can increase economic benefits for issuers and, ultimately, off-set any additional costs.

**Reputational risk and green definitions will be addressed through the link with the EU Taxonomy.** Issuers and investors will be able to refer to a common definition of green and sustainability thanks to the common reference provided by the Taxonomy (see section 3.3.1). This will significantly mitigate reputational risk in this area and alleviate market concerns about “greenwashing”. Specific recommendations on how the EU-GBS will work with the Taxonomy are provided (see section 3.3.1).

**The TEG proposes to clarify and standardise external review procedures.** External reviews will systematically take place both before and after issuance. They will focus on the verification of alignment with the EU-GBS, which notably requires explicit information on the substantive commitments of issuers in relation to impact reporting and the methodology applied. The latter will be detailed by all issuers in a comprehensive Green Bond Framework (see section 3.3.2 below).

**The ability of external reviewers will be safeguarded through an accreditation scheme, which** could be formalised through the regulatory supervision of these service providers. Until such a regulatory scheme is set up, a voluntary interim solution should be put in place as soon as practicable by market participants and stakeholders, with the support of the European Commission. Such

schemes are designed to bring further transparency to the process and content of external verification (see section 4).

**The EU-GBS expands the scope of green assets and expenditures that can be financed.** In addition to capital expenditure, relevant Research and Development costs, as well as selected operating expenditures and working capital that increase the lifetime or the value of the eligible green assets, can be included.

Sovereigns and sub-sovereign issuers can include relevant public subsidies and public investments in green expenditures.

Finally, the **advice on management of proceeds aligns the EU-GBS with the most recent market practice on tracking by equivalent amounts.** This should mitigate remaining anxieties of issuers, especially in the sovereign space, about requirements for potentially complex tracking procedures that can be incompatible with the legal parameters of government finance and national budgets.

## 3.2 PROPOSED DRAFT OF THE EU-GBS

**The TEG has prepared a draft of the EU-GBS attached in Annex 1.** The EU-GBS aims to address the issues identified above and provide the European Commission with a text in a format that could immediately serve as a voluntary standard or its basis. This section of the report is designed as a commentary on the draft EU-GBS. For a complete picture of what is being proposed, please refer to Annex 1.

The present draft directly draws on both the [“Informal Supplementary Document on Green Bonds”](#) published by the European Commission’s HLEG in January 2018, and the prevailing best market practices such as represented by the GBP.

The draft EU-GBS is composed of 4 sections: (i) Scope, (ii) Objective, (iii) Definition and (iv) Guidance on the Components (including Green Projects, Green Bond Framework, Reporting and Verification).

**The first two sections are short and concise, but comprise essential information concerning the high-level ambition of the EU-GBS,** in line with its underlying principles described above. Sections one and two confirm that the EU-GBS (i) is voluntary and draws on market practices as represented by the GBP; (ii) aims to enhance “transparency, integrity, consistency and comparability” of EU Green Bonds; and (iii) ultimately aims to increase “the flow of finance to green and sustainable projects”.

**Section three of the draft provides a clear definition of an EU Green Bond** as any type of listed or unlisted bond or any other capital market debt instrument issued by a European or international issuer, as long as three requirements are met: (i) the issuer’s “Green Bond Framework” needs to explicitly affirm the alignment with the EU-GBS; (ii) the proceeds will finance or re-finance “Green Projects”; and (iii) the alignment of the EU-GBS is verified by “an accredited External Verifier”. Both the reference to a “Green Bond Framework” and to accreditation of the External Verifier represent innovations compared to current market practice. These are explained in further detail below in the commentary on the components of the EU-GBS.



**Section four of the draft EU-GBS echoes existing market practices while introducing innovations and being more granular in many of its recommendations.** It also establishes the critical link with the EU Taxonomy, as well as with other recommendations in this report, namely the accreditation of external verifiers and more comprehensive reporting by EU-GBS issuers.

## 3.3 CORE COMPONENTS OF THE EU-GBS

### 3.3.1 Green Projects

**Detailed guidance is provided on the interpretation of the EU Taxonomy.** Green Projects are required to be aligned with the EU Taxonomy while acknowledging that the latter will be rolled out progressively over time and has been designed to identify a broader spectrum of sustainable activities than only assets. Indeed, the draft Taxonomy Regulation put forward by the European Commission in May 2018 includes a roadmap for the Taxonomy to be finalised, step-by-step, through a series of delegated acts scheduled for publication between now and 31 December 2022. Also, some of the Technical Screening Criteria for the environmental objectives, sectors and economic activities will be quantitative, while others will be qualitative and principle-based. It is therefore assumed that there will be a degree of interpretation necessary for the market participants – especially issuers and verifiers – to apply the Taxonomy and its Technical Screening Criteria when using the EU-GBS. This is consistent with the philosophy of a voluntary standard. The assumption is also made that the accreditation process of the verifiers will be robust and that there will be further guidance available by the EU Platform on Sustainable Finance, which will allow for a dialogue on the interpretation of the Taxonomy during a transition and build-up phase.

This dialogue will notably take into account the fact that the proposed Taxonomy Regulation incorporates high-level ‘fundamental principles’, i.e. that projects must (i) “substantially contribute” to one or more of the EU Taxonomy’s environmental objectives (‘the Environmental Objectives’, as defined in Article 5-11 of the Taxonomy Regulation), while (ii) not significantly harming any of the other objectives (‘Do-no-significant harm criteria’, as defined in Article 12) and (iii) complying with the minimum social safeguards represented by the principles and rights set out in the eight conventions identified in the International Labour Organisation’s declaration on Fundamental Rights and Principles at Work (‘Minimum social safeguards’, as defined in Article 13). Moreover, it also includes ‘Technical Screening Criteria’ (referred to as ‘the Technical Screening Criteria’) including overarching principles, metrics and related thresholds on sectors that are deemed environmentally sustainable (Article 14).

More specifically, issuers and external verifiers will look to the fundamentals of the EU Taxonomy to verify the alignment of Green Projects in the following circumstances:

- During the transition period until the EU Taxonomy and Technical Screening Criteria are fully available;
- In “specific cases”, when Technical Screening Criteria are considered “not directly applicable” by the issuer because of the “innovative nature, the complexity, and/or the location” of the Green Projects.

It is important to underline that the flexibility provided in “specific cases” is intended to be interpreted narrowly and in situations where there are genuine issues with the application of the Technical

Screening Criteria. It has been introduced to recognise that any classification system such as the Taxonomy may not be able to reflect the pace of technical innovation, as well as anticipate the full complexity of economic and corporate activities or all the specificities of national or regional circumstances. In these situations, in addition to the fundamentals of the Taxonomy, issuers and external verifiers can also look to developments in other authoritative taxonomies and classifications. The possibility for the future EU Platform on Sustainable Finance to give guidance in these circumstances is also under discussion.

**The scope of eligible expenditures is more clearly defined:** Existing market practice does not provide explicit guidance on how proceeds should be applied when differentiating between capital and operational expenditures (capex and opex), working capital, public expenditures, as well as intangible and intangible assets. Section 4.1 of the draft standard in Annex 1 provides greater clarity and specifies that Green Projects can include green assets and green expenditures that contribute to improving and maintaining the value of such green assets. More specifically:

- Green assets can include physical assets and financial assets such as loans. Green assets can be tangible or intangible, and they can include the share of working capital that can reasonably be attributed to their operation.
- Green expenditures can include any capital expenditure and selected operating expenditures such as maintenance costs related to green assets, that either increase the lifetime or the value of the assets, as well as research and development costs. For the avoidance of doubt, operating expenditure such as purchasing costs and leasing costs would not normally be eligible except in specific and/or exceptional cases as may be identified in the Taxonomy and/or future related guidance.
- Green expenditures for sovereigns and sub-sovereigns can also include relevant public investments and public subsidies.

In addition, it is specified that Green assets shall qualify without a specific look-back period provided that at the time of issuance they follow the eligibility criteria listed above, while Eligible green operating expenditures shall qualify for refinancing with a maximum three [3] years look-back period before the issuance year of the bond.

These clarifications may prove valuable to issuers as they **widen the scope of allowable use of proceeds in a manner that is both consistent with how financial flows actually fund and facilitate projects while also preserving the integrity of the use of proceeds**. It also acknowledges specific requirements for sovereign and public issuers reflecting their growing importance as issuers in the green bond market.

### 3.3.2 Green Bond Framework (GBF)

**The role of the Green Bond Framework (GBF) is formalised.** Many issuers in the green bond market develop “frameworks” to provide information especially on their future issues and on the type of projects that will be financed, but there is no unified practice. Section 4.2 of the standard expands and formalises what needs to be included in a GBF to make it a comprehensive document for the information of investors and other market participants. The draft standard foresees inclusion of the

use of proceeds to be specified in the legal documentation and requires the GBF to include the following:

1. The Environmental Objectives of the EU Green Bond and how the issuer's strategy aligns with such objectives, as well as their rationale for issuing.
2. The process by which the issuer determines how Green Projects are in line with the EU Taxonomy, and, if applicable, qualitative or quantitative Technical Screening Criteria
3. A description of the Green Projects to be financed or refinanced by the EU Green Bond. In cases where the Green Projects are not identified at the date of issuance, the issuer shall describe where available the type, sectors and environmental objectives of the potential Green Projects.
4. The process for linking the issuer's lending or investment operations for Green Projects to the EU Green Bond issued. The issuer shall track the amount allocated to Green Projects in an appropriate manner and documented through a formal internal process, until such amount equals the net proceeds;
5. Information on the methodology and assumptions to be used for the calculation of key impact metrics (i) as may be described in the EU Taxonomy, where feasible; and (ii) any other additional impact metrics the issuer will define<sup>43</sup>.
6. A description of the Reporting (e.g. envisaged frequency, content, metrics).

The GBF thus becomes a document covering issuer alignment with the Taxonomy, project selection and future reporting including impact. It also integrates the concept of "management of proceeds" already present in the GBP while simplifying it so that tracking focuses on equivalent amounts allocated to Green Projects. This reflects the evolution of market practice, especially with respect to the constraints for example faced historically by corporate and public issuers when considering the more onerous practice of segregating bond proceeds in order to apply them directly to Green Projects.

If the issuer wishes to use a GBF that captures also other products and frameworks, it needs to clearly distinguish when and how the EU-GBS is applied in the Framework, also for reporting and verification. In this respect it is important to note that subsequent changes to the Taxonomy will not apply to outstanding EU Green Bonds (grandfathering). Conversely new issues shall be aligned with the most recent version of the Taxonomy as relevant to their Green Projects. Annex 2 provides a high-level overview of the content of the GBF and Annex 3 provides reporting content as well as required external review.

### 3.3.3 Reporting

**Reporting requirements are specified.** The current market practice is to report on the allocation of funds to Green Projects regularly, at least annually until full allocation. The reports include information on the proceeds raised by an issuer with a green bond and information on the amounts allocated to

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<sup>43</sup> See following footnote below.

Green Projects. Amounts are reported for different sectors, and reporting is given either on a project-by-project basis or on a portfolio basis. Furthermore an increasing number of issuers provide investors with impact reporting, either on a project-by-project basis or on a portfolio basis. Impact reports contain quantitative impacts, and qualitative impacts where reporting on quantitative impact is not feasible. The reports outline the metrics as well as the methodologies and assumptions used. Guidance on key impact metrics for several project types and sectors has been developed by green bond market participants<sup>44</sup>.

Based on existing market practice two types of reporting are required under the EU-GBS: **Allocation Reporting** and **Impact Reporting**.

Allocation Reporting shall include:

- A statement of alignment with the EU-GBS;
- A breakdown of allocated amounts to Green Projects at least on sector level – however more detailed reporting is encouraged;
- The regional distribution of Green Projects (recommended on country level).

Impact Reporting shall include:

- A description of the Green Projects;
- The Environmental Objective pursued with the Green Projects;
- A breakdown of Green Projects by the nature of what is being financed (assets, capital expenditures, operating expenditures, etc.);
- The share of financing;
- Information and, when possible, metrics about the projects' environmental impacts, which needs to be in line with the commitment and methodology described in the Issuer's GBF;
- If it has not been already detailed in the GBF, information on the methodology and assumptions used to evaluate the Green Projects impacts.

Allocation Reporting and Impact Reporting can be either on a project-by-project level or on a portfolio level, where confidentiality agreements, competitive considerations, or a large number of underlying projects limit the amount of details that can be made available.

Allocation Reporting and Impact Reporting shall be published on the issuer's website or any other communication channel. The Green Bond Framework (relevant at the time of issuance), Final Allocation Report and Impact Report published upon full allocation shall remain available until maturity of such EU Green Bonds, unless replaced by further reports in case of material changes of allocation. The same applies for the relevant external reviews as described in the Section 4.4. of the GBS in Annex 1. This is particularly important for long-term bonds with a maturity of ten years or more.

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<sup>44</sup> Note: Guidance on impact metrics is available from a broad range of sources including, for example, the *Handbook Harmonized Framework for Impact Reporting* published in June 2019 by the ICMA / Green Bond Principles (see: <https://www.icmagroup.org/green-social-and-sustainability-bonds/resource-centre/>) ; the *Position paper on Green Bond Impact reporting* published by a group of Nordic Public Sector Issuers in January 2019 (see: <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Resource-Centre/NPSIPositionpaper2019final-120219.pdf>) or the *IRIS+ is the generally accepted system for measuring, managing, and optimizing impact*, published by the Global Impact Investors Network (see: <https://iris.thegiin.org/>)

Annex 3 provides templates for both Allocation Reporting and Impact Reporting. Recommended draft reporting formats are further included, while leaving issuers the flexibility to adapt them as may be necessary.

### 3.3.4 Verification

**Verification becomes mandatory and accreditation of External Verifiers is required.** As mentioned above, the draft EU-GBS is a standard requiring verification, which aligns it with leading best market practices. This is further exemplified by both pre-issuance verification focused on the GBF and post-issuance verification covering the alignment of actual use of proceeds with the GBF, the taxonomy and the use of funds. Verification of estimated impact reports is not mandatory.

Verification will only be provided by external verifiers that have been formally accredited. The high-level criteria of the accreditation are listed in the draft and reference among others codes of conduct, professional qualification, and the application of standardised procedures. This is covered *in extenso* in chapter 4.

External Verification(s), and any subsequent ones, shall be made publicly available on the issuer's website and through any other accessible communication channel as appropriate. The External Verification of the GBF shall be made publicly available before or at the time of the issuance of its EU Green Bond(s). External Verification of the Final Allocation Report shall be made publicly available together with the publication of the Final Allocation Report, or at the latest one year thereafter.

In line with guidance on external reviews developed by the GBF and additional guidance and directives for verification (so-called 'conformity assessments') provided by the ISO, the draft EU-GBS uses the generic term 'external review' to refer to two separate steps in its verification process: (i) an initial pre-issuance verification of the Green Bond Framework, and (ii) a (post-issuance) verification of the Final Allocation Report. Providers of external verification are referred to as (accredited) 'external review providers' or 'verifiers'.

## 3.4 IMPLEMENTATION OF THE EU-GBS

In line with the recommendation of the TEG on the voluntary nature of the EU-GBS, aimed at preserving the constant development and adoption of the best practices, on a voluntary basis, by the growing green bond market, it is proposed that the European Commission adopts a non-binding EU act, such as a Recommendation or a Communication, setting out the requirements that issuers, intermediaries or other third parties involved in the issuance or verification process would have to meet on a voluntary basis. The Communication or Recommendation would incorporate a finalised version of the proposed draft attached in Annex 1. The European Institutions, EU Member States and market participants should also implement as much as practicable the accompanying priority incentives to support the market adoption of the EU-GBS. Such potential incentives are described in chapter 5.

The TEG further recommends that the European Commission, for example through the EU Platform on Sustainable Finance, monitor the rate of adoption in the market and impact of the EU-GBS. After a period of up to 2-3 years, the European Commission should then evaluate if the standard has met its goals, especially of increasing the market-size while channelling financial flows towards climate

change mitigation and other EU Environmental Objectives in the EU Taxonomy, and of promoting market transparency and integrity.

**Recommendation #02: The EU-GBS should comprise four core components: (1) alignment of Green Projects with the EU Taxonomy, (2) Green Bond Framework, (3) reporting and (4) verification by accredited verifiers.** The TEG recommends that the EU-GBS should comprise clear and mandatory requirements related to (1) the alignment of Green Projects with the EU Taxonomy and how green bonds should take into account substantial contribution to the EU Taxonomy's Environmental Objectives, do-no-significant harm, social safeguards, and technical screening criteria (i.e. principles, metrics and thresholds) if and when they are defined by the EU Taxonomy. In addition, the standard should define (2) the scope and content of a Green Bond Framework (GBF) for issuer to provide details on all key aspects of the proposed use-of-proceeds, and its green bond strategy and processes at issuance. The EU-GBS should also comprise (3) requirements for period reporting on use-of-proceeds and environmental impacts, where possible, supported by quantitative metrics and (4) verification of conformity with the standard and related reporting on use-of-proceeds by accredited verifiers. The TEG believes that the most suitable European authority to design and operate such an accreditation regime for Verifiers would be the European Securities and Market Authority (ESMA).

The TEG's proposals for an accreditation regime for verifiers are described in further detail in the following chapter.

## 4 An accreditation regime for verifiers of the EU Green Bond Standard

### 4.1 EXTERNAL REVIEWS ARE COMMON MARKET PRACTICE AMONG EUROPEAN ISSUERS

External reviews are a commonly-used umbrella term that covers a wide spectrum of services from environmental consultancy, to verification against a standard or audits on use of proceeds. The Guidelines for external reviews<sup>45</sup> published by the ICMA with the Green Bond Principles in June 2018 recognise four major categories of external reviews: (1) second party opinions ('SPO'), (2) verification, (3) certification, and (4) green/social/sustainability ratings.

External reviews have become common market practice in the EU green bond market<sup>46</sup>. Recent research conducted by Luxembourg Stock Exchange (LuxSE)<sup>47</sup> for the TEG has shown that more than 85% of issuers use some form of pre-issuance review (also referred to as 'validation' in ISO standards<sup>48</sup> to confirm that requirements for a specific intended use are fulfilled), out of which almost all take the form of external reviews (98%). Recent research by CBI has also found that post-issuance

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<sup>45</sup> Guidelines for Green, Social and Sustainability Bonds External Reviews, ICMA/Green Bond Principles, June 2018, <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2018/Guidelines-for-Green-Social-and-Sustainability-Bonds-External-Reviews--June-2018-140618-WEB.pdf>

<sup>46</sup> Natixis Green Bonds 3:0, January 2017

<sup>47</sup> Luxembourg Green Exchange – report on the analysis of green bond external reviews and reporting – European Issuers, draft paper prepared for EC TEG, 11 September 2018 (unpublished)

<sup>48</sup> The ISO definition of the term "validation" is provided in the Glossary in Annex 6. The full reference is available online: <https://www.iso.org/obp/ui/#iso:std:iso:9000:ed-4:v1:en>

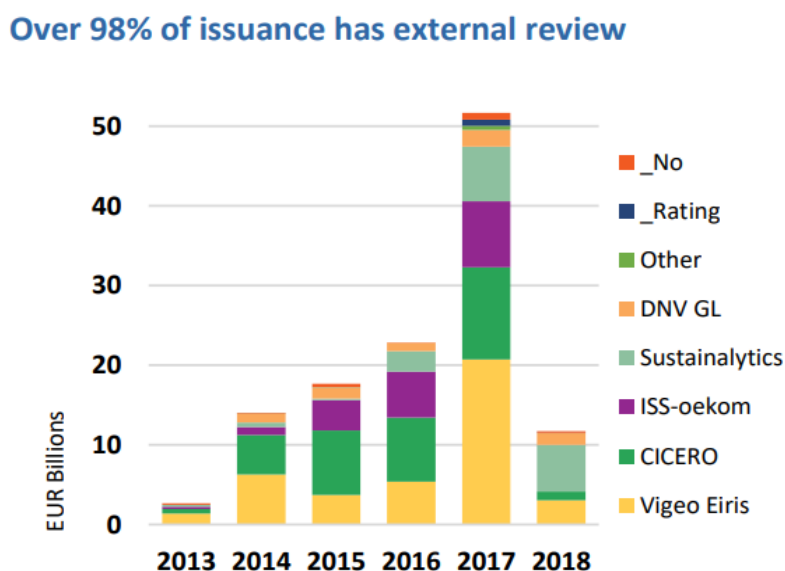


external reviews and reporting are positively correlated, i.e. an issuer's commitment to post-issuance external reviews seems to go hand-in-hand with post-issuance reporting<sup>49</sup>.

While post issuance third-party verification can be perceived as costly, as well as of variable quality and added value to the issuer and/or investor, it can strengthen the credibility of the information published by the issuer, protect the integrity of the market and reduce the risk of green washing. Another analysis conducted by Natixis<sup>50</sup> of 97 global issuer and reporting profiles showed that 64% of issuers had provided some sort of third-party opinion and impact measurements were included in the scope of the external verification for 27%. Most of these post-issuance verification statements (85%) were deemed to meet (or exceed) related professional standards of the auditing profession (i.e., IFAC/ISAE 3000).

According to recent research conducted by CBI the external review market is dominated by a relatively small group of mainly European service providers, which currently hold more than 90% of the external review market (see chart below).

**Figure 2: Amount of green bond issuance with external review (EUR bn)**



Source: [The Green Bond Market in Europe](#), CBI, June 2018. Market share in terms of value of outstanding green bonds by European issuers.

The current external review market can be divided into four types of organisations: (i) non-financial rating agencies specialised in second-party opinions: Vigeo-Eiris (recently acquired by Moody's), Sustainalytics, ISS-oekom and the research organisation CICERO; (ii) big-four audit firms (Deloitte, KPMG, PwC, EY) providing mostly post-issuance verification, so-called 'assurance' services; (iii) Credit Rating Agencies (Moody's, S&P Global Ratings, Fitch, as well as more recently Beyond

<sup>49</sup> Post-issuance reporting in the green bond market, Climate Bonds Initiative, March 2019, <https://www.climatebonds.net/2019/03/cbi-launches-post-issuance-reporting-green-bond-market>

<sup>50</sup> Natixis Green Bonds 4.0, January 2018, page 46.

Ratings<sup>51</sup>); and (iv) global technical inspection and certification bodies (e.g. DNV-GL, Bureau Veritas, TÜV, etc.).

Each of the four types of service providers currently active on the market can offer relevant skills and expertise for the future verification according to the emerging standards for sustainable finance, including (but not limited to) the EU-GBS. The future accreditation regime should build upon the existing pool of external review service providers, and ensure a level-playing field for companies that have the relevant skills to provide external review services in connection with the emerging standards in the EU.

An analysis of the current pool of external review providers, and of their respective relationship with existing accreditation and/or supervisory regimes in areas related to the green bond external review market, is provided in Annex 4.

## 4.2 THE CASE FOR AN ACCREDITATION REGIME FOR EXTERNAL REVIEWERS

According to research conducted by various market observers<sup>52/53</sup> the external review market is facing several challenges including<sup>54</sup>:

- relatively high(er) transaction costs for issuers, potentially limiting scaling of the market, if not offset by a pricing advantage<sup>55</sup>;
- potential lack of independence resulting in perceived or actual conflicts of interest;
- limited disclosure of environmental performance criteria;
- time-consuming and resource intensive process to develop robust sector-specific criteria for certification schemes;
- ambitious certification standards might be difficult to spread;
- post-issuance assurance statements do not systematically cover the environmental impacts of the projects funded by the bond;
- post-issuance verification might result in a requalification of the green bonds and the risk for investors to see their investments qualified as 'not-green';
- post-issuance verification can give rise to confidential price sensitive information that must be managed with due consideration (market sensitivity, legal and regulatory implications).

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<sup>51</sup> ESMA has registered Beyond Ratings SAS as Credit Rating Agency in March 2019. See: <https://www.esma.europa.eu/press-news/esma-news/esma-registers-beyond-ratings-sas-credit-rating-agency>. Beyond Ratings was acquired by London Stock Exchange Group in June 2019. See: <https://www.lseg.com/resources/media-centre/press-releases/london-stock-exchange-group-acquires-beyond-ratings>

<sup>52</sup> G20 GFSG (2016) Green Bonds: country experiences, barriers and options, G20 Green Finance Study Group, Prepared by the OECD, ICMA, CBI, and the Green Finance Committee (GFC) of China Society for Finance and Banking. The lead authors are Ma Jun (People's Bank of China and GFC), Christopher Kaminker (OECD), Sean Kidney (CBI) and Nicholas Pfaff (ICMA), [http://unepinquiry.org/wpcontent/uploads/2016/09/6\\_Green\\_Bonds\\_Country\\_Experiences\\_Barriers\\_and\\_Options.pdf](http://unepinquiry.org/wpcontent/uploads/2016/09/6_Green_Bonds_Country_Experiences_Barriers_and_Options.pdf)

<sup>53</sup> [Green bonds – a practitioner's roundtable to guide the development of effective & credible frameworks for external reviews](#) (WWF/EIB/14CE, June 2017), G20 study Group (2017).

<sup>54</sup> Adapted from: [Green Bonds: what contribution to the Paris Agreement and how to maximize it?](#), Institute for Climate Economics (I4CE), 2017 (see table 6 on page 10).

<sup>55</sup> For example, for a 500 million euro benchmark size bond issuance, a price-advantage of 1bts at issuance would be equivalent of a 50 000 euros cost saving, largely off-setting the average cost of external reviews.

ICMA with the GBP Executive Committee have taken a number of initiatives to promote the transparency and integrity of the external review market. Standardised templates for external reviews have been available since 2016 with their recommended public disclosure on a centralised online database hosted by ICMA. The *Guidelines for external reviews*<sup>56</sup> published by ICMA with the GBP in June 2018 were designed as a further initiative in support of market integrity. Among others, the Guidelines address the potential for conflicts, reference relevant ethical and professional standards and provide guidance on the process and content of external reviews.

However, these guidelines do not provide specific and standardised guidance on the nature and the extent of the procedures to be conducted for external reviews, nor do they spell out in detail the content of the reviewer's report or statement. As a result, there can be, for example, a certain confusion in the market about the added value of Second Party Opinions (SPOs) and the language and terms used in review reports, opinions or statements.

Recent research also seems to suggest that third-party verification is essential to reduce informational asymmetries, avoid suspicion of green (bond)-washing, and produce relatively more convenient financing conditions<sup>57</sup>.

The TEG recommends therefore that a verification programme to ensure alignment with the EU-GBS is standardised and that external verifiers are accredited. This is in line with the recommendations of the HLEG on Sustainable Finance, which advocated for the development of “[...] *accreditation requirements for external reviewers*”.

### 4.3 THE WIDER ROLE FOR A VERIFICATION MECHANISM OF THE EU TAXONOMY FOR FINANCIAL PRODUCTS

The proposed verification programme should create a level-playing field for external review service providers and enhance their comparability in the market so as to provide a robust model for the broader enabling ‘ecosystem’ of verification for green finance in Europe, which could also be relevant for other financial instruments beyond green bonds, such as green loans and private placements.

As a result, the TEG recommends that the European Commission, together with the co-legislators, finds the most suitable legal instrument to create such a regime for accreditation of verifiers, as soon as practicably feasible. This could take place for example through an amendment of the proposed Taxonomy regulation to create a verification mechanism of Taxonomy alignment for a broad range of financial instruments, including (but not limited to) green bonds. This is consistent with the European Parliament position on the Taxonomy Regulation, which proposes that, “*by 31 March 2020 the*

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<sup>56</sup> Guidelines for Green, Social and Sustainability Bonds External Reviews, ICMA/Green Bond Principles, June 2018, <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2018/Guidelines-for-Green-Social-and-Sustainability-Bonds-External-Reviews---June-2018-140618-WEB.pdf>

<sup>57</sup> Jua Bachelet, Maria & Becchetti, Leonardo & Manfredonia, Stefano. (2019). The Green Bonds Premium Puzzle: The Role of Issuer Characteristics and Third-Party Verification. Sustainability. 11. 1098. 10.3390/su11041098, quoted in <https://www.marketsmedia.com/green-bonds-may-have-halo-effect/>

Commission should, where appropriate, publish further legislative proposals on the establishment of a verification mechanism of compliance<sup>58</sup>.

Building on this proposal the TEG would encourage EU Member States to consider including amendments to the proposed Taxonomy Regulation that would allow financial market participants, including bond issuers, to have their taxonomy-related information verified on a voluntary basis.

In order to encourage appropriate, focused and reliable disclosure of taxonomy-related information, ESMA, in close coordination with the EU Platform on Sustainable Finance, could be mandated to set up a scheme for registration, authorisation, supervision and/or accreditation for third-party verifiers of Taxonomy-related information. If agreed by EU Member States, the European Parliament and the European Commission in the subsequent steps of the legislative process later this year, this could establish the legal foundation for a verification mechanism of Taxonomy alignment for a broad range of financial products, including green bonds.

#### 4.4 RECOMMENDED APPROACH AND MAJOR COMPONENTS AND CRITERIA FOR A FUTURE ACCREDITATION OF EU-GBS VERIFIERS

The overarching objective of the future regime for accreditation and supervision of EU-GBS verifiers is to promote the development of the European green bond market by improving the quality and the robustness of external review, verification/certification services through standardisation and harmonisation of existing practices for the EU-GBS, thus enhancing investor confidence.

The TEG has therefore reviewed a number of references for rules and processes that can apply to the verification and/or certification of the EU-GBS and related criteria for registration, accreditation and/or authorisation that might be relevant for the green bond market.

Accreditation is usually understood as “*the formal recognition by an independent body, generally known as an accreditation body that a certification body operates according to international standards*”. In the EU accreditation is usually a public sector activity and a not-for-profit activity” and specific principles and rules apply (see boxed text below).

##### **Box: Key terms and definitions related to accreditation, authorisation and supervision**

**“Accreditation” is usually understood as “the formal recognition by an independent body, generally known as an accreditation body that a certification body operates according to international standards”. It is designed to ensure that conformity assessment bodies (e.g. laboratories, inspection or certification bodies) have the technical capacity to perform their duties. Used in regulated sectors and voluntary areas, accreditation increases trust in conformity assessment. It reinforces the mutual recognition of products, services, systems, and bodies across the EU. In the EU accreditation is usually a public sector activity and a not-for-profit activity” and specific principles and rules apply<sup>59</sup>.**

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<sup>58</sup> See: European Parliament legislative resolution of 28 March 2019 on the proposal for a regulation of the European Parliament and of the Council on the establishment of a framework to facilitate sustainable investment (COM(2018)0353 – C8-0207/2018 – 2018/0178(COD), European Parliament, P8\_TA-PROV(2019)0325,

<sup>59</sup> Annex 7 includes detailed definitions of the term related to verification and accreditation that are used in this part.

**“Registration”.** The term registration is defined in the Credit Rating Agency Regulation<sup>60</sup>. A registration is the principal prerequisite for credit rating agencies to issue credit ratings intended to be used for regulatory purposes in the European Community. Registration and certification of credit rating agencies is one of ESMA’s supervisory responsibilities. For ESMA it is vitally important that the gateway to registered status is guarded diligently and applicants are granted registration only if they demonstrate their ability to meet all the regulatory requirements. The Credit Rating Agency Regulation lays down the harmonised conditions and the procedure for the granting, suspension and withdrawal of such registration<sup>61</sup>. However, currently credit rating agencies are not subject to registration for activities such as green bond assessments or evaluations (e.g., Moody’s Green Assessments<sup>62</sup> or S&P Global Rating’s green bond evaluations<sup>63</sup>) because they are not considered ‘ratings’<sup>64</sup>.

**“Authorisation”.** The term as also defined in the Credit Rating Agency Regulation and applies to entities located outside the European Union. Credit ratings that are related to entities established in third countries outside the EU that are subject to a legal and supervisory framework in that country may be considered equivalent under certain conditions.

**“Approval” or “Approved verifiers”.** The Climate Bonds Initiative (CBI) operates a private-sector labelling scheme for green bonds. For that purpose CBI operates a scheme of ‘approved verifiers’. Verifiers who wish to be recognised as ‘approved verifiers’ by CBI must demonstrate that they have sufficient competences and experience in three key areas<sup>65</sup>: (a) issuance of debt instruments in the capital market and management of funds within issuing organisations; (b) Technical characteristics and performance of low carbon climate resilient projects & assets; and (c) assurance procedures and provision of assurance services in line with accepted international standards (ISAE 3000 or equivalent). CBI also operates and maintains a public registry of ‘approved verifiers’, which is available on CBI’s website: <https://www.climatebonds.net/certification/approved-verifiers>

Most immediately relevant for the future regime of accreditation, authorisation and supervision of EU-GBS verifiers are also the requirements for ‘approved verifiers’<sup>66</sup> developed by CBI and the rules being elaborated by ISO in relation to its own work on a Green Bond Standard<sup>67</sup>, – which are expected to be based on ISO 17029<sup>68</sup>.

The table on the following page summarises the key components of the most important reference schemes that have guided the development of accreditation criteria for verifiers under the EU-GBS to date. Moreover, the International Alliance of Sustainability Standards (ISEAL) has also defined codes of good practice for assurance frameworks<sup>69</sup>.

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<sup>60</sup> Regulation (EC) No 1060/2009 of the European Parliament and of the Council of 16 September 2009 on credit rating agencies (Text with EEA relevance), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32009R1060>

<sup>61</sup> <https://www.esma.europa.eu/supervision/credit-rating-agencies/supervision>

<sup>62</sup> <https://www.moody.com/newsandevents/topics/Green-Bonds-007034>

<sup>63</sup> [https://www.spratings.com/en\\_US/products/-/product-detail/s-p-global-ratings-green-evaluations](https://www.spratings.com/en_US/products/-/product-detail/s-p-global-ratings-green-evaluations)

<sup>64</sup> The term "registration" used for voluntary interim registration scheme recommended in this report should not be understood as it is defined in the CRA regulation

<sup>65</sup> Page 6, Climate Bonds Standard and Certification scheme - Assurance framework – version 1.0., 5 October 2016,

<sup>66</sup> Referred to as ‘registered verifiers’ in this report.

<sup>67</sup> CD2 ISO 14030 Green Bonds, Committee draft 2 submitted to ISO member organisations in April 2018.

<sup>68</sup> Draft International Standard ISO/IEC 17029, *Conformity Assessment — General principles and requirements for validation and verification bodies*. Draft international standard submitted for vote and comments to ISO member organisation in December 2018.

<sup>69</sup> Assuring Compliance with Social and Environmental Standards, Code of Good Practice, ISEAL, March 2018: [https://www.isealalliance.org/sites/default/files/resource/2018-03/ISEAL\\_Assurance\\_Code\\_Version\\_1.0.pdf](https://www.isealalliance.org/sites/default/files/resource/2018-03/ISEAL_Assurance_Code_Version_1.0.pdf)

**Table 3: Key components currently being considered as accreditation criteria**

Item	Climate Bonds Initiative's approved verifier scheme <sup>70</sup>	Green Bond Principles (GBP)	International Standards Organisation (ISO)	ESMA regulation of Credit Rating Agencies
Professional codes of conduct related to business ethics, including conflicts of interest and independence	Reference to ISAE 3000 and ISEAL codes of good practices.	General guidance including external reviewer's credentials, statement of independence, and conflict-of interest policy.	General principle of impartiality and mechanisms for oversight of impartiality as well as very detailed requirements.	Article 6 "Independence and Avoidance of Conflicts of Interest of the CRA regulation sets out a number of requirements that CRAs must adhere to in order to ensure that the issuing of a credit rating is not affected by any existing or potential conflict of interest <sup>71</sup> . In order to ensure compliance with these requirements more specific organisational and operational requirements are set out in Annex I Section A and Annex I Section B of the CRA regulation.
Professional minimum qualifications and quality assurance and control.	The verification team must have the relevant experience to carry out the scope of the engagement and must be listed in the terms of the verification engagement.	General guidance including external reviewer's credentials.	Very detailed requirement including structural and resources requirements (personnel, competence of personnel), outsourcing, etc.	See Article 7 "Rating Analysts, employees and other persons involved in the issuing of credit ratings", requires that CRAs to ensure their rating analysts and employees have appropriate knowledge and experience for their duties. In Addition Annex I Section C sets out further "rules on rating analysts and other persons directly involved in credit rating activities".
Standardised procedures for external reviews.	Detailed <a href="#">Guidance for Verifiers</a> (version 1.0, January 2017).	General principles (objective, scope, analytical) approach, and/or methodologies).	Detailed verification programme described in Draft international Standard DIS ISO 17029 and Committee Draft CD ISO 14030(3).	Article 8(3) of the CRA Regulation requires that CRAs use rating methodologies that are rigorous, systematic, continuous and subject to validation. This Article is supported by detailed technical standards <sup>72</sup> developed by ESMA.
Scheme owner/operator.	Climate Bonds Initiative, a UK-based Charity	ICMA with Green Bond Principles Executive Committee	Any verification body (as defined in ISO 17029).	ESMA as the sole European supervisor of credit rating agencies.
Enforcement mechanisms/sanctions.	Contractual arrangement with approved verifier (" <a href="#">Verifier Agreement</a> ").	n/a	Depending on jurisdiction. Limited (peer review by International Accreditation Forum)	ESMA registration & supervision <sup>73</sup> in accordance with the CRA regulation <sup>74</sup>

<sup>70</sup> <https://www.climatebonds.net/certification/approved-verifiers>

<sup>71</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02009R1060-20150621>

<sup>72</sup> <https://www.esma.europa.eu/convergence/guidelines-and-technical-standards>

<sup>73</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02009R1060-20150621>

<sup>74</sup> The following legal requirements apply in these areas under CRAR: Article 14 "Requirements for Registration", Article 15 "Application for Registration" as well as Articles 16 and 17, 18 and 19. ESMA has issued technical standards which set out in more detail the information to be submitted as part of the registration process Delegated Regulation EU No 449/2012 on information for registration and certification of credit rating agencies: <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1422266306513&uri=CELEX:32012R0449>  
On enforcement/sanctions see also Annex III of CRAR for list of infringements.



## 4.5 FOUR OPTIONS FOR ACCREDITATION AND SUPERVISION

The TEG has analysed four different options for improved oversight and supervision of external review providers through accreditation to contrast and compare their respective benefits and drawbacks. These four options include:

- A) A centralised regime for authorisation and supervision by ESMA**, in close cooperation with the future EU Platform on Sustainable Finance. This option would need to be implemented through a legislative framework<sup>75</sup>, as ESMA currently holds no regulatory competence in this area. The overall aim of a centralised regime is to have in place one competent single body for the authorisation process and to ensure a fully harmonised supervision across all Member States. Depending on the choice of the legal instrument, the completion of the legislative process would be relatively time consuming (2-3 years) and would therefore require an interim regime to be put in place in the short term (see option D below).
- B) A decentralised regime, involving national competent bodies (national regulators, national ecolabelling authorities) in EU Member States** on a harmonised basis, possibly coordinated by ESMA in cooperation with other EU institutions (e.g. European Environment Agency, European Banking Authority (EBA), European Central Bank). As for option A, such a regime would also require a legislative framework, which would take 2-3 years to be completed by the EU legislative process.
- C) Do nothing, i.e., status quo and/or de-facto harmonisation with ISO 14030.** In the case that no European accreditation scheme is developed by the European Commission based on the advice from the TEG, the absence of regulatory action is likely to result in status-quo based on market-based best practice (e.g. *GBP Guidelines for external reviews*, CBI Approved Verifier scheme). It might also lead to voluntary adoption by the market of the future accreditation requirements currently being developed for the international standard ISO 14030(3), building on the international draft standard ISO DIS 17029 on conformity assessments.
- D) Market-based regime with European Commission participation**, in the form of an interim scheme convened by a market-based initiative in coordination with the future EU Platform on Sustainable Finance. Such a scheme would be drawing on existing and emerging market practice and would involve competent public and private institutions and other stakeholders. It could be set up, ad-hoc, as a transition regime, which could be operational very quickly. It would draw on the collective experience and expertise of the participating organisations, including the Approved Verifier scheme operated by the CBI, the *Guidelines for External Reviews* published by ICMA with the GBP, the verification process currently being developed under ISO 14030 and verification schemes operated for other sustainability standards (i.e., ISEAL). Such an approach could be envisaged to operate as an interim solution for the transition period until completion of the legislative process and full development of all components of the EU Taxonomy by the end of 2022.

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<sup>75</sup> i.e., either by adding an amendment to the proposed Taxonomy regulation or through amendments of existing regulation or a dedicated regulation.

A description of the respective benefits and drawbacks of each of the four options is provided in Annex 6.

## 4.6 RECOMMENDATION FOR AN ESMA-LED CENTRALISED ACCREDITATION REGIME FOR EXTERNAL VERIFIERS

After careful consideration of the benefits and drawbacks of each of the four options described above, the TEG is of the opinion that a centralised approach building on ESMA's core competences would be justified. ESMA can provide a unified approach and ensure a level-playing field at EU level. It already plays a comparable role for the Credit Rating Agencies (CRAs) that could potentially yield synergies with existing processes and procedures (e.g., for the avoidance of market abuse<sup>76</sup>), in particular given the fact that even under a scenario that assumes strong and continued growth in the green bond market the number of external reviewers to be accredited is expected to be relatively small<sup>77</sup>. Supervised CRAs have already started to offer these services and have acquired resources by taking over sustainability consultants. They are also increasingly integrating environmental aspect into their credit ratings.

Moreover, ESMA envisages environmental issues as becoming part of its mandate going forward. For example, ESMA has been asked to build capacity on sustainability for other purposes (MiFID II; fiduciary duty). Additional green expertise and capacity within ESMA will be required, and needs should be carefully assessed and quantified.

However, several potential challenges and drawbacks have been identified at this stage and need to be investigated by the European Commission. These include (but are not limited to) potential barriers for smaller providers and (relatively) high costs associated with ESMA supervision to be borne by verifiers, and which are likely to be transferred to issuers, thus increasing transaction costs. In the short term, it might prove challenging to achieve adoption by co-legislators, which would require the interim solution (Option D) to potentially operate for a long period (i.e. up to three years).

As a result, the TEG proposes to further develop and prepare the implementation of such a centralised approach over the coming months. This would require exploring, in close cooperation with ESMA and the European Commission, how such an authorisation and supervision regime, or potentially other alternative options such as ESMA registration inspired for certification under the Simple, Transparent and Standardised (STS) Regulation<sup>78</sup> could be implemented by ESMA (see Recommendation #02 described in section 3.4 above).

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<sup>76</sup> <https://www.esma.europa.eu/regulation/trading/market-abuse>

<sup>77</sup> Currently only six external review providers account for more than ¾ of the market. See: *CICERO Milestones 2018. A practitioner's perspective on the Green Bond Market*, November 2018, page 4, <https://www.cicero.oslo.no/en/publications/external/5887>. More detailed analysis is provided in Annex 5.

<sup>78</sup> <https://www.esma.europa.eu/press-news/esma-news/esma-defines-disclosure-standards-under-securitisation-regulation>

## 4.7 A VOLUNTARY INTERIM INITIATIVE TO SET UP A TRANSITION REGIME UNTIL THE LEGISLATIVE PROCESS IS COMPLETED

Notwithstanding the instrument that the European Commission will select to expand ESMA's current mandate for the purpose considered above, the TEG anticipates that it might take 2 to 3 years for the ESMA-led accreditation scheme to be fully operational. In order to respond to market interest and demand in the short term, the TEG has therefore started to explore how a market-based voluntary interim and/or mixed approaches could be developed for the transition period between now and the moment in time when the new legislative process to expand ESMA's mandate (as proposed in the previous section) is completed.

Based on the responses to the request for feedback published by the TEG in March 2019 several options were considered to develop concrete proposals as to how, and by whom, such a voluntary interim initiative could be developed and operated. More specifically, the TEG sought to provide proposals for an interim scheme for accreditation of external verifiers of the EU Standards on Sustainable Finance ("Voluntary Interim Registration Scheme" or "the Scheme") that addresses the following issues:

- **How should the Scheme be governed?** The TEG proposes to set up a multi-stakeholder advisory committee to advise the scheme, which should bring together the combined skills and competences of the European Supervisory Authorities (ESAs), technical subject matter experts with respect to the EU Taxonomy's Environmental Objectives, representatives of key market participants, representatives of the future EU Platform on Sustainable Finance, as well as organisations with hands-on experience in designing, setting up and operating verification schemes for sustainability standards. Naturally, advice on the application of the Taxonomy should be given by the entity that has the responsibility to develop it further i.e. the EU Platform on Sustainable Finance. The need for training of the verifiers will also be considered.
- **Who could be the operator of the interim registration<sup>79</sup> scheme for verifiers?** The scheme could be operated collectively or through a specific entity. According to ISO's international standards for conformity assessments (ISO 17029)<sup>80</sup> such a scheme can be operated by a legal entity, a so-called 'verification programme owner' or 'verification scheme operator';
- **How could the accreditation scheme be funded?** Various funding models, including government-funding, fees to be paid by the issuer and/or collected through registered verifiers, as well as other fee-based models have been explored.

The TEG identified three leading options that are summarised in the table below.

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<sup>79</sup> The term 'accreditation' in the EU usually means a public sector activity and specific principles and rules according to regulation 765/2008 apply. As a result, for the sake of consistent use of terms and definitions, the interim scheme described in detail in this section is referred to as a 'registration scheme', not an 'accreditation' schemes.

<sup>80</sup> According to *ISO/IEC Draft International Standard 17029 Conformity Assessment — General principles and requirements for validation and verification bodies* (December 2018), a 'scheme' or 'programme owner' can be a person or organization responsible for developing and maintaining a specific validation programme (3.4) or verification programme (3.7)

**Table 4: Advantages and disadvantages of options for an interim registration schemes**

Description	Scheme Operator /- owner	Funding model	Advantages	Disadvantages
<b>EU institution-led</b>	European Commission preferably anchored within the mandate of the future EU Platform on Sustainable Finance, and/or another EU institution	<ul style="list-style-type: none"> <li>Public sector funding</li> </ul>	<ul style="list-style-type: none"> <li>Strong ownership and control by European Commission institution would signal European Commission leadership and live up to the HLEG recommendation to create an 'official EU-GBS'</li> <li>Public ownership would strengthen link with future policy action</li> </ul>	<ul style="list-style-type: none"> <li>Implementation may be delayed by the need to establish the EU sustainability platform or identify an alternative appropriate and mandate setup within the EU</li> </ul>
<b>Market-based approach</b>	Potential scheme operators could include CBI, ICMA, and/or other European not-for-profit organisations with experience in sustainability standards	<ul style="list-style-type: none"> <li>Funded by financial and human resources (e.g. secondments) provided by governance members</li> <li>May require European Commission funding in addition to potential fees to be paid by registered verifiers</li> </ul>	<ul style="list-style-type: none"> <li>Continuity with current market practice, avoiding any disruption</li> <li>Existing organisational capacity and skills (e.g., CBI's approved verifier scheme) would accelerate set-up</li> </ul>	<ul style="list-style-type: none"> <li>Need to operate with a clear mandate and avoid any 'mission drift'</li> <li>Potential (perceived or actual) conflicts of interest of the scheme operator</li> </ul>
<b>Ad-hoc entity to be created as a private-sector sustainability standard</b>	Dedicated entity to be created building on experience of existing sustainability standards, in particular ISEAL members, and possibly drawing on operational experience the verification schemes set up by and for ISEAL standards	<ul style="list-style-type: none"> <li>Likely to require significant European Commission funding in addition to potential fees to be paid by registered verifiers</li> </ul>	<ul style="list-style-type: none"> <li>If successful, could become a permanent institution, hence reducing the need for European Commission regulatory action</li> <li>Could build upon experience of ISEAL network, which enjoys strong credibility with NGOs</li> <li>Expertise readily available within existing sustainability verification schemes</li> </ul>	<ul style="list-style-type: none"> <li>Likely to require significant funding to set-up and operate independent legal entity</li> <li>Might require several months to be up and running.</li> <li>Will require long-term commitment by founding partners</li> </ul>

Based on the analysis of the advantages and disadvantages described in Table 4 above, the TEG has developed a proposal for an voluntary interim registration scheme, to be set up firstly on a project and market-based approach to be substituted as soon as practicably feasible by an ESMA or EU-institution-led setup and preferably by the future EU Platform on Sustainable Finance. The European Commission should also explore options to ensure that the interim scheme is provided with sufficient funding to ensure effective operations during the transition period of up to three years. The verifiers registered under the interim scheme would be able to act as accredited verifiers to provide external verification services as required by the EU-GBS until a permanent accreditation process is set up by the relevant authorities.

**Recommendation #03: Encourage the set-up of a voluntary interim registration process for Verifiers of EU Green Bonds for an estimated transition period of up to three years.** While awaiting for the ESMA-led accreditation scheme to come into force and in order to respond to expected market demand in the short term, the TEG also recommends that an interim initiative be set up as soon as practicable, in close cooperation with the European Commission, the future EU Platform on Sustainable Finance, and ESMA, to oversee and operate a transition regime for registration and guidance of registered Verifiers. Such a voluntary interim registration scheme should (1) define robust criteria for Verifiers based on the core components proposed by the TEG (see chapter 4); (2) operate a registration process for verifiers that commit to comply with these criteria on a voluntary basis, (3) keep and maintain a public register of registered Verifiers; and (4) inform the European Commission and ESMA, at least annually, on the lessons learned in the implementation of the scheme. The TEG will engage with interested stakeholders to further develop and prepare the implementation of such as scheme over the coming months. A proposed outline of the mandate and governance of such voluntary Interim Registration Scheme is described in Annex 7.

## 5 Potential Incentives to support the EU Green Bond market

This chapter discusses potential incentive schemes that could contribute to establishing a ‘level-playing field’ between green bond issuers and issuers of conventional bonds, as well as specific incentives designed to further develop the market. Such incentive schemes should be geared exclusively towards bonds that comply with the requirements of the EU-GBS.

The identified incentives can be grouped into two main categories: (i) incentives that can be implemented relatively easily in the short-term, and in a cost effective manner; and (ii) incentives that could be more complex to implement, because they would require other authorities’ agreement, different competencies, or would require more time to be implemented. Incentives such as grants, subsidies or tax benefits, may need to include clawbacks in case of failures to meet defined standards or objectives such as measurable green benefits.

### 5.1 INCENTIVES THAT COULD BE IMPLEMENTED IN THE SHORT TERM

#### 5.1.1 Encourage investors to increase their holdings in EU Green Bonds

Investors, in particular European institutional investors such as asset managers, pension funds and insurance undertakings, as well as banks in their function as underwriter, play an essential role in developing and promoting best practices and standards.

They have done so successfully in the past (and continue to do so) through, *inter alia*, active participation in the design of the GBP, the development of the Climate Bonds Standard and, more recently the International Organization for Standards’ ISO 14030.

Some investors, including many European institutional investors, have also actively contributed to the promotion of standards by making their expectations known through public statements by investor associations, such as for example the *Green Bond Pledge*<sup>81</sup>, or the *Statement of Investor Expectations for the Green Bond Market*<sup>82</sup>.

This is why the TEG believes that investors should also consider using the requirements of the EU-GBS in their green fixed-income investment strategy and portfolios, and communicate their expectations clearly and actively through dialogue with green bond issuers and/or in public statements. Investment banks can also play a critical role in promoting the EU-GBS when assisting clients as lead advisors and/or underwriters.

***Recommendation #04: Investors, in particular institutional investors are encouraged to use the requirements of the EU-GBS when designing their green fixed-income investment strategies and to communicate their preference and expectations actively to green bond issuers as well as to underwriters. Investors, in particular European institutional investors such as asset managers, pension funds and insurance undertakings as well as banks in their function as underwriter play an essential role in promoting standards. The TEG recommends that investors use the requirements of the EU-GBS in their green fixed-income investment strategy and communicate their expectations actively in their investor dialogue with bond issuers.***

### **5.1.2 Disclosure of EU Green Bond holdings by European institutional investors**

The French experience with mandatory climate-related disclosures by institutional investors, under Article 173(vi) of the French Energy Transition for Green Growth Act adopted in 2017, has demonstrated how increasing transparency can play a significant role in triggering demand and spurring growth in the European green bond markets.

Mandatory disclosures for institutional investors, even under a flexible approach – such as for instance in France under Article 173(vi), where pilot testing are emphasised and investors are required to comply with these new requirements or explain why they do not apply to them ('comply or explain' approach) – can be an efficient tool in providing additional credibility to the EU Green Bond market, and in turn have a major impact on demand.

***Recommendation #05: The TEG welcomes the recent political compromise on the sustainability-related disclosures regulation<sup>83</sup> and recommends that the European Commission adopts an ambitious disclosures regime on green bond holdings for institutional investors. Through the development of delegated acts in the context of the sustainability-related Disclosures Regulation for institutional investors in the EU, the TEG recommends that the European Commission adopts an ambitious regime for periodic disclosure of EU Green Bonds and other green bond holdings***

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<sup>81</sup> <https://www.greenbondpledge.com/>

<sup>82</sup> [http://www.emergingmarketsdialogue.org/wp-content/uploads/2018/02/Statement\\_of\\_Investor\\_Expectations\\_for\\_Green\\_Bonds.pdf](http://www.emergingmarketsdialogue.org/wp-content/uploads/2018/02/Statement_of_Investor_Expectations_for_Green_Bonds.pdf)

<sup>83</sup> Sustainable finance: Presidency and Parliament reach political agreement on transparency rules, updated 26 March 2019: <https://www.consilium.europa.eu/en/press/press-releases/2019/03/07/sustainable-finance-presidency-and-parliament-reach-political-agreement-on-transparency-rules>



by institutional investors such as asset managers, pension funds and insurance undertakings. Underwriters should also disclose the portion of green bonds underwritten<sup>84</sup>.

Such a disclosure regime should be adopted by the European Commission, as appropriate, through delegated acts in relation to the Disclosure Regulation or other legal instruments to ensure that institutional investors are required to disclose the total amount of green bonds holdings that are aligned with the requirements of the EU-GBS.

The sector specific guidance for banks and insurance companies included in the TEG Report on Climate-related Disclosures<sup>85</sup> published in January 2019, recommends a type 2 indicator for this purpose: a Green Bond ratio. Likewise, the proposed draft new Guidelines on reporting climate-related information<sup>86</sup> published by the EC for consultation in February 2019, also contains a similar indicator under its further guidance for banks and insurance companies when carrying out investment or asset management activities. Asset owners are encouraged to use the same indicator.

More specifically for the public sector, the European Commission should encourage all types of public sector investors in the European Union to disclose their green bond holdings periodically at least once a year, either directly for European Institutions, or indirectly and in close cooperation with EU Member States. Last but not least the European members of the NGFS should encourage the members of the NGFS to adopt similar approaches.

### 5.1.3 Encourage Central Banks / Supervisors to lead by example to scale up green finance

Central banks and supervisors can play a central role in facilitating the mainstreaming of green finance. The Central Banks and Supervisors NGFS, issued<sup>87</sup> six recommendations for Central Banks, supervisors, policymakers and financial institutions to enhance their role in greening the financial system and managing environmental and climate-related risks. Central Banks and supervisors are encouraged to integrate climate-related risks into financial stability monitoring and micro-supervision, as well as, without prejudice to their mandates and status, to integrate sustainability factors into the management of some of the portfolios at hand (own funds, pension funds and reserves to the extent possible).

The TEG welcomes the network's initiative and recommends that the European System of Central Banks (ESCB), i.e., the European Central Bank (ECB) and the national central banks in the EU Member States, considers integrating sustainability criteria in their portfolio management frameworks

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<sup>84</sup> Specific metrics are provided in non-binding guidelines on non-financial reporting that are currently being revised. See: *Consultation document on the update of the non-binding guidelines on non-financial reporting*, European Commission, March 2019, [https://ec.europa.eu/info/sites/info/files/business\\_economy\\_euro/banking\\_and\\_finance/documents/2019-non-financial-reporting-guidelines-consultation-document\\_en.pdf](https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/2019-non-financial-reporting-guidelines-consultation-document_en.pdf)

<sup>85</sup> See the sector on sector specific guidance for banks and insurance undertakings in: *Report on climate-related disclosures*, EC Technical Expert Group on Sustainable Finance, January 2019 [https://ec.europa.eu/info/publications/190110-sustainable-finance-teg-report-climate-related-disclosures\\_en](https://ec.europa.eu/info/publications/190110-sustainable-finance-teg-report-climate-related-disclosures_en)

<sup>86</sup> *Consultation document on the update of the Non-Binding Guidelines on Non-Financial Reporting*, [https://ec.europa.eu/info/consultations/finance-2019-non-financial-reporting-guidelines\\_en](https://ec.europa.eu/info/consultations/finance-2019-non-financial-reporting-guidelines_en), published on 20 February 2019, section 5, page 29

<sup>87</sup> <https://www.banque-france.fr/en/financial-stability/international-role/network-greening-financial-system/first-ngfs-progress-report>

for own funds, pension funds and official reserves. Under that remit, ESCB member banks could consider supporting the EU green bond market through further investing in EU Green Bonds.

More specifically, due to its (monetary) policy portfolios, ECB, is already one of the world's largest investors in green bonds: under both its public sector and corporate sector purchase programmes, the ECB has already purchased 'green bonds' for a total amount of approximately 18bn euros<sup>88</sup>. Several (academic) authors have studied the interactions between monetary policy and climate change<sup>89</sup>.

The NGFS also considers exploring the interaction between climate change and central banks' mandates (beyond financial stability) and the effects of climate-related risks on the monetary policy frameworks, paying due regard to their respective legal mandates. The ECB is also already considering the links between monetary policy and climate change: In a speech at a conference organised by the German Bundesbank in November 2018 in Berlin, Benoit Coeuré, Member of the Executive Board of the ECB, argued that "[...] *the ECB, acting within its mandate, can – and should – actively support the transition to a low carbon economy, in two main ways: first, by helping to define the rules of the game and, second, by acting accordingly, without prejudice to price stability*"<sup>90</sup>

Within its core mandate to achieve price stability and taking into account market neutrality, the ECB should consider promoting greening the financial system by expressing and implementing a preference for EU Green Bonds when purchasing green bonds.

**Recommendation #06: Consider promoting greening the financial system by expressing and implementing a preference for EU Green Bonds.** The TEG recommends that the European System of Central Banks (ESCB) and the members of the Network for Greening the Financial System (NGFS) consider promoting greening the financial system by expressing and implementing a preference for EU Green Bonds when purchasing green bonds.

#### 5.1.4 Encourage banks to find ways to enhance pricing of green assets

When providing loans to finance green assets, some financial institutions have started to apply positive factors on a voluntary basis<sup>91</sup>. Such a calibration would aim at passing a better price than

<sup>88</sup> According to a recent ECB publication, the ECB currently hold around 24% of the eligible "green" universe, estimated to amount to some EUR 48 bn. Under the latter, we hold close to 20% of the eligible "green" corporate bond universe, which currently has an outstanding volume of EUR 31 bn. Under both programmes, the share hold in "green" eligible bonds mirrors by the EC, by and large, the share of our holdings of the entire eligible universe. see [https://www.ecb.europa.eu/pub/economic-bulletin/focus/2018/html/ecb.ebbox201807\\_01.en.html](https://www.ecb.europa.eu/pub/economic-bulletin/focus/2018/html/ecb.ebbox201807_01.en.html)

<sup>89</sup> See for example: *Why monetary policy should go green!*, Alexander Barkawi, CEP, May 18 2017, see: <https://ftalphaville.ft.com/2017/05/18/2189013/quest-post-why-monetary-policy-should-go-green/>  
*The climate impact of quantitative easing*, Sini Matikainen, Emanuele Campiglio & Dimitri Zenghelis, Policy Paper, May 2017, Grantham Research Institute on climate Change and the Environment, see: [http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2017/05/ClimateImpactQuantEasing\\_Matikainen-et-al-1.pdf](http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2017/05/ClimateImpactQuantEasing_Matikainen-et-al-1.pdf)  
Can Green Quantitative Easing (QE0) reduce global warming? Yannis Dafermos, Maria Nikolaidi & Giorgos Galanis, Foundation for European Processive Studies, July 2018, see: <https://www.fepe-europe.eu/attachments/publications/fepe%20qperc%20policybriefgreenqe.pdf>

<sup>90</sup> Speech by Benoît Coeuré, Member of the Executive Board of the ECB, at a conference on "Scaling up Green Finance: The Role of Central Banks", organised by the Network for Greening the Financial System, the Deutsche Bundesbank and the Council on Economic Policies, Berlin, 8 November 2018, <https://www.ecb.europa.eu/press/key/date/2018/html/ecb.sp181108.en.html>

<sup>91</sup> For example, as of January 2019 the French Bank Natixis (Groupe BCPE) has introduced a Green Weighting Factor for its financing deals to comply with Paris Agreement goals, see: [https://www.natixis.com/natixis/jcms/tpaz5\\_68794/en/natixis-innovates-on-climate-action-by-introducing-the-first-green-weighting-factor-for-its-financing-deals-to-comply-with-paris-agreement-goals](https://www.natixis.com/natixis/jcms/tpaz5_68794/en/natixis-innovates-on-climate-action-by-introducing-the-first-green-weighting-factor-for-its-financing-deals-to-comply-with-paris-agreement-goals)

conventional financial instruments to the corporates. A better pricing in green loans could trigger a higher demand for green financing instruments and therefore potential new green bond issuances from financial institutions for financing these green loans.

### 5.1.5 Provide financial incentives to support the EU Green Bond Market

The EC and the Member states have tools and mechanisms at their disposal that could be used to support the uptake of the green financing and EU-GBS. These may include co-financing or credit enhancements by partial public guarantees schemes provided by the European Institutions currently involved in the Investment Plan for Europe (so-called Juncker Plan), or Public Institutions in EU Member States<sup>92</sup> such as Export Credit Agencies, at limited cost for taxpayer. Such blended finance approach that combine private investment by partial public guarantees is likely to attract many investors by enhancing the risk profile of EU green bonds.

Several jurisdictions outside the EU, including China, Hong Kong and Singapore, have put in place incentives to support the development of their green bond market, e.g. by subsidising eligible green bond issuers in obtaining verification. The European Commission could create a scheme to subsidise – totally or partially – the additional cost associated with external verification of EU Green Bonds in order to equalise issuance costs with mainstream bonds.

If implemented during the transition period until the EU Taxonomy is fully available and given the fact that the external review market is dominated by European players and is of limited size (in the order of EUR 3-7.5m<sup>93</sup> in fees), such a programme would require relatively modest financial resources. However the impact on new issuance of such programs remains unclear.

**Recommendation #07: Consider developing financial incentives to support the EU Green Bond Market alignment with the EU-GBS.** The TEG recommends that the European Commission and EU Member States consider developing a full range of short- and long-term financial incentives to support the development of the EU Green Bond Market aligned with the EU-GBS.

### 5.1.6 Encourage EU public and private sector bond issuers to adopt the EU-GBS

The public sector has historically played - and still plays - a very important role in the green bond market. Public sector green bond issuances represented more than one third of global issuances of in 2018<sup>94</sup>. Indeed, in 2018 sovereign green bond issuers accounted for 11% of issuances and local

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<sup>92</sup> Such as, for example, *France Transition Ecologique*, which was recommended in a report prepared by Canfin/Zaouati for the French Ministries of Finance and Ecological and Fair Transition, see: Rapport Canfin-Zaouati : un plan Juncker vert à la française, December 2018 <https://financefortomorrow.com/2018/12/18/rapport-canfin-zaouati/> . The creation of France Transition Ecologique was announced on 23 May 2019, see: <https://financefortomorrow.com/2019/05/28/le-gouvernement-annonce-la-creation-de-france-transition-ecologique/>

<sup>93</sup> A back-of-the envelope calculation, assuming approximately 150 issuers across Europe with average prices for external verification services ranging between EUR 20-50k, this leads to a rough estimate of the total external review market in the order of EUR 3-7.5 million per year. As a result, a grant-scheme covering a maximum of 50% of the total costs of external verification is likely to offset the marginal cost of additional requirements. Using a conservative assumption that the total cost of external verification services is highly unlikely to exceed an upper limit of EUR 100k (e.g., 1btp for a benchmark issuance of a value of EUR 1 billion) and a 100% growth in issuers (= approximately 300 issuers in Europe) such a grant-scheme would cost the European taxpayer in the range between EUR 3-15 million annually.

<sup>94</sup> Data from: *2019 Global Green Bond Outlook*, Moody's Investor Services, 31 January 2019, exhibit 5 on page 5 <https://www.moodys.com/newsandevents/topics/Green-Bonds-007034>

governments, including regions and municipalities in the EU, for 4%, Government-backed entities accounted for 10% and multilateral agencies and development banks accounted for 9%. Public sector issuers have also been at the forefront of defining best market practices and it would therefore be natural for the European public sector to demonstrate leadership by endorsing the EU-GBS.

The private sector has also played an important role in developing the market and the leading European private sector issuers of green bonds have demonstrated strong commitments to support market growth, aiming for the highest standards. In December 2017, for example, nine industrial issuers of green bonds have publicly committed to support the green bond market as part of their strategies, financing policies and their active engagement in the reporting debate and dialogue with investors by signing the *Paris Green Bond Pledge*<sup>95</sup>.

Both public and private issuers can therefore play an important role in promoting and supporting the implementation of the EU-GBS.

***Recommendation #08: The TEG encourages all types of bond issuers to issue their future green bonds in conformity with the requirements of the EU-GBS. The TEG encourages all public and private sector bond issuers to use the EU-GBS for their future green bond issuances and communicate openly to which extent they plan to do so.***

This recommendation should cover public sector issuers including sovereign green bond issuers by EU Member States, local governments, including regions and municipalities across the EU, government-backed entities in the EU as well as bilateral and multilateral agencies and development banks, and private-sector entities, for example, where European investors have significant ownership. Such a public-sector support would greatly increase the credibility of the EU-GBS and thereby set an example for other issuers to follow. It would also contribute to enhancing the attractiveness of the green bond market for investors through market diversification and could trigger further market growth.

With respect to private sector issuers, this recommendation is addressed to all types of bond issuers, irrespectively whether they have already issued green bonds or not, be they corporate, industrial or financial companies, with or without public ownership.

### **5.1.7 Use the requirements of the EU-GBS as technical criteria for the future EU ecolabel for financial products**

Under the Sustainable Finance Action Plan the European Commission is currently also pursuing efforts to develop an EU Ecolabel for financial products<sup>96</sup> to provide retail investors desiring to invest in sustainable economic activities with more and better information.

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<sup>95</sup> Including: EDF, Enel, ENGIE, Iberdrola, Icade, Paprec, SNCF Réseau, SSE and TenneT, see: <http://sse.com/media/490746/Paris-Green-Bond-pledge-Pledge-text.pdf>

<sup>96</sup> The EU Ecolabel for Financial Products is currently being developed by Unit B5 - Circular Economy and Industrial Leadership, as well as Unit B1 - Finance & Economy of the Joint Research Centre (JRC) Directorate B - Growth and Innovation for the Directorate General for the Environment in collaboration with the Directorate General for Financial Stability, Financial Services and Capital Markets Union (DG FISMA) of the European Commission, see: [http://susproc.jrc.ec.europa.eu/Financial\\_products/index.html](http://susproc.jrc.ec.europa.eu/Financial_products/index.html)

While, of course, bonds are in most cases not directly available to retail investors, they represent an important share of the underlying components of financial products geared towards long-term retail investor targeted products such as pension savings schemes or life-insurance-related savings products. As a result, the minimum environmental performance that the EC is currently developing on the basis of the requirements of the EU Ecolabel Regulation<sup>97</sup> should take advantage of the additional disclosures on use-of-proceeds offered by green bonds and, more importantly, the impact reporting which is envisioned as a core component of the EU-GBS. The TEG is convinced that an explicit reference to the EU-GBS would enhance the use of the standard.

**Recommendation #09: Promote adoption of the EU-GBS through the EU Ecolabel for financial products.** *The TEG recommends that the European Commission explicitly prioritises the EU-GBS in the technical criteria that are currently being developed for the EU Ecolabel for financial products, especially for funds that may be referred to as 'green bond funds'.*

## 5.2 INCENTIVES THAT COULD BE MORE COMPLEX TO IMPLEMENT

In addition, the TEG has identified a second group of incentives that are more complex to implement because they require other authorities' agreement, different competencies in play and/or can have very different timelines. These incentives could work to enhance green investments at large and are not necessarily limited to green bonds.

These incentives will require further analysis by the EC as well as outreach and feedback from a broad range of stakeholders. They are included here for inspiration and for further development by the necessary parties.

### 5.2.1 Tax incentives

Tax incentives for EU Green Bonds could also support future market growth, in particular if applied at the level of financial or real assets. Given that EU taxation policy currently requires unanimity among Member States<sup>98</sup>, and it is therefore mainly a competence of individual Member States, the European Commission could encourage Member States to assess supporting the green bond market through tax incentives for assets located in the EU. These incentives could either be granted at issuer or investor level.

Examples of tax incentives in the fixed income market exist in jurisdictions outside the EU, such as, for example, in the area of clean energy are the U.S. federal government Clean Renewable Energy Bonds (CREBs<sup>99</sup>) and Qualified Energy Conservation Bonds (QECBs<sup>100</sup>) programmes.

Accelerated Depreciation Scheme (ADS) is another form of tax incentive. ADS refers to any one of several methods by which a company, for 'financial accounting' or tax purposes, depreciates a fixed asset in such a way that the amount of depreciation taken each year is higher during the earlier years

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<sup>97</sup> Regulation (EC) No 66/2010 of the European Parliament and of the Council of 25 November 2009 on the EU Ecolabel (Text with EEA relevance, <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex:32010R0066>

<sup>98</sup> [http://europa.eu/rapid/press-release\\_IP-19-225\\_en.htm](http://europa.eu/rapid/press-release_IP-19-225_en.htm)

<sup>99</sup> <https://www.energy.gov/savings/clean-renewable-energy-bonds-crebs>

<sup>100</sup> <https://www.energy.gov/eere/slsc/qualified-energy-conservation-bonds>

of an asset's life. Accelerated depreciation has therefore a positive impact on a company's profit-and-loss account cash flow (because of lower tax paid) during the first years of the life of a capital expenditure. Discounted Cash Flows and Net Present Value of the eligible green assets increase and make the investment more attractive. If granted only to capital expenditures that meet the requirements of the EU Taxonomy and are financed by green loans or green bonds, such incentives both (a) increase the number of green projects and direct more funds to these projects; and (b) favour green financing instruments (such as green bonds or green loans) to the expense of conventional financing instruments and offsetting the constraints of issuing a green financing instrument.

For illustration, the US tax-code currently allows companies to apply accelerated depreciation (called *Modified Accelerated Cost Recovery System* or 'MACRS'<sup>101</sup>) for renewable energy that provide significant support for wind energy development to most renewable energy developers operating there. This proposal needs to be balanced with any national level aims to widen the base for tax collection.

## 5.2.2 Financial sector regulation and prudential rules

The TEG welcomes the work of central banks and supervisors in assessing the differences in risk profile of green and non-green financing, starting with mortgages. The initial findings of staff of the Bank of England<sup>102</sup> already indicate better creditworthiness for more energy-efficient properties. These results remain unchanged even if mortgage borrowers' income at origination is taken into account. According to the authors some banks have started to price mortgages against energy-efficient properties at lower rates, implying a lower risk premium. The TEG is also aware of other market initiatives working on this topic like the Energy Efficient Mortgages Project (EeMAP) and the European Covered Bond Council (ECBC).

Moreover, in its first comprehensive report, published in April 2019, the NGFS has announced that it would perform “[...] *an exploratory data collection from selected banks in 2019 with the objective to analyse the collected data and assess if there is a risk differential between green and non-green assets (loans and bonds) [...]. As a possible next step after the collection and analysis of historical data, the NGFS considers that it may be expedient to introduce a more forward-looking perspective into the analysis, for example, through scenario analysis and/or stress tests*<sup>103</sup>.

In case further research supports these findings, banking regulatory and prudential rules should take this into account. From the market development perspective, it is also important to keep in mind harmonisation of adequate definitions of green and sustainability related assets, economic activities and risks.

The TEG is also aware of the mandate in the recent amendment of the Capital Requirement Regulation (Article 501), based on which the EBA shall assess on the basis of available data and the findings of the High Level Expert Group on Sustainable Finance of the EC whether a dedicated

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<sup>101</sup> Publication 946 (2018), How To Depreciate Property, Section 179 Deduction, Special Depreciation Allowance , MACRS, Listed Property, US Internal Revenue Services (IRS), <https://www.irs.gov/publications/p946>

<sup>102</sup> <https://bankunderground.co.uk/2018/10/16/insulated-from-risk-the-relationship-between-the-energy-efficiency-of-properties-and-mortgage-defaults/>

<sup>103</sup> See A call for action - Climate change as a source of financial risk, Network on Greening the Financial System (NGFS), April 2019, page 27, [https://www.banque-france.fr/sites/default/files/media/2019/04/17/ngfs\\_first\\_comprehensive\\_report\\_-\\_17042019\\_0.pdf](https://www.banque-france.fr/sites/default/files/media/2019/04/17/ngfs_first_comprehensive_report_-_17042019_0.pdf)



prudential treatment of assets exposed to activities associated substantially with environmental and /or social objectives, in the form of different capital charges, would be justified from a prudential perspective.

The TEG recommends that as part of this mandate the EBA may also assess the possibility to develop a segment of green bonds that would define the conditions to be met by EU-GBS in order to possibly benefit from a preferential prudential treatment, similar with what EBA did for covered bonds, European Secured Notes (ESN) and Simple, Transparent and Standardised (STS) securitisation.

Finally, the TEG also welcomes the mandate given to the EBA in the recent amendment of the Capital Requirements Directive (Article 98) to assess the potential inclusion in the supervisory review and evaluation process performed by competent authorities of environmental, social and governance risks.

## 6 Synergies of the EU-GBS with the Green Loans Market

To date, the bank loan market is still the largest source of financing for the corporate sector in Europe<sup>104</sup>. The European corporate bond markets are dominated by investment grade issuers and the issuances are concentrated in a few countries. As explained above, bond issuance typically requires a credit rating and minimum issue size that is not easy to obtain for small and medium sized companies or municipalities (especially outside their domestic markets). Also, large corporates that frequently borrow from bond markets may use green bank loans for specific purposes in the lack of adequate green volume, for pricing or other reasons. Bank loans will therefore remain a key funding instrument for many players in Europe, and they should be able to get loans as well as bonds in a green format.

The NGFS and EBA are expected to develop further guidance for banks on how to integrate climate-related risks and scenario analysis into their overall risk management. A large share of credibly identified environmentally future proof loan assets could be an indicator of banks' respective risk management and business focus. Where bonds are used for the refinancing of green loan assets and where these bonds are aligned with the EU-GBS, this would act as a strong indicator of the high environmental quality of the loan assets behind those bonds.

The green loan market has developed alongside the green bond market and there are currently at least three types of asset based green loans in the market:

- Green loans, typically syndicated term loans or revolving credit facilities, made available exclusively to finance or re-finance, in whole or in part, new and/or existing eligible Green Projects. These are increasingly aligned with the *Green Loan Principles*<sup>105</sup> released in March 2018 by the Loan Markets Association (LMA) and the Asia-Pacific Loan Markets Association

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<sup>104</sup> Bank finance through credits and loans is a one of the largest sources of corporate financing in continental Europe, representing one third of financing needs of non-financial corporations, see: *Improving European corporate bonds markets*, Report from the Commission Expert Group on Corporate Bonds, November 2017, figure 2, page 12, [https://ec.europa.eu/info/sites/info/files/171120-corporate-bonds-report\\_en.pdf](https://ec.europa.eu/info/sites/info/files/171120-corporate-bonds-report_en.pdf)

<sup>105</sup> *Green Loan Principles*, March 2018, [https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/LMA\\_Green\\_Loan\\_Principles\\_Booklet-220318.pdf](https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/LMA_Green_Loan_Principles_Booklet-220318.pdf)

(APLMA) with the support of ICMA. These Principles are closely related to the GBP and recommend transparency on: (i) Use of proceeds, (ii) process for project evaluation and selection (iii) management of proceeds and (iv) reporting<sup>106</sup>. The eligible green projects and economic activities are described on a high level in line with the GBP, but the borrower maintains flexibility to use their own definitions and criteria. There are also comparable definitions of external reviews and adapted recommendations for their use.

- Bilateral green loans that commercial, multilateral and development banks offer to their corporate and institutional customers to finance specific green projects with set criteria and reporting requirements. The loans may, or may not be public, and the terms vary considerably.
- Loans offered to retail borrowers for specific purposes that are deemed to be green (green mortgages, energy efficiency improvement and renewable energy loans, hybrid/ electric vehicle leasing etc.). The number of loans is typically large and the size of each loan small.

The loan types mentioned above form the basis for green assets and asset categories underlying the green bond issuance by the banking sector. Currently external verification of the individual bank loans is not systematic. However, the underlying loans i.e. the green assets, their selection criteria, process and reporting typically get some level of external review when they are refinanced by green bonds issued by the bank in question.

There are other types of loans, sometimes called sustainability improvement loans whose remuneration and/or covenants are linked to the borrower's achievement of pre-determined environmental benchmarks. In contrast to asset based green bonds and loans, sustainability improvement loans look to performance across the whole borrower, not just part of its business. The Key Performance Indicators (KPI)'s range from ESG ratings to carbon footprint improvements and are set by the borrower. LMA, APLMA and LSTA released with the support of ICMA in March 2019 the Sustainability Linked Loan Principles (SLLP)<sup>107</sup>.

The intention for the TEG is to create an EU-GBS that could represent also a useful reference for the loan market. Harmonisation of concepts and definitions is an important prerequisite for mainstreaming green financing.

## 7 Impact of the EU Green Bond Standard

*“The High-Level Expert Group on Sustainable finance recommends that the EU should introduce an official EU Green Bond Standard (EU-GBS) and conduct an impact study of the EU Green Bond market and design a R&D programme aiming to develop open-source methodologies, tools and technologies (i) to develop metrics to monitor, evaluate and verify the environmental impact of green bonds in accordance with the EU Green Bond Standard, and reporting annually on how they contribute to scale up investments in green projects and activities; (ii) to aggregate information provided by issuers to enable EU institutions and member states to monitor alignment of financial*

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<sup>106</sup> [https://www.lma.eu.com/application/files/9115/4452/5458/741\\_LM\\_Green\\_Loan\\_Principles\\_Booklet\\_V8.pdf](https://www.lma.eu.com/application/files/9115/4452/5458/741_LM_Green_Loan_Principles_Booklet_V8.pdf)

<sup>107</sup> The SLLP are available at <https://www.lma.eu.com/>

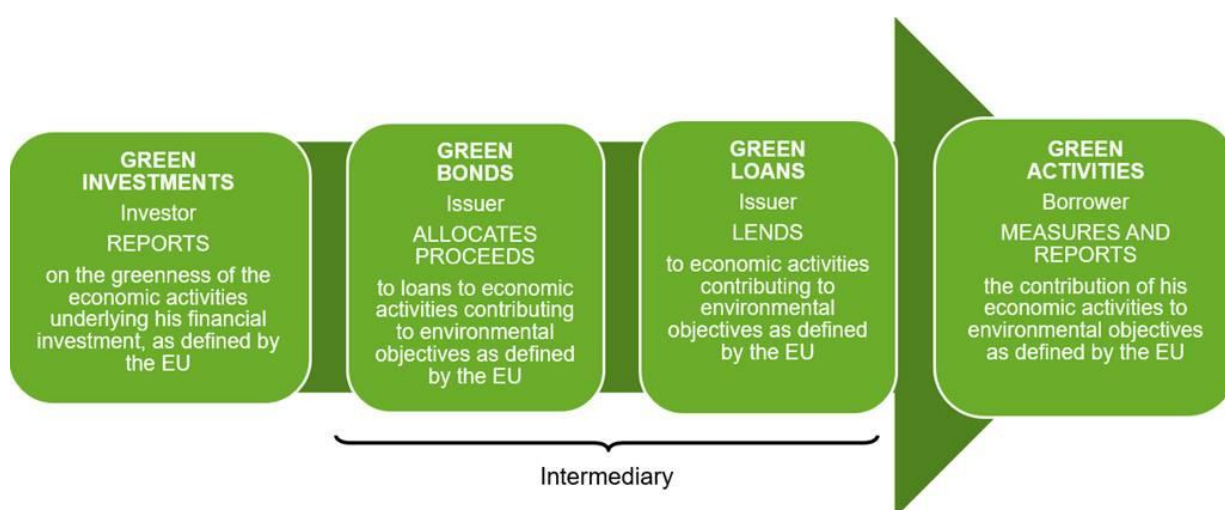
flows with EU policy priorities, including the Paris Agreement; and (iii) introduce a measurement framework to track the contributions of green bonds to this objective<sup>108</sup>”

Following on the EU HLEG’s recommendations, the development of an EU-GBS is a centrepiece of the European Commission’s Action Plan for Financial Sustainable Growth published in March 2018. The expected impact of the EU-GBS can best be illustrated through (i) its expected contribution to the EU’s sustainable finance policy objectives, (ii) its promotion of the green bond market’s integrity and (iii) its support for the market’s growth and financing of sustainable projects. Although it is difficult to estimate the impact of a voluntary standard, the working group is convinced this EU-GBS substantially addresses the two main concerns of the market, i.e. definition of what is green and the varying quality and extent of external reviews.

## 7.1 CONTRIBUTING TO THE EU’S SUSTAINABLE FINANCE POLICY OBJECTIVES

The green bond market has been pivotal in connecting sustainability and positive environmental impacts with finance by, among others, making the use of funds transparent and making climate investible, as well as by progressing the policy debate on green finance, as described in Chapter 2.1. The green bond market connects investment decisions with targeted environmental outcomes that are themselves in line with the EU’s environmental policy objectives especially regarding climate change mitigation.

Future green bond issuance aligned with the EU-GBS can be expected to generate higher environmental accountability. This can be enhanced by banks applying the EU Taxonomy to their lending activities (see graph below), combined with the refinancing of such loans through green bonds in line with the EU-GBS. In turn, this will promote the systematic collection by banks of comparable environmental data from their borrowers. Mapping this data, in combination with impact reporting, will greatly increase the capacity to measure and monitor the impact of the underlying projects against the intended EU Taxonomy’s Environmental Objectives.



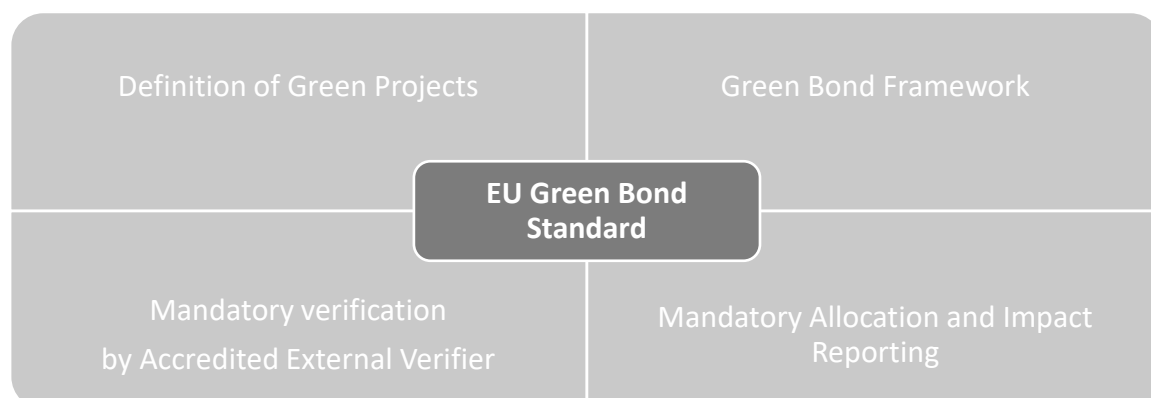
<sup>108</sup> EU HLEG on Sustainable Finance: “Financing a European Economy”, p.30-34

In a recent study<sup>109</sup> the Joint Research Centre (JRC) links the issuance of green bonds with a company's environmental performance over 2007-2018. JRC finds that the issuance of green bonds is associated with lower direct greenhouse gas emissions, particularly in the long term. This evidence is consistent with green bonds being used to finance genuinely green investment. However, there are several challenges pertaining to data availability and measurement issues, as well as to the methodological problems one faces when one needs to identify a causal relationship between green bond issuance and company-level outcomes. The results are therefore to be considered preliminary.

## 7.2 PROMOTING MARKET INTEGRITY

The EU-GBS aims to represent the best practice of the current green bond market. Green bonds already promote transparency especially on use of proceeds and through regular reporting on project impact. The EU-GBS is designed to further promote this transparency and the market's integrity, especially with respect to concerns relating to possible misrepresentation of projects' green or sustainable aspects, objectives or impact (i.e. "greenwashing").

This ambition of the EU-GBS is to achieve this objective by providing the green bond market stakeholders (issuers, investors, external reviewers/verifiers, public authorities and civil society) with four key components:



- **A clear definition of Green Projects** as projects that i) contribute substantially to at least one of six Environmental Objectives of the EU Taxonomy, while (ii) not significantly harm any of the other Objectives, and (iii) comply with minimum social safeguards. The EU Taxonomy, which is rooted in Article 1 of the *Regulation proposal on the establishment of a framework to facilitate sustainable investment*, will provide a detailed guidance to issuers and investors on green metrics and eligibility. The issuer shall provide a description of the Green Projects to be financed or refinanced by the proceeds in the Green Bond Framework and in the legal documentation.
- **A comprehensive Green Bond Framework** which shall confirm the alignment of the green bond with the EU-GBS, provides details on all the key aspects, including how issuer's

<sup>109</sup> *Green bonds and companies' environmental performance*, JRC Technical Report, European Commission – Joint Research Centre

strategy aligns with the Environmental Objectives; rational for issuing; alignment with EU Taxonomy, project selection; the tracking and reporting of use of proceeds, including the methodology and assumption applied to calculate key impact metrics.

- **Mandatory verification by an accredited External Verifier** to verify the alignment with the EU-GBS key components. This will provide a professional and consistent validation of the Green Bond qualities. The required formal accreditation of the external verifiers will harmonise the market for external reviews and standardise verification procedures including proper code of conduct and professional qualification of the verifier.
- **Mandatory Allocation and Impact Reporting** will improve transparency on allocation of proceeds (Allocation Reporting<sup>110</sup>) and the environmental impacts of the Green Bond (Impact Reporting). The Final Allocation Report shall be verified by an accredited External Verifier. The reporting requirements have been expanded and standardised by development of standard reporting templates and the Green Bond Framework will establish clear reporting methodology and assumptions.

### 7.3 SUPPORTING MARKET GROWTH AND TRACKING OF FINANCING FLOWS

As described in section 7.1, one of the ultimate objective of the EU Green Bond Standard is to channel substantial financial flows to Green Projects. The EU-GBS creates a strong foundation to further grow the green bond market and accelerate the flow of capital towards the EU's environmental objectives. Alignment with the EU Taxonomy provides greater clarity and certainty on the definition of green, improves the market's ability to identify projects and broadens the scope of eligible economic activities and expenditures. It expands the universe of eligible Green Projects and encourage new issuers to enter the market.

Financial markets are fundamentally about pricing risks and opportunities. The transparency promoted by the EU-GBS and its alignment with the EU Taxonomy will allow for the systematic collection of comparable data on sustainable opportunities and potential risks especially related to climate change. Combined with the TEG's recommendations on disclosures, the EU-GBS will enable the green bond market to operate with greater efficiency and will enhance its attractiveness to investors and its capacity to welcome greater inflows of capital.

In addition, the TEG recommends a range of short- and long-term incentives to bolster the role of the EU-GBS and its positive effect on the market and the financing of eligible Green Projects. The incentives range from encouraging investors to adopt the requirements of the EU-GBS in their investment strategies and the European Central Bank to promote greening the financial system by implementing a preference for EU Green Bonds and finding ways to enhance pricing of green assets; to establishing a 'level-playing field' for green bond issuers compared to issuers of conventional bonds, e.g. through subsidies to offset the (additional) cost of issuing a green bond or tax incentives.

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<sup>110</sup> The EU-GBS requires annual Allocation Reporting until full allocation of the proceeds and thereafter only in case of substantial changes.

Last but not least, it will also facilitate the aggregation of information provided by issuers to enable EU institutions and EU Member States to monitor alignment of financial flows with EU policy priorities, including the Paris Agreement, and, ultimately, introduce a measurement framework to track the contributions of green bonds to these objective.

***Recommendation #10: Monitor impact on the alignment of financial flows with the EU Taxonomy's Environmental Objectives and consider further supporting action including possible legislation after an estimated period of up to 3 years. The TEG recommends that the European Commission, through the EU Platform on Sustainable Finance, conducts a review of the take up and the impact of the EU-GBS after an estimated interim period of up to 3 years. The European Commission should then consider further appropriate measures including, if relevant, the possible recourse to legislation in support of the implementation of the EU-GBS.***



# **Annex 1: Draft Model of the EU Green Bond Standard**

## **1. Scope of the EU Green Bond Standard (EU-GBS)**

The European Green Bond Standard ('EU-GBS') is a voluntary standard proposed to issuers that wish to align with leading best practices in the market. It is designed to be globally relevant and accessible to issuers located in the EU as well as to issuers located outside the EU. It builds on market best practices such as the Green Bond Principles (GBP).

## **2. Objective of the EU-GBS**

The EU-GBS is intended to provide a framework of core components for EU Green Bonds, as defined below, thereby enhancing transparency, integrity, consistency and comparability of EU Green Bonds. The ultimate objective is to increase the flow of finance to green and sustainable projects.

## **3. Definition of an EU Green Bond**

An EU Green Bond is any type of listed or unlisted bond or capital market debt instrument issued by a European or international issuer that is aligned with the EU-GBS, and is therefore meeting the following requirements:

1. The issuer's Green Bond Framework shall confirm the alignment of the green bond with the EU-GBS;
2. The proceeds, or an amount equal to such proceeds, shall be exclusively used to finance or re-finance in part or in full new and/or existing Green Projects as defined in section 4.1, as it shall be described in the bond documentation; and
3. The alignment of the bond with the EU-GBS shall have been verified by an accredited Verifier in accordance with section 4.4.

An issuer may only use the term 'EU Green Bond' if the above criteria are met. European and international issuers may decide to voluntarily requalify their existing green bonds as EU Green Bonds in the same manner and, for the avoidance of doubt, after verification by an accredited Verifier.

It is important to note that EU Green Bonds are only fungible with green bonds issued as EU Green Bonds or requalified as EU Green Bonds.

## **4. Core components of the EU-GBS**

### **4.1 Green Projects**

Proceeds from EU Green Bonds, or an amount equal to such proceeds, shall be allocated only to finance or refinance Green Projects ('Green Projects') defined, subject to confirmation by an accredited Verifier (see section 4.4), as (a) contributing substantially to at least one of the

Environmental Objectives as defined in the EU Taxonomy Regulation<sup>111</sup> ('the Environmental Objectives'), namely (i) climate change mitigation, (ii) climate change adaptation, (iii) sustainable use and protection of water and marine resources, (iv) transition to a circular economy, waste prevention and recycling; (v) pollution prevention and control and (vi) protection of healthy ecosystems, while (b) not significantly harming any of the other objectives and (c) complying with the minimum social safeguards represented by the principles and rights set out in the eight fundamental conventions identified in the International Labour Organisation's declaration on Fundamental Rights and Principles at Work.

When the EU Taxonomy will be in force and where Technical Screening Criteria (i.e., principles, metrics, thresholds) have been developed in the Taxonomy for specific environmental objectives and sectors, Green Projects shall align with these criteria allowing however for specific cases where these may not be directly applicable as a result of factors such as the innovative nature, the complexity, and/or the location of the Green Project(s). An accredited Verifier shall either confirm alignment with the Technical Screening Criteria, or alternatively in cases where no technical screening criteria have been developed or in the above mentioned specific cases, that the projects nonetheless meet the requirements under the EU Taxonomy framework i.e. that they (a) contribute substantially to at least one of the Environmental Objectives (b) do not significantly harm any of the other objectives and (c) comply with the minimum social safeguards.

The issuer shall provide a description of such Green Projects in their Green Bond Framework (see section 4.2) and in the Green Bond legal documentation (for instance in the Prospectus or in the Final Terms). The information provided in the legal documentation may be summarised or may be limited to a reference to the Environmental Objectives and the GBF. In case that the Green Projects are not identified at the date of issuance, the issuer shall describe the type and sectors and/or environmental objectives of the potential Green Projects. Green Projects can include:

- Physical assets and financial assets such as loans. Green assets can be tangible or intangible, and they can include the share of working capital that can reasonably be attributed to their operation.
- Any capital expenditure and selected operating expenditures such as maintenance costs related to green assets that either increase the lifetime or the value of the assets, and research and development costs. For the avoidance of doubt, operating costs such as purchasing costs and leasing costs would not normally be eligible except in specific and/or exceptional cases as may be identified in the EU Taxonomy and future related guidance.
- Relevant public investments and public subsidies for sovereigns and sub-sovereigns.

Green assets shall qualify without a specific look-back period provided that at the time of issuance they follow the eligibility criteria listed above. Eligible green operating expenditures shall qualify for refinancing with a maximum three [3] years look-back period before the issuance year of the bond.

For the avoidance of doubt, a specific green asset or expenditure can only qualify as a Green Project for direct financing by one or several dedicated green financing instruments (such as bonds or loans)

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<sup>111</sup> Proposal for a *REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL* on the establishment of a framework to facilitate sustainable investment, COM(2018) 353 final 2018/0178 (COD), 24 May 2018.  
<https://ec.europa.eu/transparency/regdoc/rep/1/2018/EN/COM-2018-353-F1-EN-MAIN-PART-1.PDF>

up to the combined equivalent of its full value. It is understood that green financing instruments can be refinanced by other green financial products.

## **4.2 Green Bond Framework**

The issuer shall produce a Green Bond Framework ('GBF') which confirms the voluntary alignment of the green bonds issued following this GBF with the EU-GBS and provides details on all the key aspects of the proposed use of proceeds and on its green bond strategy and processes. The draft standard foresees inclusion of the use of proceeds to be specified in the legal documentation:

The issuer shall indicate the following elements in their GBF:

- 1 The Environmental Objectives of the EU Green Bond or EU Green Bond programme and how the issuer's strategy aligns with such objectives, as well as their rationale for issuing.
- 2 The process by which the issuer determines how Green Projects align with the EU Taxonomy and, if applicable, qualitative or quantitative technical screening criteria with reference to section 4.1 and with the support of an accredited Verifier. Issuers are also encouraged to disclose any green standards or certifications referenced in project selection;
- 3 A description of the Green Projects to be financed or refinanced by the EU Green Bond. In case where the Green Projects are not identified at the date of issuance, the issuer shall describe, where available, the type and sectors of the potential Green Projects. Where confidentiality agreements, competitive considerations, or a large number of underlying projects limit the amount of detail that can be made available, information can be presented in generic terms or on an aggregated portfolio basis.
- 4 The process for linking the issuer's lending or investment operations for Green Projects to the EU Green Bond issued. The issuer shall track the amount allocated to Green Projects in an appropriate manner until such amount equals the net proceeds and document the allocation through a formal internal process;
- 5 Information on the methodology and assumptions to be used for the calculation of key impact metrics: (i) as described in the EU Taxonomy, where feasible; and (ii) any other additional impact metrics that the issuer will define;
- 6 A description of the Reporting (e.g. envisaged frequency, content, metrics).

For the avoidance of doubt, it is understood that subsequent changes to the Taxonomy will not apply to outstanding EU Green Bonds (grandfathering). Conversely new issues shall be aligned with the most recent version of the Taxonomy and as relevant to their Green Projects.

The GBF shall be published on the issuer's website or any other communication channel before or at the time of the issuance of an EU Green Bond and shall remain available until the respective maturity of the EU Green Bond.

## **4.3 Allocation and Impact Reporting**

Two types of reporting are required under the EU-GBS: Allocation Reporting and Impact Reporting.

Allocation Reporting: Issuers shall report at least annually, until full allocation of the bond proceeds to Green Projects and thereafter, in case of any material change in this allocation. Verification is only required for the Final Allocation Report.

**The Allocation Report shall include:**

- A statement of alignment with the EU-GBS
- A breakdown of allocated amounts to Green Projects at least on sector level, however more detailed reporting is encouraged
- The geographical distribution of Green Projects (recommended on country level)

For the avoidance of doubt, the Final Allocation Report for an EU Green Bond to be published upon full allocation shall comprise information on all allocated amounts to Green Projects at least on sector level.

Impact Reporting: Issuers shall report on impact of Green Projects at least once during bond lifetime after full allocation of the bond proceeds to Green Projects and thereafter, in case of material changes in this allocation.

**The Impact Report shall include:**

- a description of the Green Projects,
- the Environmental Objective pursued by the Green Projects
- a breakdown of Green Projects by the nature of what is being financed (assets, capital expenditures, operating expenditures, etc.), the share of financing (i.e. the amount of Green Projects financed after the bond issuance) and refinancing (i.e., the amount of Green Projects financed before the bond issuance),
- information and, when possible metrics, about the projects' environmental impacts, which needs to be in line with the commitment and methodology described in the Issuer's GBF.
- if it hasn't been already detailed in the GBF, information on the methodology and assumptions used to evaluate the Green Projects impacts.

Verification of the Impact Reporting is not mandatory, however issuers are encouraged to have their Impact reporting reviewed by an independent third party.

Allocation Reporting and Impact Reporting can be either on a project-by-project level or on a portfolio level, where confidentiality agreements, competitive considerations, or a large number of underlying projects limit the amount of detail that can be made available.

For the avoidance of doubt, the Allocation Report as well as the Impact Report may cover several bond issuances under the same Green Bond Framework. The issuer may also decide to publish separate Impact Reports for separate project categories. Allocation and Impact Reporting can be presented in a combined report or in separate reports. In case full allocation and or impact is already determined upon issuance of a bond, issuers may choose to publish one report comprising information on allocation and impact at issuance, for the avoidance of doubt in case of material change of allocation, further reporting will be required.

Recommended draft reporting formats are further included in Annex 2, while leaving issuers the flexibility to adapt them as may be necessary.

Allocation Reporting and Impact Reporting shall be published on the issuer's website or any other communication channel. The Final Allocation Report and Impact Report published upon full allocation shall remain available until maturity of such EU Green Bonds unless replaced by further reports in case of material changes of allocation.

#### **4.4 Verification**

Issuers shall appoint an external Verifier to confirm:

- before or at the time of issuance, through an initial Verification, the alignment of their GBF with the EU-GBS, in accordance with section 4.1 (Green Projects) and 4.2 (Green Bond Framework); and
- after full allocation of proceeds, through a Verification, the allocation of the proceeds to green eligible projects in alignment with the Allocation Reporting as outlined in section 4.3 of the EU-GBS.

For the avoidance of doubt, an initial Verification can be valid for several bonds issued under a programme with the same GBF.

It is also understood that for transactions that are fully allocated at issuance (e.g. as in the case of refinancing) the verification of the Allocation Reporting can be incorporated in the initial Verification.

Verification(s), and any subsequent ones, shall be made publicly available on the issuer's website and through any other accessible communication channel as appropriate. The Verification of the GBF shall be made publicly available before or at the time of the issuance of its EU Green Bond(s). Verification of the Final Allocation Report should be made publicly available together with the publication of the Final Allocation Report, however at the latest one year after the publication.

Verification provider(s) will be subject to accreditation<sup>112</sup> including explicit requirements related to (i) professional codes of conduct related to business ethics, conflicts of interest and independence; (ii) professional minimum qualifications and quality assurance and control; and (iii) standardised procedures for Verification.

Verification providers shall also disclose their relevant credentials and expertise and the scope of the review conducted in the Verification report.

Before the accreditation of verifiers is in place, a Voluntary Interim Registration Scheme may be established<sup>113</sup>.

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<sup>112</sup> Further information on the accreditation process can be found in section 4 of this report

<sup>113</sup> See Section 4.7 and Annex 7 of this report

## Annex 2: EU Green Bond Framework Template

**Date:** Click or tap to enter a date.

**Issuer name:** Click or tap here to enter text.

**Green Bond Framework name:** Click or tap here to enter text.

**External Verification provider name:** Click or tap here to enter text.

---

### **Section 1: Strategy and rationale**

*Information in this Section relates to Annex 1 (Draft Model EU GBS), section 4.2. Green Bond Framework, point 1. NB: the use of proceeds needs to be specified in the legal documentation*

#### **1.1. Please describe your Environmental Objectives as part of your overall strategy and the reasoning for issuing a green bond**

Click or tap here to enter text.

#### **1.2. Which environmental objectives do your Green Projects contribute to (as specified in the EU Taxonomy regulation)? Select all those that apply.**

- Climate Change Mitigation
- Climate Change Adaptation
- Sustainable use and protection of water and marine resources
- Transition to a circular economy, waste prevention, and recycling
- Pollution prevention and control
- Protection and/or promotion of healthy ecosystems

#### **1.3. [Voluntary section] In the section below, you have the opportunity to describe whether and where (sources and/or documents) you have already reported on how your environmental objective(s) and/or strategy relate(s) to international commitments:**

*International commitments include, for example, the Paris Climate Agreement pathways or the UN Sustainable Development Goals, etc.*

Click or tap here to enter text.

#### **1.4. Please record any additional information that may be relevant to this section:**

Click or tap here to enter text.

---



## **Section 2: Process for selection of Green Projects**

*Information in this Section relates to Annex 1 (Draft Model EU GBS), section 4.2 Green Bond Framework, point 2. This section generally aligns with the "Process for project evaluation and selection" component of the GBP promoted by ICMA.*

**2.1. Please describe the governance process to ensure alignment of each Green Project with the EU Taxonomy: (1) substantial contribution to environmental objectives, (2) do-no-significant harm to environmental objectives, (3) minimum social safeguards and where developed (4) meeting the technical screening criteria.**

*For example, use of committees, internal/external environmental expertise, exclusion criteria, eligibility principles, metrics and thresholds, methodologies, standards or certifications.*

Click or tap here to enter text.

**2.2. Please record any additional information that may be relevant to this section:**

Click or tap here to enter text.

---

## **Section 3: Green Projects**

*Information in this Section relates to Annex 1 (Draft Model EU GBS), section 4.2. Green Bond Framework, point 3 and 4. This section generally aligns with the "Use of proceeds" component of the GBP promoted by ICMA. Please provide in this section the description of your Green Projects and how they align with the EU Taxonomy.*

**3.1. Please describe the projects / project categories financed by the green bond proceeds, the relevant economic activity under the Taxonomy, and NACE code if available. Please refer to the EU Taxonomy [[link to website](#)] for further details.**

*For example, for the construction of wind farms, there can be several economic activities that apply. In this case, for example, the relevant activity is the production of electricity from wind power (NACE code 35.1.1).*

Click or tap here to enter text.

**3.2. If available, please record the indicative list of Green Projects /activities financed by the green bond proceeds. If available, please supplement this information with the relative estimated proceeds allocation per Green Project category or asset class.**

Click or tap here to enter text.

**3.3 Please record any additional information that may be relevant to this section:**

Click or tap here to enter text.

---

## **Section 4: Tracking of amounts of Use-of-Proceeds**

*Information in this Section relates to Annex 1 (Draft Model EU GBS), section 4.2. Green Bond Framework, point 5. This section generally aligns with the "Management of Proceeds" component of the GBP promoted by ICMA.*

Click or tap here to enter text.

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## **Section 5: Reporting**

*Information in this Section relates to Annex 1 (Draft Model EU GBS), section 4.2. Green Bond Framework, point 6 and 7. This section generally aligns with the "Reporting" component of the GBP promoted by ICMA.*

### **5.1. Please record the indicative name of the report, its publication location, and your reporting frequency.**

*For example, "Green Bond Report to be published on our website". If you plan to report more frequently than on an annual basis, please state your reporting frequency.*

Click or tap here to enter text.

### **5.2. Allocation reports will be published...**

- Until full allocation of the proceeds of the relevant green bond
- Until maturity of the relevant green bond

### **5.3. When and at which frequency impact reports will be published...**

Click or tap here to enter text.

### **5.4. Please explain the qualitative and quantitative impact metrics that will be used to demonstrate substantial contribution to Environmental Objectives per project category related to the criteria for the relevant taxonomy activity.**

Click or tap here to enter text.

### **5.5. Please explain the qualitative and quantitative impact metrics that will be used to demonstrate no-significant-harm alignment per project category as defined in the relevant taxonomy activity (including any material changes).**

Click or tap here to enter text.

### **5.6. Please explain any quantitative or qualitative metrics you will use in your impact report that are supplemental to the metrics described in the EU Taxonomy and provide embedded links to relevant guidance documentation**

*For example, Annual Greenhouse gas emissions reduced/avoided in tonnes CO<sub>2</sub>e, Annual Renewable Energy generation in MWh/GWh.*

Click or tap here to enter text.

### **5.7. If available, please provide an environmental impact estimation for the project(s) financed by the proceeds of your green bond(s).**

Click or tap here to enter text.

### **5.8. External verification will be provided for**

- each annual allocation report (voluntary)
- the final allocation report (required)

### **5.9. Please record any additional information that may be relevant to this section:**

Click or tap here to enter text.

## Annex 3: Reporting Templates

### REPORTING FORM

#### 1. Basic Information

Issuer name:

Related Green Bond ISIN(s):

Accredited External Verification provider's name for the final allocation report:

Reporting period:

Publication date of reporting:

Frequency of reporting:

Next reporting planned for:

Reference to the Green Bond Framework applied:

**Is the Green Bond/Are the Green Bonds still in alignment with the EU Green Bond Standard?**

Yes

No

#### 2. Scope and Approach of Reporting

The reporting contains the following elements *[templates below to be included in the reporting accordingly]*:

Allocation Reporting

Impact Reporting

Combined Allocation and Impact Reporting

Approach for impact reporting:

Project-by-project reporting

Portfolio-based reporting

### 3. Allocation Reporting Templates

#### 3.1. Allocation to Green Project Sectors<sup>114</sup>

ISIN	Total Green Bond proceeds	Total Proceeds allocated so far	Proceeds allocated to Sector X	Proceeds allocated to Sector Y	Proceeds allocated to Sector Z
<i>XS12345689</i>	<i>EUR 500 million</i>	<i>EUR 400 million</i>	<i>EUR 300 million</i>	<i>EUR 50 million</i>	<i>EUR 50 million</i>

#### 3.2. Additional information

*Regional distribution of Green Projects is recommended on country level. Issuers shall provide relevant information in an appropriate manner, e.g. a pie chart with % numbers or in absolute terms]*

### 4. Impact Reporting Templates

*Please select and fill out one of the templates below, as applicable. If the impact report relates to more than one Green Bond, please fill out one template per Green Bond and state the respective ISIN.*

#### 4.1. Project-by-project Reporting

Project name	Project description	Sector and environmental objective	Total project cost	Share of financing	Amount of green bond proceeds allocated	Project start date/end date (if relevant)	Share of proceeds used for financing vs refinancing	Nature of green asset / expenditure	IF AVAILABLE Impact metric <sup>115</sup> (absolute, annually <sup>116,117</sup> )	IF AVAILABLE Impact metric <sup>2/118</sup> (relative) <sup>3</sup>

<sup>114</sup> In addition to reporting on the allocation per sector, issuers are welcomed to provide more detail on a project level as well as on the allocation per taxonomy environmental objectives pursued.  
<sup>115</sup> Provide a description of background on the methodology and assumptions used for the calculation of impact metrics, thresholds and indicators, or cross refer to those described in the Green Bond Framework.

<sup>116</sup> Where appropriate: additional column for lifetime/lifetime impact of the project.

<sup>117</sup> Please report only the pro-rated share of impact that corresponds to the project cost financed by the issuer (share of financing).

<sup>118</sup> Please add column(s) for other impact metrics as relevant.

Note: Guidance on impact metrics is available from a broad range of sources including, for example, the Handbook Harmonized Framework for Impact Reporting published in June 2019 by the ICMA / the Green Bond Principles (see: <https://www.icmagroup.org/green-social-and-sustainability-bonds/resource-centre/>); the Position paper on Green Bond Impact reporting published by a group of Nordic Public Sector Issuers in January 2019 (see: <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Resource-Centre/NPSIPositionpaper2019final-120219.pdf>) or the IRIS+ is the generally accepted system for measuring, managing, and optimizing impact, published by the Global Impact Investors Network (see: <https://iris.thegiin.org/>)

<i>Wind Farm One</i>	<i>Construction and installation of a windfarm with an annual generation capacity of x MW/GW</i>	<i>Renewable energy (wind energy) / Climate Change Mitigation</i>	<i>EUR 100 million</i>	<i>75%</i>	<i>EUR 75 million</i>	<i>2016 ongoing</i>	<i>100% financing</i>	<i>tangible asset (98% CAPEX, 2% OPEX)</i>	<i>x t CO2e emitted (based on y gCo2e/kwh)</i>  <i>x t CO2e avoided</i>	

#### 4.1. Portfolio-based Reporting

Portfolio name	Portfolio description	Sector and environmental objective	Total portfolio cost	Share of financing	Amount of green bond proceeds allocated	Portfolio start date/end date (if relevant)	Share of proceeds used for direct financing vs refinancing	Nature of green asset /Expenditure	IF AVAILABLE Impact metric <sup>119</sup> (absolute, annually <sup>120</sup> ) <sup>121</sup>	IF AVAILABLE Impact metric <sup>6/122</sup> (relative) <sup>7</sup>
<i>Solar energy portfolio</i>	<i>Installation of solar rooftop panels for 4000 private households with a total annual generation capacity of x MW/GW</i>	<i>Renewable energy (solar photovoltaic) / Climate Change Mitigation</i>	<i>EUR 40 million</i>	<i>90%</i>	<i>EUR 36 million</i>	<i>2017 ongoing</i>	<i>100% financing</i>	<i>Tangible asset, (100% CAPEX)</i>	<i>x t CO2e emitted (based on y gCo2e/kwh)</i>  <i>x t CO2e avoided</i>	

<sup>119</sup> Provide a description of background on the methodology and assumptions used for the calculation of impact metrics, thresholds and indicators, or cross refer to those described in the Green Bond Framework.

<sup>120</sup> Where appropriate: additional column for lifetime/lifetime impact of eligible activity.

<sup>121</sup> Please report only the pro-rated share of impact that corresponds to the portfolio cost financed by the issuer (share of financing).

<sup>122</sup> Please add column(s) for other impact metrics as relevant.

Note: Guidance on impact metrics is available from a broad range of sources including, for example, the Handbook Harmonized Framework for Impact Reporting published in June 2019 by the ICMA / the Green Bond Principles (see: <https://www.icmagroup.org/green-social-and-sustainability-bonds/resource-centre/>); the Position paper on Green Bond Impact reporting published by a group of Nordic Public Sector Issuers in January 2019 (see: <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Resource-Centre/NPSIPositionpaper2019final-120219.pdf>) or the IRIS+ is the generally accepted system for measuring, managing, and optimizing impact, published by the Global Impact Investors Network (see: <https://iris.thegiin.org/>)

## Annex 4: Feedback from Public

The TEG published its interim report on 6 March 2019 for public feedback. The interim report presented the draft EU Green Bond Standard (also referred to as the “EU-GBS”), provided a rationale for action, and explained how such a standard should be developed and implemented in Europe. A key objective of the call for public feedback was to validate the relevance of our assumptions and recommendations with a broad spectrum of green bond market stakeholders. To facilitate the feedback process, an online survey was launched along with the interim report.

More than 100 organisations and individuals responded to the survey. Table A1 shows the overview of respondents by organisation type and the country in which they are based.

**Table A1: Overview of respondent type and home country**

	Issuer *	Investor	Verifier **	NGO	Market Infrastru cture provider ***	Intermedi ary	Other ****	Total
<b>Austria</b>	2		1	1		1	1	<b>6</b>
<b>Belgium</b>		3	2	1	2		8	<b>16</b>
<b>Denmark</b>	1	1					2	<b>4</b>
<b>Finland</b>	2			1			3	<b>6</b>
<b>France</b>	7	4	1			1	3	<b>16</b>
<b>Germany</b>	4	2	3	2			6	<b>17</b>
<b>Ireland</b>							1	<b>1</b>
<b>Italy</b>	2							<b>2</b>
<b>Luxemburg</b>			1					<b>1</b>
<b>Netherlands</b>		1	1	1			2	<b>5</b>
<b>Norway</b>			1					<b>1</b>
<b>Poland</b>	1							<b>1</b>
<b>Portugal</b>	1							<b>1</b>
<b>Romania</b>	1							<b>1</b>
<b>Spain</b>	4			1				<b>5</b>
<b>Sweden</b>	3							<b>3</b>
<b>Great Britain</b>		6	2			1		<b>9</b>
<b>USA</b>	1	1	3		1			<b>6</b>
<b>Other</b>		1	1				1	<b>3</b>
<b>Total</b>	<b>29</b>	<b>19</b>	<b>16</b>	<b>7</b>	<b>3</b>	<b>3</b>	<b>27</b>	<b>104</b>

\* Incl. Corporates, financial institutions, public sector issuers, government backed agencies and development banks

\*\* Incl. auditing/assurance firms, index providers, and sustainability consultancies

\*\*\* Incl. stock exchanges, financial data providers

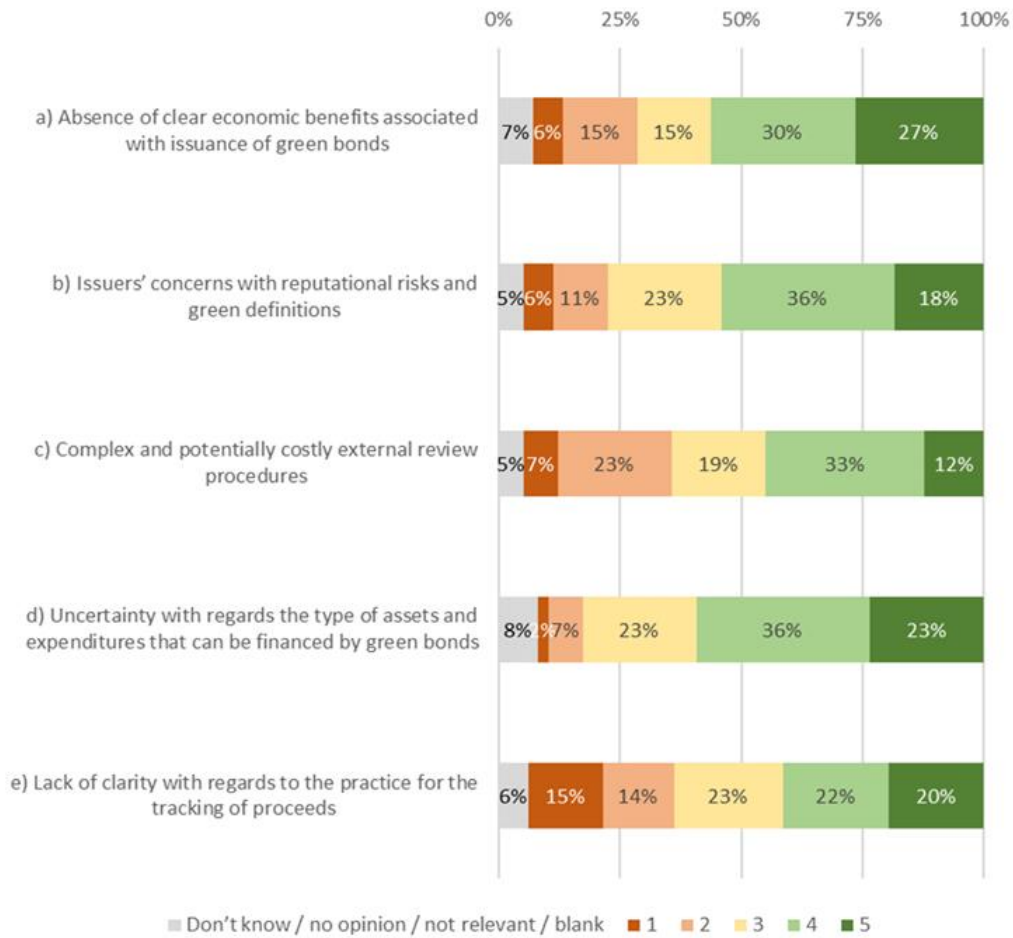
\*\*\*\* Incl. supervisory authorities, business associations, and other interest groups

The TEG has carefully studied all feedback received from the stakeholders to create an improved version of the GBS. The overall results from select key survey questions are presented in below summary.

The TEG has identified five key barriers to the development of the green bond market, c.f. section 2.2 of the interim report. On a scale from 1 to 5, the respondents were asked to score the importance of each of these barriers (1 indicating the lowest importance). The results are shown in figure A1. The average score ranges from 3.0 for barrier e) lack of clarity with regards to the practice for the tracking of proceeds as the lowest (least important, but overall still relevant), to 3.5 for barrier d) uncertainty with regards the type of assets and expenditures that can be financed by green bonds.



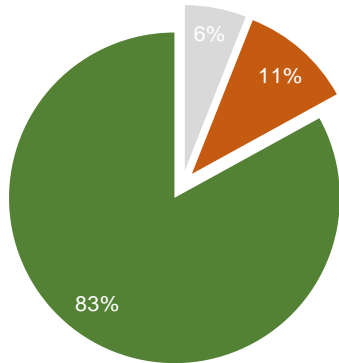
**Figure A1: Importance of identified barriers to development of green bond market**



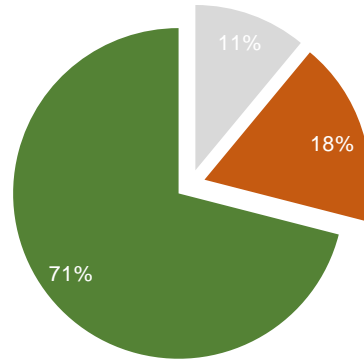
The TEG has made 11 recommendations to address the abovementioned barriers to the green bond market. Respondents were asked if they agreed with the recommendations, and their importance. Results are shown in figure A2 and A3.

**Figure A2: Support for recommendations to address the market barriers**

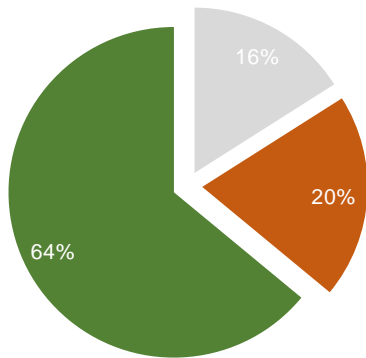
Recommendation 1 - Create a voluntary EU Green Bond Standard



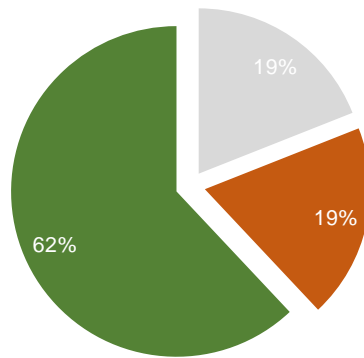
Recommendation 2 - Monitor impact and consider further supporting action including possible legislation after an estimated period of 3 years



Recommendation 3: Develop a legislative proposal for a centralised accreditation regime for external green bond verifiers to be potentially operated by ESMA

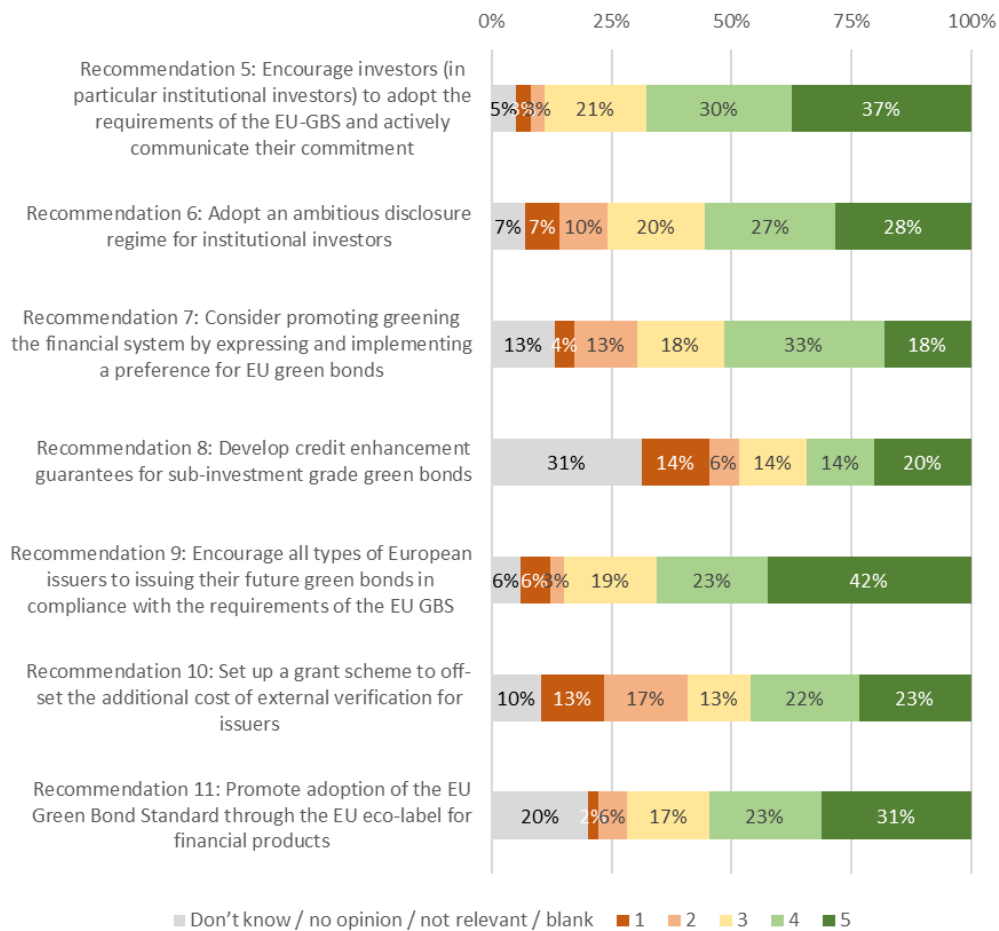


Recommendation 4: Set up a market-based voluntary Accreditation Committee for external verifiers of green bonds for a transition period



Yes
  No
  No opinion / Don't know / Not Relevant

**Figure A3: Importance of recommendations to address the market barriers**



## Annex 5: Accreditation and Supervision of current external review providers

The table in this Annex lists the current pool of external review service providers in Europe and maps their relationship with existing accreditation, approval and/or supervisory regimes in areas related to the green bond external review market that could be used as a model/template for the accreditation of verifiers. The top 5 players in the external review market in Europe in 2017 (according to CBI data) are highlighted in **bold**.

External review service provider name	Market share (2007-2017) <sup>123</sup>	Core business service <sup>124</sup>	ICMA/GBP voluntary disclosures	CBI approved for Europe	ESMA accreditation (i.e., CRA)	ISO/ and National SOs <sup>125</sup>	Financial audit <sup>126</sup>
<b>Bureau Veritas</b>		Technical certification	-	Worldwide	-	Yes	-
<b>CICERO (top 5 - #2)</b>	<b>29%</b>	<b>SPOs/research</b>	<b>Yes</b>	-	-	-	-
<b>ISS-oekom (top 5 - #3)</b>	<b>6%</b>	<b>SPO / non-financial rating</b>	<b>Yes</b>	<b>Worldwide</b>	-	-	-
<b>IG Verifier</b>		Technical certification	Yes	No	-	-	-
<b>Escarus/TSKB</b>		Consulting	Yes	-	-	-	-
<b>Rating &amp; Investment Info.</b>		Credit Rating Agency	Yes	-	-	-	-
<b>DNV-GL (top 5 - #5)</b>	<b>4%</b>	<b>Technical certification</b>	-	<b>Worldwide</b>	-	<b>Yes</b>	-
<b>SGS</b>		Technical certification	-	No	-	Yes	-
<b>EPIC Sustainability</b>		Consulting	-	Worldwide	-	-	-
<b>EthiFinance</b>		Non-financial rating/consulting	-	Europe	-	-	-
<b>Deloitte</b>		Audit & consulting		Member firms		(in some countries?)	Yes
<b>Beyond Ratings<sup>127</sup></b>		Non-financial rating agency	-	No	CRA application (decision pending)	-	-
<b>EY</b>	7%	Audit & consulting	-	Member firms		(in some countries?)	Yes
<b>KPMG</b>		Audit & consulting	-	Member firms		(in some countries?)	Yes
<b>PwC</b>		Audit & consulting	-	Member firms		(in some countries?)	Yes
<b>Sustainalytics (top 5 - #4)</b>	<b>15%</b>	<b>SPO / ESG rating/ consult.</b>	-	<b>Worldwide</b>		-	-
<b>S&amp;P Global</b>		SPO / Credit	Yes	Europe	Authorised	-	-

<sup>123</sup> Market shares of external reviewers by cumulative value of bonds issued from 2008-2018, data from CBI (July 2018), quoted in *CICERO Milestones 2018. A practitioner's perspective on the Green Bond Market*, November 2018, page 4, <https://www.cicero.oslo.no/en/publications/external/5887>

<sup>124</sup> According to ICMA/GBP External Review Service Mapping, ICMA website (as of 14 December 2018)

<sup>125</sup> This column covers accreditation for non-audit related certification and/or verification services (e.g., ISO 14001, ISO 9000, etc) through national standards organisations affiliated to the International Standards Organisation (ISO), in particular those modelled after and aligned with ISO 17029 Conformity assessment – general principles and requirements for validation and verification bodies (CASCO)

<sup>126</sup> In most cases individual network members firms are subject to regulatory oversight or self-regulation for financial audits as applicable in their respective jurisdictions. Big 4 firms tend to use ISAE 3000 in their review statements.

<sup>127</sup> Beyond Ratings was recently acquired by London Stock Exchange Group <https://www.lseg.com/resources/media-centre/press-releases/london-stock-exchange-group-acquires-beyond-ratings>

Ratings/Trucost		Rating Agency		(via Trucost)	CRA (S&P Global Ratings)		
Moody's /		Credit Rating Agency	-	No	Authorised CRA	Via Vigeo-Eiris (see below)	-
Fitch		Credit Rating Agency	-	No	Authorised CRA	-	-
TüV Nord		Technical certification		Worldwide	-	Yes	-
Atelier Ten		Environmental design consultant	-	UK only	-		-
First Environment		Consulting/ GhG verification	-	Worldwide	-	Yes (GhG)	-
VigeoEiris (top 5 - #1)	13%	<b>SPO / Non-financial rating/ consulting</b>	-	<b>Worldwide</b>	-	<b>Yes</b>	-
Carbon Trust		Certification	-	Worldwide	-	Yes	-
EVI			-	Worldwide	-	Yes	-
NSF		Certification/ verification		Worldwide	-	Yes	-
Kestrel Verifiers		Verification		Worldwide	-	Yes	-
Multiconsult		Consulting		Worldwide	-	?	-
ERM CVS		Certification/ verification		Worldwide	-	Yes	
HKQAA		Certification/ verification		Worldwide		Yes	
Indufor Oy		Consulting		Worldwide		-	
Green Solver		Consulting		Worldwide		-	
DQS CFS		Certification/ verification		Worldwide		-	

## Annex 6: Options for accreditation schemes – Benefits and Drawbacks

Option	Description	Benefits	Drawbacks
<b>OPTION A. Centralised regime for registration/ authorisation and supervision by ESMA, in cooperation with the future EU platform on sustainable finance</b>	Authorisation and supervision based on a centralised scheme modelled on, for example, the regime established for the supervision of Credit Rating Agencies (CRA).	<ul style="list-style-type: none"> <li>• Would avoid market fragmentation in terms of regulation and supervision, establishing a true level playing field for verifiers.</li> <li>• Cross-border providers would be facing the same framework and supervisory approach, thus enhancing competition, and greater clarity to both verifiers and issuers.</li> <li>• Synergies with ESMA’s existing core competences (including market abuse) and the proposed expansions of its scope to cover sustainability, resulting in economies of scale and hence, lower costs.</li> <li>• Accreditation of CRAs (which play a critical role in bond markets and some of which are already active in the external review market) are already authorised and supervised by ESMA.</li> <li>• Could also take into account ongoing developments of ISO 14030 to ensure a harmonised approach.</li> </ul>	<ul style="list-style-type: none"> <li>• Would require a new European legislative framework as ESMA currently holds no regulatory competence in this area (i.e., a regulation to ensure full harmonisation).</li> <li>• Potentially high costs (e.g., supervisory fees and compliance fees) which might result in a barrier of entry for small providers, resulting in limited competition and/or further concentration of the sector.</li> <li>• Might give (or be perceived as) providing an unfair competitive advantage to CRA (over other types of providers).</li> <li>• Adoption by co-legislators might be complex.</li> </ul>
<b>OPTION B. Decentralised scheme for supervision by national competent authorities in EU member states</b>	<p>In application of the subsidiary principle, supervision could be performed at Member State level.</p> <p>Competent authorities could include either</p> <ol style="list-style-type: none"> <li>a) Member States’ financial markets supervisors (i.e., AMF, BaFin, AFM, CSSF) ; or</li> <li>b) Member States’ competent bodies for accreditation, EU Ecolabel for financial services (e.g., AFNOR/ADEME in France);</li> <li>c) A combination of both.</li> </ol>	<ul style="list-style-type: none"> <li>• Adoption by co-legislators may be facilitated.</li> <li>• Member States could, for example, nominate the same national body currently issuing the Ecolabel or the financial sector regulator to also act as a supervisor for verifiers which might create (limited) economies of scale</li> </ul>	<ul style="list-style-type: none"> <li>• Would also require a new European legislative framework (i.e., a regulation to ensure full harmonisation).</li> <li>• Would provide Member States with a certain amount of flexibility in how verifiers are supervised, which could result in market distortion and uneven practices.</li> <li>• Verifiers may face a fragmented regulatory and supervisory framework across Member States, which could threaten the smooth development of a (relatively) young green bond market in Europe.</li> <li>• May reduce the level of competition and could potentially even give rise to barriers to entry.</li> <li>• Supervisory capacity spread across a large number of competent bodies in several Member States, resulting in a lack of critical mass, dilution of supervisory skills, inefficiencies and increased costs.</li> <li>• Lack of harmonisation might lead to regulatory arbitrage.</li> </ul>



<p><b>OPTION C:</b> <b>Do nothing: status quo and/or de-facto harmonisation with ISO 14030 international standards system</b></p>	<p>In the case that no European accreditation scheme is developed by the European Commission based on advice from TEG, the absence of regulatory action is likely to result in status-quo based on market based best practice (e.g. GBP Guidelines for external reviews, CBI Approved Verifier scheme). It might also lead to voluntary adoption by the market of the future accreditation requirements currently being developed for the international standard ISO 14030(3), building on the international draft standard ISO DIS 17029 on conformity assessments (CASCO).</p>	<ul style="list-style-type: none"> <li>• Continuity with existing market organisation and best practices</li> <li>• Likely alignment with ISO 17029 model, terminology and way of operations, which are widely accepted internationally.</li> <li>• No competition with ongoing developments within ISO.</li> <li>• No additional costs to European Commission and Member States.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential outcome is a highly decentralised approach with accreditation eventually implemented by competent authorities in each EU member state and risk of market fragmentation within the EU.</li> <li>• No role nor influence for EU sustainability platform, nor ESMA.</li> <li>• No guarantees that end result lives up to the level of ambition of the HLEG and the European Commission's Action Plan.</li> <li>• Likely to provide competitive advantage to global technical inspection and certification bodies, which are likely to be more familiar with ISO 17029 than other types of external review service providers.</li> </ul>
<p><b>OPTION D: Market-based transition scheme with supervisory participation)</b></p>	<p>Scheme convened as a market-based initiative, in cooperation with the Commission and drawing on existing and emerging market-practice. It would involve competent public and private institutions and stakeholders with the input of one or more European Supervisory Authorities (ESA) (e.g., ESMA involved as a member or observer) and appointed members of the TEG/the future EU Sustainability Platform.</p>	<ul style="list-style-type: none"> <li>• Could be implemented relatively quickly (e.g.. end 2019 early 2020) in response to market needs.</li> <li>• Could be envisaged for a transition to allow the legislative process to be concluded (2-3 years) and the EU taxonomy to be fully developed (by the end of 2022).</li> <li>• Could operate a smooth transition and minimises market disruption by building upon and expanding existing market-based scheme(s).</li> <li>• Could allow ESMA to build capacity, step-by-step through private-sector-led 'pilot-testing' of implementation</li> <li>• Possibly increased spill-over effect to non-EU countries by leveraging skills through the voluntary registration Committee members' global operations (e.g., CBI's focus on emerging markets, ICMA global scope, ISO 14030's relevance for global beyond the EU, etc. ).</li> </ul>	<ul style="list-style-type: none"> <li>• Will remain a voluntary scheme and will not provide the equivalent of direct supervision by an ESA.</li> <li>• May face organisational and resourcing challenges.</li> <li>• Standing of supervisory and official sector participation will need to be carefully defined.</li> <li>• Need for the European Commission to identify relevant organisations capable of operating such a scheme.</li> <li>• Might be challenging to enforce.</li> </ul>

## Annex 7: Voluntary Interim Registration Scheme for EU Green Bond Standard Verifiers

In order to establish in the near term an interim registration scheme for verifiers of conformity with the EU Green Bond Standard (EU-GBS), it is proposed to set up, in 2019, a voluntary process open to all interested external verifier firms.

### I Scope of the Voluntary Interim Registration Scheme

The Voluntary Scheme for Registration of EU Green Bond Standards verifiers (hereafter the ‘the Interim Registration Scheme’, or “the Scheme”) will cover green bonds wishing to demonstrate conformity with the emerging EU Green Bond Standard, and would involve services by external review firms verifying the conformity of green bond issues or issuance programmes with the EU-GBS. The scheme is designed for a transition period of up to 3 years and is expected to be replaced by direct accreditation of such firms by ESMA as soon as relevant EU legislation enters into force.

#### **Early-adopter verification for climate-related environmental objectives / sectors where the EU Taxonomy is fully developed.**

The mandate of the Scheme would be to develop and operate a voluntary registration scheme that would provide issuers with the possibility to obtain external verification of their financial products against the emerging EU Green Bond Standard.

The Scheme would develop a standardised verification scheme, which would provide issuers the possibility to have their taxonomy-related information of their green bonds verified by registered verifiers.

The Scheme would be designed to cover the following areas:

- 1. Define criteria for registered verifiers.** The Scheme would define minimum criteria for registration and guidance of verifiers based on the core components proposed by the TEG including policies and processes related to business conduct and potential conflicts of interest, professional minimum qualifications and quality assurance and control, as well as standardised procedures for external reviews (see below). These criteria will take into account, and expand best market practices such as the Climate Bonds Initiative’s (CBI) Approved Verifier scheme, Guidance for external reviewers published by the GBP promoted by ICMA and the rules currently being elaborated under ISO 14030, which are expected to be based on ISO 17029.
- 2. Formal registration process for verifiers.** The Voluntary Interim Registration Scheme should also develop, and periodically update a formal registration process for verifiers who voluntarily commit to compliance with the criteria for registered verifiers defined by the Scheme (‘Registered Verifiers’). Once the Scheme is up and running, the Scheme may decide, from time to time, to commission an independent assessment of the registered verifiers’ qualifications and management processes to ensure verifiers’ implementation of the criteria.
- 3. Public registry of verifiers.** The Scheme would also set up, and maintain, a public registry of approved verifiers that meet the accreditation criteria and make it available on a dedicated website, so as to allow green bond issuer and investors to check the registration status of external verifiers and their respective qualifications by sector and/or environmental objective (e.g., some verifiers might only be approved for climate-related services in certain sectors only, other might choose to cover a range of subject matters including additional environmental objectives, other than climate).
- 4. Inform the European Commission and ESMA on the lessons-learned in the implementation of the Scheme.** The Scheme should also operate in close cooperation with

the European Commission and ESMA to share lessons learned in the practical implementation of the scheme. This will facilitate the transition and avoid market disruptions when the ESMA-led accreditation scheme eventually becomes applicable.

Last but not least, in response to interest expressed by verifiers that are currently operating in the market, the Scheme also may decide to engage with its approved verifiers to **share knowledge on environmental objectives (other than climate) where the EU Taxonomy is yet to be developed**. For this purpose the Scheme may decide to establish a peer-to-peer knowledge sharing platform for environmental objectives, other than climate, and/or sectors for which the taxonomy is not fully developed and related selection criteria are yet to be developed (e.g., according to Article 8 and 11 of the proposed draft regulation the EU Taxonomy for environmental objectives other than climate will only enter into application at the end of 2021 / 2022 respectively).

The Scheme may also be expanded for firms wishing to provide verification services for possible other future EU green financial product standards (e.g., green loans, private placements, etc.), as well as to provide more general advisory services relating to the alignment of projects with the EU Taxonomy.

## II Organisational design and governance

The scheme would be designed to operate in close cooperation with the future EU Platform on Sustainable Finance but would be established with its own multi-stakeholder advisory board and organisation to enable a timely and independent launch. This would include:

- A **multi-stakeholder advisory board** constituted by full members and observers selected based on draft criteria provided by the TEG, taking into account the competences and skillsets required to oversee the Scheme effectively. The table provides a preliminary list of core competences, skills and experience that the TEG will consider as well as potential organisations that the TEG might be consider proposing as member of the multi-stakeholder advisory board.
- A **secretariat**, with staff provided by the scheme sponsors and potentially by the European Commission, ESMA and other European Institutions. The secretariat may decide to outsource or enter into partnerships with other parties that would advise and assist the secretariat on the conformity of the applications of external verifiers with respect to registration criteria.

**Table: Core competences of the multi-stakeholder advisory board of the future Interim Verification Scheme**

Required core competences, skills and required experience
Technical subject-matter expertise related to environmental objectives, including objectives other than climate.
Experience in developing and operating an approved verifier scheme for the green bond market and training of verifiers.
Green bond market participants representing the voices of investors, underwriters and issuers.
Civil society organisation with significant experience in green bonds markets, standards setting and green- or ecolabelling.
In-depth understanding of the technical development of the EU Taxonomy and direct coordination with the future Sustainability platform.
In depth experience of accreditation schemes with the European/International (i.e., ISO 17029, ISO 14030).
In depth technical experience of with setting up and operating verification and accreditation schemes for sustainability standards.

### III Selection criteria for approved verifiers

Specific criteria for the selection of approved verifiers would be based on the proposals made by the TEG (see draft criteria included below) referencing existing market-based precedents such as CBI's Approved Verifiers, the LuxFLAG label, ICMA's Guidelines for External Reviewers and, relevant ISO standards including ISO 17029 and/or ISO 14030 1 to 4 so as to achieve harmonisation with international standards currently under development.

Other professional guidelines and standards may also be considered such as relevance of the International Code of Ethics for Professional Accountants paying particular attention to section 4B – Independence for Assurance Engagements other than Audit and Review Engagements; the Attestation Standards established by the American Institute of Certified Public Accountants; ISAE 3000 (Revised); Assurance Engagements Other than Audits or Reviews of Historical Financial Information; IESBA Handbook of the Code of Ethics of Professional Accountants, section 291 Independence - Other Assurance Engagements; and the AICPA Code of Professional Conduct (AICPA Code). In addition, the standard provided by ISO 9001 may also be applicable as well as certification from the Association for Responsible Investment Services (ARISE).

In summary, and in line with current market practice, all firms providing verification services will confirm that they will be guided by the following five fundamental ethical and professional principles:

1. Integrity
2. Objectivity
3. Professional Competence and Due Care
4. Confidentiality
5. Professional Behaviour

While providing verification services related to the EU-GBS, external verifiers will also confirm and provide evidence that they:

1. Have an organisational structure, working procedures, and other relevant systems for carrying out the verification services.
2. Employ appropriate staff with the necessary experience and qualifications for the scope of the external review being provided.
3. Have appropriate professional indemnity / professional liability insurance cover.

Verifiers will also demonstrate that they have competence and experience <sup>128</sup> in:

- The characteristics and issuance processes of listed and unlisted debt market products;
- The management of confidential and market sensitive information
- Assessing environmental projects for [all or certain] environmental objectives and for [all or certain] sectors covered by the EU Taxonomy and/or otherwise meet the requirement of the EU sustainable investment framework under the proposed regulation on the establishment of a framework to facilitate sustainable investment<sup>129</sup>
- Providing assurance services and/or conformity assessments in line with, among others, ISAE 3000 and/or DIS ISO 17029.

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<sup>128</sup> Draft list - adapted from CBI's approved verifiers scheme – to be finalised.

<sup>129</sup> COM(2018) 353 final 2018/0178 (COD)



